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State of Texas
Health and Human Services Commission
Department of State Health Services

Analysis of the Texas Public Behavioral Health System

Presented by PCG
With Assistance From: DMA Health Strategies and Civic Initiatives

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TABLE OF CONTENTS

I. EXECUTIVE SUMMARY

Background

The Texas Department of State Health Services (DSHS), created in 2003 under Texas House Bill 2292, is the state agency responsible for the oversight and provision of public mental health and substance abuse services. The DSHS Mental Health and Substance Abuse Division (MHSA) supports the agency-wide mission of improving the health and well-being of Texans. MHSA funds and/or manages a continuum of mental health and substance abuse services ranging from prevention and early identification to residential treatment and in-patient hospitalization.

In May 2011, the Texas Health and Human Services Commission (HHSC) issued Work Request #2011-DSHS-002 under Solicitation No. 529-11-0009 and engaged the Public Consulting Group (PCG) to undertake a thorough evaluation of the state's public behavioral health system. Specifically, the Behavioral Health System Analysis was to consider those services funded and/or managed through DSHS and HHSC, including:

- Thirty seven county or regionally based Local Mental Health Authorities (LMHAs);
- The NorthSTAR behavioral health Medicaid and indigent care managed care waiver contract with ValueOptions;
- Substance abuse prevention and treatment providers;
- State Psychiatric Hospitals and additional psychiatric inpatient beds contracted by DSHS through local entities;
- Behavioral health services provided to Medicaid fee for service and managed care recipients as part of the standard Medicaid benefit, and
- Behavioral health services provided to CHIP recipients as part of the standard CHIP benefit.

The basis for the Behavioral Health System Analysis can be found in House Bill 1 of the Texas 82nd legislative session which appropriates funding to state agencies for the FY 2012-13 biennium. Rider 71 of the appropriations bill directs DSHS to contract with an independent entity "to review the state's public mental health system and make recommendations to improve access, service utilization, patient outcomes, and system efficiencies."

Overview of the Report

To address the charge set forth in Rider 71, PCG's efforts have been structured into two distinct phases; Phase I of the engagement includes the documentation and review of the state's public behavioral health system as it currently exists, and Phase II of the engagement will include the development of recommendations to reform the public behavioral health system with consideration for federal health care reform efforts under the Affordable Care Act (ACA), in the event it is not repealed.

PCG was tasked under Phase I to conduct a review of current service delivery models for inpatient and outpatient care, funding levels, financing methodologies, services provided, and community-based alternatives to hospitalization. PCG was also asked to examine other service delivery models or clinical practices that may be successful in Texas, and to review and recommend "best value" practices that the state's public behavioral health system may implement that will maximize the use of federal, state and local funds.

The Phase I study encompasses the review of the behavioral health system in Texas managed by DSHS and behavioral health services included as a standard benefit under Medicaid and CHIP. While DSHS does not have responsibility for all behavioral health services within the Medicaid program, PCG recognizes the significant role that DSHS serves on behalf of Medicaid as a purchaser of behavioral health services, in particular DSHS' role in overseeing the case management and rehabilitation services under the Medicaid program.

Throughout Phase I, PCG met with and interviewed stakeholders including staffs at DSHS and HHSC, mental health and substance abuse providers, consumer and provider advocacy groups, state legislators and their staffs, county judges, and county and local law enforcement representatives, to name a few. PCG also conducted seven public stakeholder forums across the state to provide an overview of PCG's charge and more importantly, an opportunity to provide input on the strengths and weaknesses of the public behavioral health system.

Phase II of the engagement, which will begin with seven public stakeholder forums for the discussion of potential options for system reform, will result in the development of recommendations to the state for system reform. Initial options for consideration will be drafted based on the analysis completed through Phase I. The final recommendations for system reform will include financial projections, a state implementation plan, and will take under consideration the current status of larger efforts being undertaken at both the state and federal levels.

Analysis of Behavioral Health Services (*Section III*)

PCG conducted an extensive review of the Texas Behavioral Health system to document the current state of programs, services and populations served. Detailed analyses were performed in the following areas:

Evaluation of persons served by public behavioral health services – DSHS provided mental health services to 303,618 adults and children in fiscal year 2011. In addition, DSHS provided substance abuse services to 50,435 adults and children in fiscal year 2011.

Eligibility criteria for priority populations – Texas provides behavioral health services to individuals that are eligible for Medicaid, as well as individuals that meet mental health priority population criteria. As with any state, Texas has had to make difficult choices in determining eligibility criteria for mental health and substance abuse services, particularly surrounding those

patient populations that are not Medicaid eligible and do not have the financial means to pay for care. The primary use of the priority population designation is for the medically indigent population as it determines an individual's ability to receive publicly funded services. Medically indigent individuals that meet the priority population criteria are eligible to receive DSHS funded services through the DSHS system of care while those medically indigent individuals that do not meet the priority population criteria are not eligible to receive DSHS funded services. Those medically indigent individuals outside the priority population may receive services; however, they would need to be funded through non-DSHS sources.

The priority population designation also applies to Medicaid eligible individuals; however, it is only used for determining access to the Medicaid Rehabilitation and Targeted Case Management services. Medicaid consumers without a priority population designation are still eligible to receive a full continuum of services as defined under the Medicaid benefit.

Public behavioral health delivery systems

Department of State Health Services

The DSHS system of care is the primary means for an indigent consumer to enter the behavioral health system, via the LMHAs or NorthSTAR, which operate as a "safety net" for those without insurance or other financial resources. As has been previously discussed, the "safety net" is available to those medically indigent consumers that also have a Priority Population diagnosis. Consumers that do not qualify as Priority Population may still receive services; however, these would be at the discretion of the LMHAs and depend on the availability of non-DSHS funding resources.

In addition to serving the medically indigent population, DSHS is also responsible for the oversight and delivery of mental health and substance abuse services to certain Medicaid eligible adults and children that have a clinical diagnosis that meets the priority population criteria. Eligible Medicaid recipients that do not meet the priority population criteria still have access to mental health and substance abuse services; however, these services are overseen by HHSC.

- Local Mental Health Authorities (LMHAs) – DSHS contracts with 37 LMHAs to deliver mental health services in communities across Texas. The LMHAs are required to plan, develop policy, coordinate, allocate and develop resources for mental health services in their local service area. The role of the LMHAs as the authority is defined under Section 533.035 of the Texas Health and Safety Code. As an authority, the LMHAs responsibilities include:
    - Allocation of funds received from DSHS to ensure mental health and chemical dependency services (for dually diagnosed individuals) are provided in the local service area.
    - Consider public input, cost benefit, and client care issues to ensure consumer choice and the best use of public funds in:
        - Assembling a network of service providers; and

        - Making recommendations related to the most appropriate and available treatment alternatives for individuals in need of mental health services.
    - Demonstrate to DSHS that the services that the authority provides directly or through subcontractors and that involve state funds comply with relevant state standards.

- NorthSTAR program – In an effort to improve the delivery of behavioral healthcare in Dallas service area, the state opted to try a different strategy by carving out mental health and substance abuse services in a single, separate delivery system. In 1999, through the passage of a 1915(b) Waiver, NorthSTAR was implemented as a managed care carve-out pilot program to serve the Dallas and contiguous counties. NorthSTAR program operates in seven North Texas counties including Dallas, Collin, Hunt, Rockwall, Kaufman, Ellis, and Navarro counties. Medicaid eligible recipients residing in the service area are automatically enrolled in NorthSTAR. Non-Medicaid eligible individuals residing in the service area may be eligible to receive NorthSTAR services through an application process if they meet clinical and income criteria.

  The NorthSTAR model is an "at risk" model, meaning the behavioral health organization assumes the risk for the delivery of all covered services administered. NorthSTAR initially contracted with two behavioral health organizations (BHOs): Magellan, and ValueOptions. In October 2000, Magellan did not renew its contract and the Magellan enrollees were transitioned to ValueOptions. ValueOptions became and still remains the sole BHO for NorthSTAR.

- State Mental Health Hospitals and Community Based Hospitals – In addition to funding community based services the State of Texas also provides inpatient hospital services through state-owned and operated facilities across the State. DSHS is responsible for managing these nine state-owned mental hospitals and one state-owned inpatient residential treatment facility for adolescents. The state hospitals are one component of the statewide mental health delivery system that includes inpatient care and community based care. The state mental hospitals' primary purpose is to stabilize the patients admitted by providing inpatient mental health treatment. In addition, DSHS provides funds to purchase beds at four community psychiatric hospitals to help supplement capacity.

- Substance Abuse Services – DSHS is also responsible for funding and providing substance abuse services to the Medically Indigent population as well as a an array of services, not included in the Medicaid benefit, to the Medicaid population. The DSHS funded substance abuse services are provided by a number of providers, including some LMHAs, under contract with DSHS.

<u>Health and Human Services Commission</u>

HHSC has been the single state agency for oversight of the Texas Medicaid program since 1993. Under the Medicaid program, there are various programs through which consumers may be eligible for services including the traditional Medicaid Fee for Service (FFS) program and Medicaid Managed Care programs including STAR, STAR+Plus, and NorthSTAR. Prior to March 1, 2012, Medicaid included a third program known as Primary Care/Case Management (PCCM), however this program was terminated in favor of a managed care model. In addition to the Medicaid program, HHSC is also responsible for the oversight of the Texas CHIP program.

Unlike the service delivery models outlined under the DSHS section, the service delivery model for Medicaid eligible consumers is viewed as having greater freedom of choice for consumers. That is, under the Medicaid FFS program, consumers have, with some exceptions, a "freedom of choice" in their providers as they may seek services through "any willing provider" that is enrolled as a Texas Medicaid provider. Medicaid consumers may also access non-Medicaid funded services such as supported employment, crisis respite, and supported housing through a DSHS provider.

Consumers in a Medicaid Managed Care Program or in the CHIP program can seek their services only through those providers under contract with a Managed Care Organization (MCO). Like consumers in the Medicaid FFS program, those individuals in a Medicaid Managed Care program who are eligible to receive the Medicaid Rehabilitation and Targeted Case Management services may only do so through the LMHAs.

Another key difference between the HHSC and DSHS systems of care is the funding of inpatient hospital services to Medicaid recipients. Medicaid consumers between the ages of 21 and 64 are not able to receive inpatient psychiatric hospital services in an Institution for Mental Disease (IMD) due to the federal Medicaid IMD Exclusion. This exclusion means that Medicaid FFS consumers cannot receive services in one of the State Hospitals under the Medicaid Benefit and therefore these services are funded through general revenue, but may receive services in acute care hospital settings. Medicaid Managed Care consumers however, could receive inpatient psychiatric hospital services through a State Hospital under the "in lieu of" provision of the managed care contract, which permits managed care entities to provide inpatient services in a psychiatric hospital in lieu of an acute care hospital.

While the Medicaid consumers do have more choice in accessing services, they, like the indigent consumers, must receive an initial screening and assessment to determine their diagnosis and subsequently whether that diagnosis places them in the Priority Population. The Priority Population diagnosis for Medicaid consumers is important in determining a Medicaid consumer's eligibility for the Medicaid Rehabilitation Service. Unlike the Medically Indigent population, the Priority Population designation does not limit a Medicaid consumer from receiving a comprehensive continuum of care.

In addition to the mental health services offered to Medicaid consumers, there is also an array of substance abuse services covered under the Medicaid benefit. These services have only been added to the Medicaid benefit within the last five years and it covers only a limited set of services and as such the majority of substance abuse services are still provided through the DSHS system of care.

Utilization analysis

PCG conducted a detailed quantitative analysis of the utilization of both mental health and substance abuse services. Multi-year data on the number of persons served, the costs of service, and the amounts of services are presented. Even more detailed analyses are presented in the Appendix. With exceptions such as peer support services, the data generally shows that both the funding for services has gone up as well as the numbers of persons getting some kind of service. The result is that the funding per person has been relatively flat over the last four to five years. While the amount of funds per person has been flat the cost of providing the services has understandably increased over the 4-5 year period. The result is that there are examples of services where a smaller percentage of persons receive services, or fewer services are provided. For example, the percentage of all persons receiving RDM services has declined.

Analysis of Funding for Behavioral Health Services *(Section IV)*

A detailed analysis of the funding of mental health and substance abuse services was performed in an effort to document the current state, local and earned funds used to support the system. For each program, the amount of funds in each state and federal funding source is shown. For example, DSHS expends in excess of $1.1B in funding from ten state sources and 17 federal sources. How DSHS expends this money is also discussed at length. For example, allocations for community mental health, NorthSTAR, and hospitals are discussed. This section closes with a discussion of the revenue received for services provided.

DSHS Spending in 2009	Total Funds
Mental Health State Hospitals	$386,745,864
Mental Health Services for Adults	$290,140,663
Substance Abuse Prevention, Intervention, and Treatment	$160,979,409
NorthSTAR Behavioral Health Waiver	$105,667,843
Mental Health Services for Children	$63,168,700
Community Mental Health Crisis Services	$54,866,004
Other Services	$0
Total of DSHS Spending	**$1,114,951,245**

Summary of Stakeholder Meetings (*Section V*)

A summary of the seven stakeholder meetings held throughout the state is provided to document the depth of sentiment and thinking about the current provision of behavioral health services across Texas.

PCG received stakeholder comments from four main sources: the seven public hearings across the state, visits to mental health and substance abuse providers, meetings with organizational representatives, and comments made to the public website. The depth and volume of feedback received was immense, but tended to center on common themes which are discussed in at length in Section V. These themes centered on the following:

- **Lack of integration between mental health and substance abuse delivery systems and the general shortage of substance abuse services.** Participants expressed the view that substance abuse is often forgotten or ignored when addressing behavioral health, and is not treated on par with mental health. PCG met with substance abuse providers and it is clear that local providers are putting on first rate programs. However, in general, there are shortages of substance abuse providers, waiting lists for services, and a widespread perception that mental health priorities are more important at the state level than substance abuse priorities.

- **In general there is a lack of resources.** In literally every meeting PCG had, someone said Texas ranks last nationally among states in its mental health funding. There is a lack of hospital beds, workforce shortages of mental health and substance abuse professionals, a lack of long-term services and supports such as supportive housing, transportation, and employment services, waiting lists for services, and a general lack of community resources to divert persons from hospital emergency rooms.

- **Numerous comments were received about children's services.** In addition to a lack of funding for children's services, persons that discussed children's services said there was a lack of supportive adolescent and family support services, a lack of inpatient and residential services, a need for more "wrap-around" services, as well as children's psychiatric services. There needs to be a more open, competitive procurement for children's services. The Medicaid rate for children's services is lower than it was five years ago and private providers will not accept Medicaid patients.

- **There are a series of comments that can be summarized as administrative burdens.** These include references to inflexible licensing requirements e.g. person with mental health training cannot provide substance abuse counseling and vice versa, payment issues such as the lack of funding for case management services in hospitals; participants expressed challenges in working with Medicaid for reimbursement of service ranging from the costly and time consuming efforts to deal with the denial and claims appeals processes to Medicaid's inflexibility for paying for certain substance abuse treatments.

Analysis of the Current Public Behavioral Health System (*Section VI*)

PCG documents and summarizes key strengthens and weaknesses of the current behavioral health system. These observations are based on PCG's review and analysis of the system, as well as the feedback received through the stakeholder meetings and forums.

Strengths of the Texas Public Behavioral Health System

- The LMHAs are established organizations with substantial capabilities and program reach;
- The NorthSTAR program is well accepted in the Dallas area; Persons familiar with Texas behavioral health are aware of the differences of opinion about the relative merits of the different ways behavioral health services are provided. Relevant to this discussion, it is pertinent to observe that the NorthSTAR program appears to have broad acceptance in the Dallas area.
- The East Texas Behavioral Health Network is a good model for shared administrative services across geographical regions;
- Texas has numerous informed and articulate advocates and providers who understand what is needed to improve behavioral health care;
- Hundreds of thousands of persons receive publically funded behavioral health services;
- The Resiliency Disease Management (RDM) system has broad service packages and encourages statewide consistency with minimum levels of service based on uniform assessment;
- There is a growing trend to integrate behavioral and physical health services within the LMHAs;
- LMHAs appear to be well integrated with judicial and law enforcement agencies;
- There has been a continuous increase in the use of peer support services;
- There has been a significant strengthening of crisis services with clear improvements in patient outcomes;
- Additional funding for transitional services has improved program services, and
- Local control of LMHAs brings the possibility of obtaining local funding.

Weaknesses of the Texas Public Behavioral Health System

- The need for the State of Texas to spend hundreds of millions of dollars on mental health and substance abuse services within county jails and by other law enforcement agencies is viewed as the symptom of an inadequate community based system of care;
- LMHAs get funded year after year without competition;
- The LMHAs both authorize and provide behavioral health services and this dual role raises a potential conflict of interest;

- House Bill 2292 and subsequently House Bill 2439 "provider of last resort" provisions are neither monitored nor strictly enforced by DSHS;
- From the standpoint of the consumer, a closed provider network for mental health services does not provide freedom of choice;
- A closed provider network has hindered the ability of other not for profit and/or private providers to play a critical role in the delivery of mental health and substance services to the priority populations;
- Texas has proposed plans to selectively contract for certain behavioral health services; This is a reference to the submittal by HHSC of a 1915(b) Medicaid waiver that would result in the State having the ability to implement selective contracting for the Medicaid rehabilitation with the LMHAs as the sole providers for these services.
- The existing service delivery model is not adequately prepared for the implications of federal health care reform, if it is not repealed;
- Children receive fewer services;
- There is a general shortage of substance abuse providers and the number of substance abuse providers has declined over time;
- Pubic data reporting prepared by DSHS on the operation of its providers is minimal and not transparent;
- Performance measures of LMHAs and Substance Abuse Providers Require Refinements
- DSHS does not appear to have integrated its mental health and substance abuse programs;
- Over the last five years, flat funding has contributed to both the LMHAs and NorthSTAR having to decrease utilization, both reducing the number of individuals that receive treatment services or the amounts of treatment service that persons receive;
- The lack of funding for supportive housing, transportation, and employment services is a barrier for both families and adults;
- Treatment Programs have waiting lists;
- The system of care is focused on addressing crisis and not on promoting recovery;
- There is a growing workforce shortage of practitioners notably substance abuse providers, psychiatrists (especially child psychiatrists), and therapists;
- Licensure restrictions potentially limit access to care;
- RDM has inherent flaws resulting in limited service availability;
- Forensic admissions may impact the civil use of state hospitals;
- Texas ranks low compared to other states on substance abuse spending;
- Low funding for DSHS behavioral health services compared to other states;
- The allocation process for mental health funds has not kept pace with population trends;
- Funding for behavioral health services is "siloed" at the state level, and
- There is significant cost variability across the LMHAs.

Analysis of National Best Practices (*Section VII*)

PCG conducted reviews and analyses of national best practices that were identified as potentially applicable or relevant to the Texas behavioral health system. To develop recommendations for Texas, the PCG team identified six areas that state officials might consider as they develop policy recommendations. These include:

- Optimizing funding and financing strategies is of particular interest and value when federal and state budgets are under significant stress. The team reviewed the following efforts:
  - 1915(i) State plan Amendments in Oregon, Louisiana, and Wisconsin;
  - Arizona's financing of Medicaid and non-Medicaid services under an 1115 Waiver;
  - Oklahoma Enhanced Tier Payment System
  - Louisiana's Statewide Management Organization (SMO)
  - Maryland Care Management Entities (CMEs)

- At the system level, other states have innovative ideas about governance and oversight that provide regional or cross-system oversight and planning to increase local "ownership" of the system. The PCG team identified the following or further review:
  - Interagency councils
  - New uses of Local Mental Health Authorities in North Carolina and Arizona

- At the direct care level, it is crucial to ensure that the services being provided are evidence-based and supported by data and that demonstrate their effectiveness. Four areas were focused on:
  - Learning collaborative;
  - Mental Health First Aid;
  - Peer Crisis Services and
  - Building Bridges for children in residential treatment

- Integrating behavioral and primary health care, often within medical or health homes, is a process that is advancing rapidly, in part due to the incentives incorporated within the Patient Protection and Affordable Care Act (ACA). Four different projects were examples of best practice:
  - Missouri Health Homes;
  - Colorado's Medical Home Initiative
  - Massachusetts SBIRT
  - IMPACT Team Care

- Since management of inpatient facilities generally constitutes a major component of the work of state mental health agencies, new approaches should be considered. The team reviewed management and privatization efforts in Florida, Kentucky and Arizona.

- Many individuals are served by multiple state agencies. As a result, successful initiatives for cross system care coordination are important to consider. Three efforts were reviewed:
    - Georgia Peer Support
    - Montana Behavioral Health and Corrections Collaboration
    - Minnesota's Stay Well and Stay Working

II. OVERVIEW OF REPORT

In May 2011, the Texas Health and Human Services Commission (HHSC) issued Work Request #2011-DSHS-002 under Solicitation No. 529-11-0009 to undertake a thorough evaluation of the state's public behavioral health system. Specifically, the Behavioral Health System Analysis was to consider those services funded and/or managed through the Texas Department of State Health Services (DSHS) and HHSC, including:

- Thirty seven county or regionally based Local Mental Health Authorities (LMHAs)
- The NorthSTAR behavioral health Medicaid and indigent care managed care waiver contract with ValueOptions
- Substance abuse prevention and treatment providers
- State Psychiatric Hospitals and additional psychiatric inpatient beds contracted by DSHS through local entities
- Behavioral health services provided to Medicaid fee for service, primary care case management (PCCM) and managed care recipients as part of the standard Medicaid benefit

HHSC engaged Public Consulting Group (PCG) to carry out this study. The project is organized into two phases. The first phase of this engagement documents the current behavioral health service delivery system including highlights of the strengths and weaknesses of the existing model. The second phase will include recommendations for changes to the service delivery system. The overarching goal of the study is to identify opportunities to enhance the current service delivery system in order to improve access and clinical outcomes for individuals in need of state services within a dynamic environment undergoing significant changes at the local and national level.

Rider 71

The basis for the Behavioral Health System Analysis can be found in House Bill 1 of the Texas 82nd legislative session which appropriated funds to state agencies for the FY 2012-13 biennium. Rider 71 of the appropriations bill directs DSHS to contract with an independent entity "to review the state's public mental health system and make recommendations to improve access, service utilization, patient outcomes, and system efficiencies."

As part of the study, PCG was tasked with reviewing current service delivery models for inpatient and outpatient care, funding levels, financing methodologies, services provided, and community-based alternatives to hospitalization. PCG was also asked to examine other service delivery models or clinical practices that may be successful in Texas, and to review and recommend "best value" practices that the state's public behavioral health system may implement to maximize the use of federal, state and local funds.

The study encompasses the review of the behavioral health system in Texas managed by DSHS and behavioral health services included as a standard benefit under Medicaid and CHIP. While DSHS does not have responsibility for all behavioral health services within the Medicaid program, PCG recognizes the significant role that DSHS serves on behalf of Medicaid as a purchaser of behavioral health services, in particular DSHS' role in overseeing the case management and rehabilitation services under the Medicaid program.

The study does not, however, include a comprehensive review of all behavioral health service delivery models or related behavioral health services within the state. The scope of this project focused on the requirements within Rider 71 of the appropriations bill, which targets programs administered by DSHS including behavioral health services covered under the standard Medicaid benefit through HHSC. It is widely recognized that there are several parallel service delivery systems and funding streams which provide similar services; however, these systems were not considered part of this scope as DSHS does not have authority or control of these systems. Examples of other behavioral health service delivery systems include the criminal justice and juvenile justice systems, adult and child protective services, and the educational system. Examples of other funding streams include Medicare, the Veterans Administration, private insurance, as well as city and county governments. While the importance of these systems and sources of funding to the behavioral health system is unquestioned, DSHS does not have oversight for how these services are purchased and therefore has no authority to recommend reform to these particular systems of care.

The study does include general descriptions and consideration of the impact of these other purchasers and providers of behavioral health services in the state; however, detailed analysis of those services or recommendations for changes were deemed outside the scope of this study. In cases where these systems intersect with DSHS –for instance, entry and re-entry of DSHS clients into the criminal justice system and vice versa – these linkages are considered part of this study.

Agency Objectives

The mission of DSHS is to improve health and well-being in Texas. This is achieved through implementation of a variety of public health and behavioral health services in partnership with numerous academic, research and human services stakeholders in Texas, across the U.S. and along the U.S./Mexico border. DSHS has an annual budget of approximately $2.9 billion and a workforce of approximately 12,500 employees.

Under Texas House Bill 2292, passed in 2003, DSHS assumed all functions of the Texas Department of Mental Health and Mental Retardation (TDMHMR) relating to providing mental health services and the Texas Commission on Alcohol and Drug Abuse (TCADA) relating to providing substance abuse services. This agency consolidation was part of a broader effort to realign the health and human services system to improve client access to services and the quality

of those services, reduce administrative costs, strengthen accountability, and spend tax dollars more effectively.

The DSHS Mental Health and Substance Abuse Division (MHSA) supports the agency-wide mission of improving the health and well-being of Texans through the provision of behavioral health information and services. MHSA offers a continuum of mental health and substance abuse services ranging from prevention and early identification to residential treatment and in-patient hospitalization. Additional programs target specific demographics including the elderly, homeless, veterans, forensic populations, tobacco prevention and cessation, and disaster behavioral health response, while others address vocational or other supportive services.

MHSA consists of three primary sections: Program Services, Contract/Quality Management, and Hospital Services. The functions of these sections are described below.

- The Program Services section consists of four units that oversee child and adult mental health and substance abuse program policy and associated rules, disaster behavioral health, and tobacco prevention and cessation. Section personnel develop performance measures and provider requirements for state and federally purchased mental health and substance abuse services.

- The Contract/Quality Management section provides leadership, design, and coordination of quality management activities for mental health and substance abuse community services. The section uses performance based risk assessment to identify contractors at high risk for contractual non-compliance and delivery of poor quality services and implements appropriate interventions to increase compliance and service quality.

- Through its Hospital Services section, DSHS provides oversight of ten state mental health hospitals and one infectious disease hospital to ensure the delivery of services through coordination of quarterly meetings of the Executive Committee of the Governing body. This section monitors and ensures compliance with federal regulations and state laws to determine trends that impact the delivery of services to consumers.

DSHS' Regulatory Division establishes and administers rules and standards to maintain health care quality and consumer safety and is responsible for licensing, surveying, and inspecting providers of health care and consumer safety services. This oversight includes the responsibility to license private psychiatric hospitals, crisis stabilization units, general hospitals that provide psychiatric services, and substance abuse treatment facility providers.

While DSHS plays a pivotal role in the provision of mental health and substance abuse services in Texas, as noted above, it is one of many entities funding and overseeing the administration of

such services. A more detailed overview of the DSHS provider system may be found in Section III of this report.

In the Health and Human Services System Strategic Plan for 2013-2017, DSHS delineated the following strategic priorities:

1. Improve the health and well-being of Texans;
2. Encourage partnerships and community involvement;
3. Protect vulnerable Texans from abuse, neglect, and exploitation;
4. Create opportunities that lead to increased self-sufficiency and independence; and
5. Ensure good outcomes in all health and human services programs by strengthening and supporting the workforce, infrastructure, technology, and integrity in business processes.

In addition, DSHS uses the following principles in service design and delivery of behavioral healthcare services:

- Client choice of providers
- Least restrictive environment for clients
- Outcomes-driven
- Optimize efficiencies
- Provider incentives to achieve performance measures and outcomes
- Reduce redundancy
- Local governance and support

While this report examines very specific elements of DSHS-funded services, the overall mission and goals of the organization have been kept at the forefront of PCG's efforts.

It should be noted that H.B. 2196, 81st Legislature, Regular Session, 2009, directed HHSC to establish the Integration of Health and Behavioral Health Services Workgroup to recommend best practices in policy, training and service delivery for the promotion of health care integration. H.B. 2196 charged the workgroup with studying and making recommendations on the integration of health and behavioral health services in Texas. The workgroup was composed of stakeholders from a variety of physical health and behavioral health backgrounds. The workgroup actively studied and deliberated on the merits and barriers to health care integration in Texas, and solicited public input to obtain additional insight into its legislative charge.

H.B. 2196 required HHSC to file a legislative report describing the best practices for health and behavioral health integration, barriers to implementing the best practices, and policy considerations for improving integrated service delivery to Texans. The report examined the interconnectivity of physical and behavioral health conditions, the provision of primary care and behavioral health services within a collaborative care context, best practices for health care

integration, and possible strategies for addressing barriers to health care integration. H.B 2196 provided an August 31, 2010, end date for the workgroup. The findings of the report have been taken into account for this study.

Report Objectives

The purpose of this Preliminary Report on System Redesign Analysis is to provide a detailed overview of the behavioral health landscape in Texas as it currently exists. The HHSC work request stipulated that the following specific activities be carried out in support of the study's objectives:

- A review of DSHS' current service delivery mechanisms for outpatient and inpatient behavioral healthcare, including populations served, funding levels, financing methodologies, services provided, quality indicators and methods for reporting and evaluating service quality and effectiveness.

- A review of DSHS funding sources and identification of other HHS agencies' funding sources that currently purchase behavioral healthcare for Texans with mental health and/or substance abuse disorders.

- A review of best practices and/or clinical models that may be successful in Texas, including behavioral health system governance structures utilized to purchase behavioral health services.

- Targeted stakeholder involvement to include meetings and interviews with DSHS staff and Council members, mental health and substance abuse service providers and consumers, advocates, legislators and other relevant system stakeholders.

The information on the following pages is the result of extensive review of documentation including data sets, reports and studies related to the provision and funding of behavioral health services in Texas. For DSHS-funded community mental health services, DSHS conducted data analyses per PCG's requests, and supplied raw, de-identified data on which PCG conducted data analyses. For DSHS-funded substance abuse treatment services, DSHS conducted the data analyses due to client confidentiality issues emerging from Part 2 on the Confidentiality of Alcohol and Drug Abuse Patient Records of Title 42 of the Code of Federal Regulations.

PCG conducted formal and informal interviews and discussions with an array of stakeholders throughout the system including state employees and contracted staff, providers, clients, advocates, facility and program administrators, and many others. In addition, PCG held a series of seven stakeholder forums throughout the state where interested parties were invited to gather and share their individual perspectives on the current behavioral health system and offer

suggestions for how the system might be enhanced or improved. These stakeholder sessions, along with the broader outreach effort, are discussed in greater detail in section V of this report.

In developing this report, PCG has sought to document all elements of DSHS-funded behavioral health services so that the information contained herein may serve as the basis for developing specific recommendations for improving service delivery and system efficiency. PCG's examination of data, including financial data as available, for other funders of behavioral health services has factored into the development of this report even though a detailed overview of those programs and services may not be found in the report.

This report is a precursor to the issuance of specific recommendations for intermediate and long-term system redesign focused on improved access, service utilization, patient outcomes, and system efficiencies. These recommendations will take into account best practices and innovations that support DSHS principles and consider cost effectiveness, funding levels and financing methodologies. In addition, all recommendations will include considerations relevant to the Patient Protection and Affordable Care Act (ACA), should it be upheld or repealed. ACA could have a significant impact on the behavioral health system of care and PCG will properly analyze the recommendations in light of this legislation.

Finally, PCG will organize our recommendations to identify those that can be implemented in the short-term and those that will require sufficient planning and therefore can be implemented long-term. These distinctions are important in order to understand the complexity of the recommendation and when system reform can be achieved. The Final Report on System Redesign is expected to be submitted no later than September 2012 to the Legislative Budget Board, the Governor, Senate Health and Human Services Committee, and House Public Health Committee.

III. ANALYSIS OF MENTAL HEALTH AND SUBSTANCE ABUSE SERVICES

A. Overview of Texas Population

With an estimated 2011 population of approximately 25.8[1] million people, Texas is the second most populous state in the nation. Texas is also a rapidly growing state: during the period from 2000-2010, the population of Texas increased by approximately 20%, second only to California.

Table III.1: Texas Population Estimates, 2000 and 2008 – 2010

2000	2008	2009	2010	% change, 2008 – 2010	% change, 2000 – 2010
20,851,820	24,326,974	24,782,302	25,010,235	2.81%	19.94%

Source: Texas State Data Center

Based on U.S. Department of Agriculture estimates, in 2010 approximately 22,085,169 Texans lived in urban areas while 3,060,392 lived in rural areas. This represents a split of 87.8% and 12.2%, respectively. Per capita income in Texas in 2009 was $39,617 for urban areas and $31,262 for rural areas. The projected poverty rate for urban areas was 17.5% and for rural areas, 20.4%.[2]

According to estimates based on the U.S. Census Bureau's March 2010 and 2011 Current Population Survey, approximately 54 percent of the population in Texas had income at or above the 200% of the Federal Poverty Level (FPL), while the remaining 46 percent had income below 200% of FPL. These figures represent approximately 13.4 million and 11.4 million individuals, respectively, and place Texas 46th out of 50 states and the District of Columbia in terms of the percentage of the population with income at or above 200% of the FPL.[3] For 2011, the U.S. Department of Health and Human Services (HHS) defines the FPL as income of $22,350 for a household of four.[4]

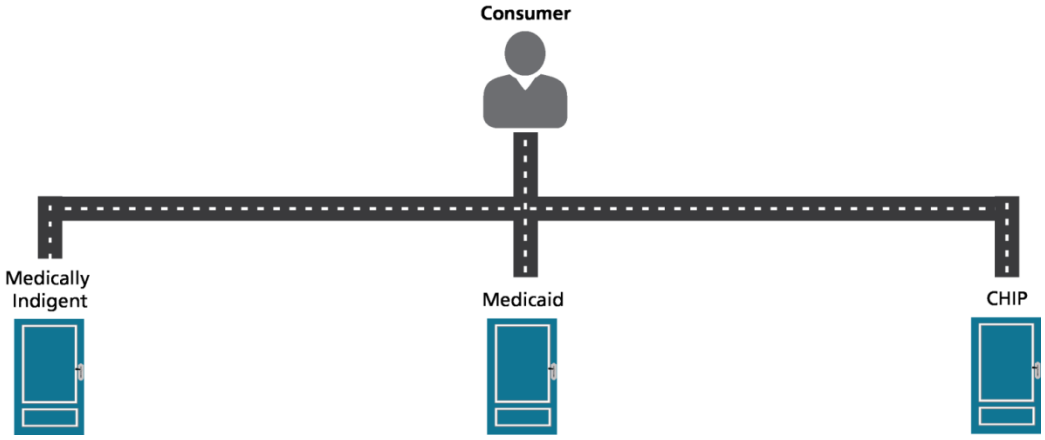
B. Overview of the Public Behavioral Health System

Populations served by the Texas Public Behavioral Health System

This section of the report provides an overview of the patient populations that are eligible to receive publicly funded behavioral health services in Texas. DSHS and HHSC are responsible for oversight and delivery of behavioral health services to certain patient populations. HHSC oversees the Medicaid program and the Children Health Insurance Program (CHIP) and provides

[1] DSHS Center for Health Statistics. http://www.dshs.state.tx.us/chs/popdat/ST2011.shtm.
[2] USDA Economic Research Service. State Fact Sheets: Texas. http://www.ers.usda.gov/statefacts/TX.HTM.
[3] Kaiser Family Foundation State Health Facts. http://www.statehealthfacts.org/profileind.jsp?cat=1&sub=2&rgn=45.
[4] *2011 HHS Poverty Guidelines*. http://aspe.hhs.gov/poverty/11poverty.shtml.

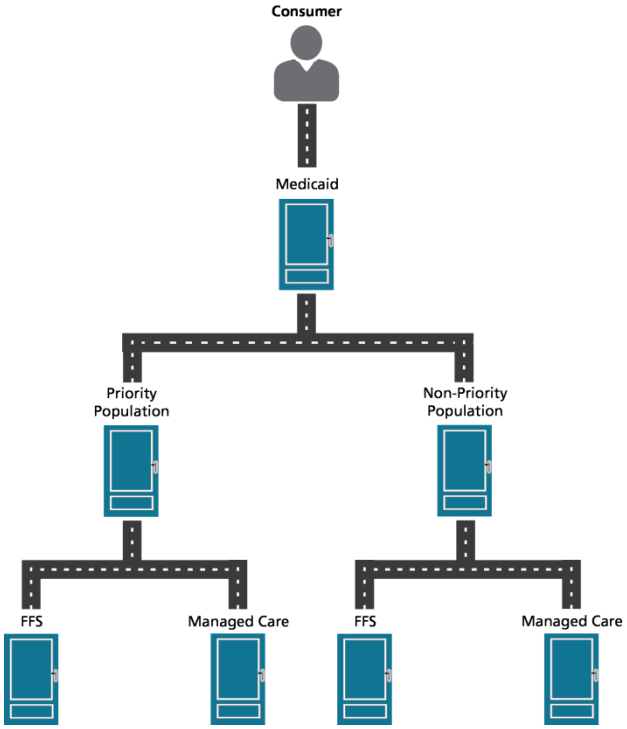
access to behavioral health services for any eligible recipient that requires these services. DSHS is responsible for the oversight and administration of services to certain adults and children meeting financial and clinical eligibility criteria as well as certain Medicaid and CHIP eligible individuals. The following graphic illustrates the paths a consumer has to the public behavioral health system.



Brief descriptions of the eligibility criteria to receive services in the public behavioral health system are outlined in the paragraphs below. Descriptions of the services and systems of care for each of the populations are then provided; first for mental health services and then for substance abuse services.

Medicaid

The following section describes the Medicaid population and eligibility requirements. As the following graphic illustrates, Medicaid eligibility is not the lone determinant in a consumer's path services as a Medicaid consumer may be included as a member of the mental health priority population (described below) or non-priority population. For Medicaid consumers, a further delineation occurs between those served through the fee-for-service (FFS) program and those served under a Medicaid Managed Care program. The distinctions between the FFS and Managed Care programs will be described in greater detail under the *HHSC Systems of Care* section.



Texas Medicaid currently serves on average approximately 3.3 million residents each month. In determining program eligibility, Texas considers a variety of factors such as patient income and family size, age, disability, pregnancy, citizenship and state residency requirements. Medicaid covers families with children and pregnant women, medically needy individuals, the elderly, and people with disabilities, if state and federal guidelines are met.

The income eligibility requirements for each of the categories for Medicaid coverage is based on the following income limits:

1. Children age 1 to 5- up to 133% FPL
2. Children age 6 to 18 – up to 100% FPL
3. Pregnant Women and Newborns– up to 185% FPL
4. SSI, Aged and Individuals with a Disability – Approximately 74% of FPL

More specifically, in order to be eligible for Medicaid, an individual must:

1. Reside in the state of Texas and meet necessary residential requirements and
2. Be financially eligible (fall within the federal poverty guidelines); or
3. Meet applicable non-financial eligibility conditions
    a. Categorically needy
        i. AFDC related individuals

ii. SSI related individuals
iii. Pregnant women with infants or children
iv. Aged and disabled

b. Medically needy
c. Certain Medicare beneficiaries covered under state plan
d. Qualified disabled and working individuals

To find a detailed description of the eligibility requirements, please consult the *Texas Medicaid State Plan Attachments, Section 2: 2.6-A (A): Eligibility Conditions and Requirements, p. 1-4.*

Eligible Medicaid recipients, which include both adults and children, have access to mental health and substance abuse services that are outlined and approved within the Medicaid state plan. A comprehensive description of the covered services that are made available to Medicaid recipients are outlined in Table III.2 within this section of the report.

CHIP

Texas CHIP served approximately 562,550 residents a month during fiscal year 2011. Eligibility for CHIP is based on a number of factors including income and family size, age, citizenship, and state residency requirements.

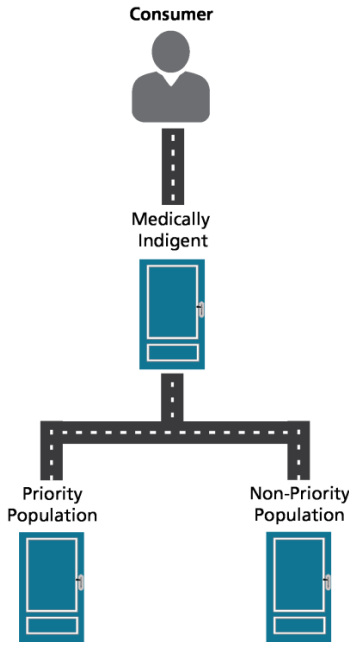
In order to qualify for CHIP in Texas, a child must:

1. Not already have insurance;
2. Be 18 years of age or younger;
3. Reside in the state of Texas;
4. Be a U.S. citizen or legal permanent resident; and

5. Meet the financial requirements based on family size and Monthly or Yearly Family Income.

Eligible CHIP recipients have access to mental health and substance abuse services that are outlined in the Texas CHIP Health Benefit Plan Evidence of Coverage (EOC). A comprehensive description of the covered services that are made available to CHIP recipients are outlined in Table III.3 within this section of the report.

DSHS Eligible



Texas Administrative Code Title 25, Part 1, Chapter 412, Rule 412.106 requires LMHAs to "conduct and document a financial assessment for each person within the first 30 days of services"[5] for mental health services. This financial assessment is used to determine an individual's ability to pay for services and the maximum monthly fee that individual would be required to pay for services. Those individuals that are determined to have no ability to pay would receive services with no monthly fee assessed.

Texas Administrative Code Title 25, Part 1, Chapter 444, Rule 444.413 requires substance abuse programs/providers to conduct financial assessments for individuals seeking substance abuse services funded by DSHS. The financial eligibility criteria dictates that an individual whose adjusted income is at or below 200% of the federal poverty guidelines is eligible for fully-funded

[5] Texas Administrative Code: Title 25, Part 1, Chapter 412, Subchapter C, Rule 412.106.

substance abuse services and an individual whose adjusted income is above 200% of the federal poverty guidelines is charged according a sliding fee scale.

Under the NorthSTAR program, clients who meet clinical and residential criteria with adjusted income at or below 200% of the federal poverty guidelines are eligible to receive NorthSTAR services.

For services in a state hospital setting, Texas classifies an individual as indigent if they meet the following criteria:

1. Possesses no property;
2. Has no person legally responsible for the patient's support; and
3. Is unable to reimburse the state for the costs of the patient's support, maintenance, and treatment.[6]

Individuals meeting the eligibility under this set of criteria could be eligible to receive publicly funded behavioral health services through the DSHS system of care. Unlike the Medicaid and CHIP eligible individuals, the DSHS eligible population is not guaranteed to receive a defined set of services. Given the finite level of funds available in the state, Texas has developed an additional set of criteria for determining eligibility for publicly funded mental health services, known as the priority population. For publicly funded substance abuse services, the priority population does not determine eligibility for services but rather the order in which clients are admitted to services.

Priority Population

As with any state, Texas has had to make difficult choices in determining eligibility criteria for mental health and substance abuse services, particularly surrounding those patient populations that are not Medicaid eligible and do not have the financial means to pay for care. Texas developed an additional set of criteria that is used in determining eligibility for publicly funded behavioral health services. The priority populations for substance abuse are based on definitions and requirements set for by SAMHSA. The priority population criteria, as defined below, has been developed for adults and for children with applications for both mental health and substance abuse services.

Adult Priority Population

Mental health: The priority population for mental health services is defined as those with a severe and persistent mental illness diagnosis of schizophrenia, bipolar disorder, or major

[6] Texas Health and Safety Code: Texas Statutes - Section 552.012: Classification and Definition of Patients

depression, or other severely disabling mental disorders which require crisis resolution or ongoing and long-term support and treatment.[7]

Substance abuse: The priority population for substance abuse services, used for determining the order for accessing services, identifies three populations that receive priority for admission to services before all others. Pregnant intravenous substance users are the highest priority followed by pregnant substance users and intravenous drug users. After these populations have been admitted to services, DSHS then places all referrals from the Department of Family and Protective Services in treatment followed by any other client in need of substance abuse services may be admitted.

Child and Adolescent Priority Population
Mental health: DSHS also serves children ages 3 through 17 who have a diagnosis of mental illness and exhibit serious emotional, behavioral or mental disorders and who:

1. Have a serious functional impairment; or
2. Are at risk of disruption of a preferred living or child care environment due to psychiatric symptoms; or
3. Are enrolled in a school system's special education program because of serious emotional disturbance.

Children and adolescents with a single diagnosis of autism, pervasive developmental disorder, intellectual disability, or substance abuse do not meet the priority population criteria for mental health services.[8]

Substance abuse: The child and adolescent priority population definition for substance abuse services follows that outlined for the adult population above. Pregnant intravenous substance users are the highest priority followed by pregnant substance users and intravenous drug users. After these populations have been admitted to services, DSHS then places all referrals from the Department of Family and Protective Services in treatment followed by any other client in need of substance abuse services may be admitted. As was the case with the adult substance abuse priority population, the substance abuse priority population for children and adolescents does not determine an individual's eligibility for services but rather the priority by which individuals are admitted to services.

[7] Texas Administrative Code: Title 40, Part 1, Chapter 72, Subchapter B, Rule 72.204
http://info.sos.state.tx.us/pls/pub/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=40&pt=1&ch=72&rl=204
[8] DSHS: Mental Health Services for Children and Adolescents
http://www.dshs.state.tx.us/mhsa/mh-child-adolescent-services/

The primary use of the priority population designation is for the DSHS eligible population as it determines an individual's ability to receive publicly funded mental health services or the priority in which individuals may access publicly funded substance abuse services. DSHS eligible individuals that meet the priority population criteria are eligible to receive DSHS funded mental health services through the DSHS system of care while those DSHS eligible individuals that do not meet the priority population criteria are not eligible to receive DSHS funded mental health services. Those individuals outside the priority population may receive services; however they would need to be funded through non-DSHS sources.

For substance abuse services, the priority population designation does not determine eligibility for services but rather the order in which individuals will be admitted to services. Unlike mental health, individuals not in the substance abuse priority population are still eligible to receive publicly funded substance abuse services however they may have to wait longer to access those services.

The priority population designation also applies to mental health services for Medicaid eligible individuals as it is used for determining access to the Medicaid Rehabilitation and Targeted Case Management services. Medicaid consumers without a priority population designation are still eligible to receive a full continuum of services as defined under the Medicaid benefit.

Mental Health Systems of Care

Depending on an individual's eligibility for services as determined based on the eligibility criteria described in the previous section, they have varying access to services, both in the services that are available to them and the delivery systems through which they can receive services. The following tables provide details regarding the services available to each of the populations defined in the previous sections and the system of care through which the services are rendered, including the providers from which they may receive those services, the model under which those services are reimbursed, and the state agency responsible for oversight and monitoring of the services. Detailed descriptions of the systems of care are provided in the sections following these tables.

In developing the following tables, the complex nature of the public mental health and substance abuse systems in Texas became overwhelmingly apparent. In an effort to present the information in the most concise manner possible, some assumptions were built in to the various columns of the tables. In reviewing the following tables, as well as those under the substance abuse systems of care, the following items should be considered:

- Enrolled Medicaid providers may include the LMHAs along with any individual providers.

- MCO contracted providers would include any contractors under STAR, STAR PLUS+, STAR Health, or NorthSTAR.

- For any services rendered through NorthSTAR, DSHS serves as the oversight agency.

Table III.2: Medicaid Mental Health Services Matrix

Medicaid Population					
Services	Provider(s)	Oversight Agency	Reimbursement Model	Service Available to Priority Population	Service Available to Non-Priority Population
Rehabilitation Services Day program for acute needs Medication training and support Crisis intervention services Skills training and development Psychosocial rehabilitative services	LMHAs and NorthSTAR	DSHS	FFS	Yes	Not Available
Targeted Case Management	LMHAs and NorthSTAR	DSHS	FFS	Yes	Yes
Screening	LMHAs and NorthSTAR	DSHS	FFS	Yes	Yes
Assessment	LMHAs and NorthSTAR	DSHS	FFS	Yes	Yes
Physician Services	Enrolled Medicaid Providers and MCO Contracted Providers	HHSC	FFS; Managed Care	Yes	Yes
Psychologist and LPA Services	Enrolled Medicaid Providers and MCO Contracted Providers	HHSC	FFS; Managed Care	Yes	Yes
Electroconvulsive Therapy (ECT)	Enrolled Medicaid Providers and MCO Contracted Providers	HHSC	FFS; Managed Care	Yes	Yes
Pharmacological Regimen Oversight and Pharmacological Management Services	Enrolled Medicaid Providers and MCO Contracted Providers	HHSC	FFS; Managed Care	Yes	Yes
Psychiatric Diagnostic Interviews	Enrolled Medicaid Providers and MCO Contracted Providers	HHSC	FFS; Managed Care	Yes	Yes
Psychological and Neuropsychological Testing	Enrolled Medicaid Providers and MCO Contracted Providers	HHSC	FFS; Managed Care	Yes	Yes
Psychotherapy/Counseling	Enrolled Medicaid Providers and MCO Contracted Providers	HHSC	FFS; Managed Care	Yes	Yes
Narcosynthesis	Enrolled Medicaid Providers and MCO Contracted Providers	HHSC	FFS; Managed Care	Yes	Yes
Inpatient (Acute)	Enrolled Medicaid Providers and MCO Contracted Providers	HHSC	FFS; Managed Care	Yes	Yes
Inpatient (State Hospitals)	Enrolled Medicaid Providers and MCO Contracted Providers	HHSC	Managed Care, provided as "in lieu of" service	Yes	Yes
Crisis Services	Enrolled Medicaid Providers and MCO Contracted Providers	HHSC	FFS; Managed Care	Yes	Yes
ACT	LMHAs and NorthSTAR	DSHS	DSHS Funded	Yes	Not Available
Supported Employment	LMHAs and NorthSTAR	DSHS	DSHS Funded	Yes	Not Available
Supported Housing	LMHAs and NorthSTAR	DSHS	DSHS Funded	Yes	Not Available

Table III.3: CHIP Mental Health Services Matrix

CHIP Population			
Services	Provider(s)	Reimbursement Model	Oversight Agency
Case Management Services	CHIP Managed Care Contracted Provider	Managed Care	HHSC
Inpatient Mental Health Services (Acute)	CHIP Managed Care Contracted Provider	Managed Care	HHSC
Inpatient Mental Health Services (State Hospital)	CHIP Managed Care Contracted Provider	Managed Care	HHSC
Outpatient Mental Health Services Neuropsychological and Psychological Testing Medication Management Rehabilitative Day Treatments Rehabilitative Treatment Services Sub-Acute Outpatient Services Partial Hospitalization Rehabilitative Day Treatment Skills Training Psycho-educational Skill Development	CHIP Managed Care Contracted Provider	Managed Care	HHSC

Table III.4: DSHS Eligible Mental Health Services Matrix

DSHS Eligible Population					
Services	Provider(s)	Oversight Agency	Reimbursement Model	Service Available to Priority Population	Service Available to Non-Priority Population
Rehabilitation Services Day program for acute needs Medication training and support Crisis intervention services Skills training and development Psychosocial rehabilitative services	LMHAs and NorthSTAR	DSHS	DSHS Funded	Yes	Not Available
Targeted Case Management	LMHAs and NorthSTAR	DSHS	DSHS Funded	Yes	Not Available
Screening	LMHAs and NorthSTAR	DSHS	DSHS Funded	Yes	Yes*
Assessment	LMHAs and NorthSTAR	DSHS	DSHS Funded	Yes	Yes*
Physician Services	LMHAs and NorthSTAR	DSHS	DSHS Funded	Yes	Not Available
Psychologist and LPA Services	LMHAs and NorthSTAR	DSHS	DSHS Funded	Yes	Not Available
Electroconvulsive Therapy (ECT)	LMHAs and NorthSTAR	DSHS	DSHS Funded	Yes	Not Available
Pharmacological Regimen Oversight and Pharmacological Management Services	LMHAs and NorthSTAR	DSHS	DSHS Funded	Yes	Not Available
Psychiatric Diagnostic Interviews	LMHAs and NorthSTAR	DSHS	DSHS Funded	Yes	Not Available
Psychological and Neuropsychological Testing	LMHAs and NorthSTAR	DSHS	DSHS Funded	Yes	Not Available
Psychotherapy/Counseling	LMHAs and NorthSTAR	DSHS	DSHS Funded	Yes	Not Available
Narcosynthesis	LMHAs and NorthSTAR	DSHS	DSHS Funded	Yes	Not Available
Inpatient (Acute)	LMHAs and NorthSTAR	DSHS	DSHS Funded	Yes	Yes**
Inpatient (State Hospitals)	LMHAs and NorthSTAR	DSHS	DSHS Funded	Yes	Yes
Crisis Services	LMHAs and NorthSTAR	DSHS	DSHS Funded	Yes***	Not Available
ACT	LMHAs and NorthSTAR	DSHS	DSHS Funded	Yes****	Not Available
Supported Employment	LMHAs and NorthSTAR	DSHS	DSHS Funded	Yes	Not Available
Supported Housing	LMHAs and NorthSTAR	DSHS	DSHS Funded	Yes	Not Available

*Screening and Assessment are used to determine if an individual is a member of the priority population and qualifies for services, therefore these are open access services

** These services are not funded by DSHS. They are part of the uncompensated care costs that these facilities incur.

*** Individuals requiring Crisis Services are considered to be part of the Priority Population

**** Individuals receiving ACT Services are considered part of the Priority Population as that individual would require "long term support and treatment"

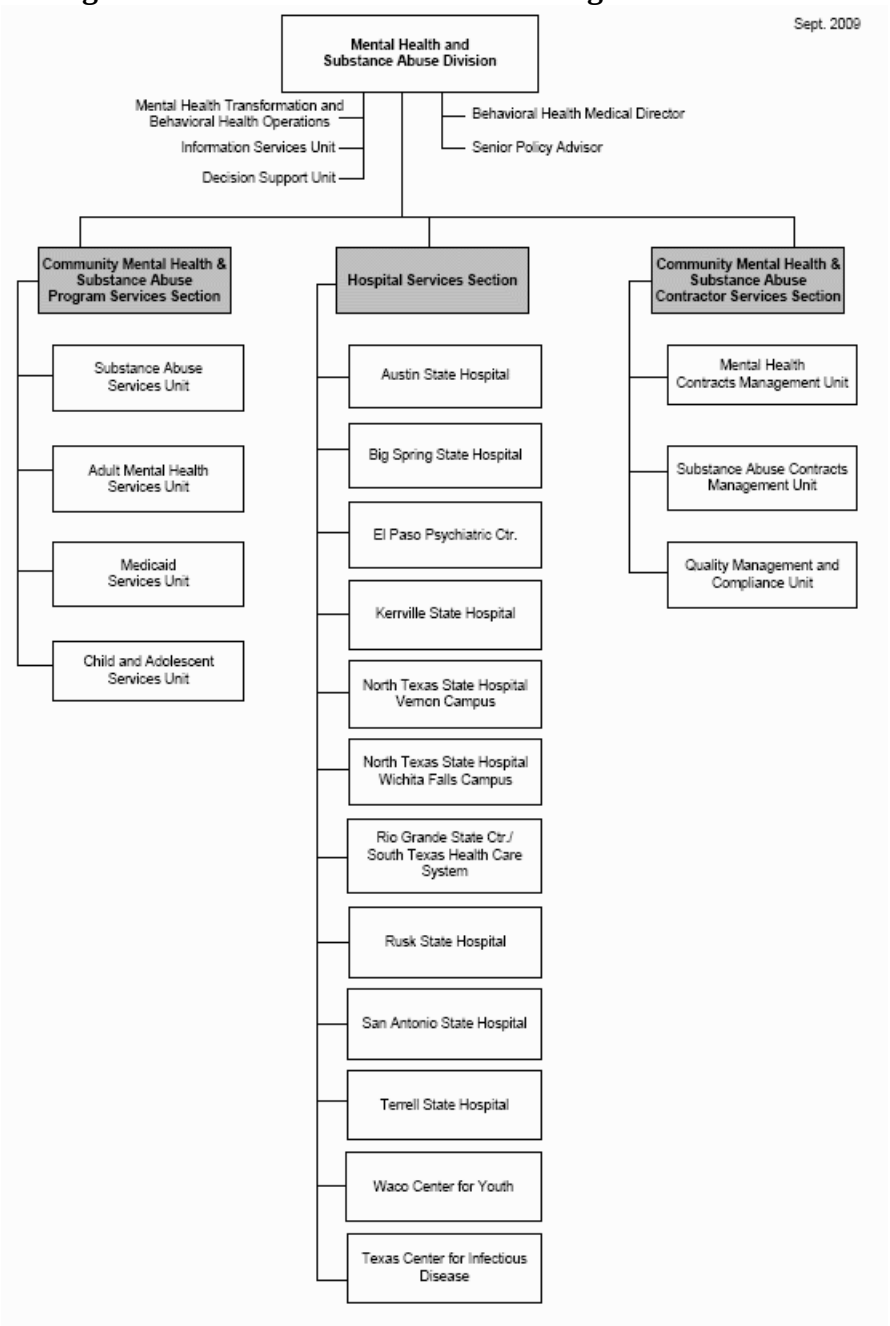
DSHS System of Care

The DSHS system of care is the primary means for a DSHS eligible consumer to enter the behavioral health system, via the LMHAs or NorthSTAR, which operate as a "safety net" for those without insurance or other financial resources. As has been previously discussed, the "safety net" for mental health services is only available to those DSHS eligible consumers that also have a Priority Population diagnosis. Those consumers that do not qualify as Priority Population may still receive services; however these would be at the discretion of the LMHAs and depends on the availability of non-DSHS funding resources.

In addition to serving the DSHS eligible population, DSHS is also responsible for the oversight and delivery of certain mental health services to certain Medicaid eligible adults and children that have a clinical diagnosis that meets the priority population criteria. Eligible Medicaid recipients that do not meet the priority population criteria still have access to mental health and substance abuse services; however, these services are overseen by HHSC.

Within the structure of DSHS, it is the Mental Health and Substance Abuse Division (MHSA) that supports the agency-wide mission of improving the health and well-being of Texans through the provision of information and services related to behavioral health. MHSA, in meeting the agency-wide mission, offers a continuum of mental health and substance abuse services ranging from prevention and early identification to residential treatment and inpatient hospitalization. Additional programs target specific demographics including the elderly, homeless, veterans, and forensic populations, tobacco prevention and cessation, and disaster behavioral health response, while others address vocational or other supportive services. The following organizational chart provides an outline of the structure of the MHSA Division, which was described previously in the Overview Section of this report.

Figure III.1: DSHS MHSA Division Organizational Chart



[9]

[9] http://www.dshs.state.tx.us/orgchart/mhsa.shtm

The continuum of services offered and funded by DSHS include those community based mental health services provided under contracts with the LMHAs and through the NorthSTAR program as well as inpatient hospital services provided through the state and community mental health hospitals. Substance abuse services, described in a subsequent section, are provided under contracts with a number of specialty providers. The following sections provide details on each of the mental health components of the DSHS system. Details are also provided in the Description of Services section below on the Resiliency and Disease Management (RDM) model that has been the statewide model for publicly funded behavioral health services since 2004.

Local Mental Health Authorities (LMHAs)

DSHS is responsible for the oversight and management of mental health services provided to certain Medicaid eligible consumers within the priority population, as well as the DSHS eligible adult consumer population and seriously emotionally disturbed children. In order to meet these responsibilities, DSHS contracts with 37 LMHAs, also referred to as Community Mental Health Centers (Centers), to deliver mental health services in communities across Texas. The LMHAs are also required to plan, develop policy, coordinate and allocate and develop resources for mental health services in their local service area.

The role of the LMHAs as the authority is defined under Section 533.035 of the Texas Health and Safety Code. As an authority, the LMHAs responsibilities include:

- Using funds received from DSHS to ensure mental health and chemical dependency services (for dually diagnosed individuals) are provided in the local service area

- Consider public input, ultimate cost benefit, and client care issues to ensure consumer choice and the best use of public funds in:
  - Assembling a network of service providers; and
  - Making recommendations relating to the most appropriate and available treatment alternatives for individuals in need of mental health services.

- Demonstrate to DSHS that the services that the authority provides directly or through subcontractors and that involve state funds comply with relevant state standards[10]

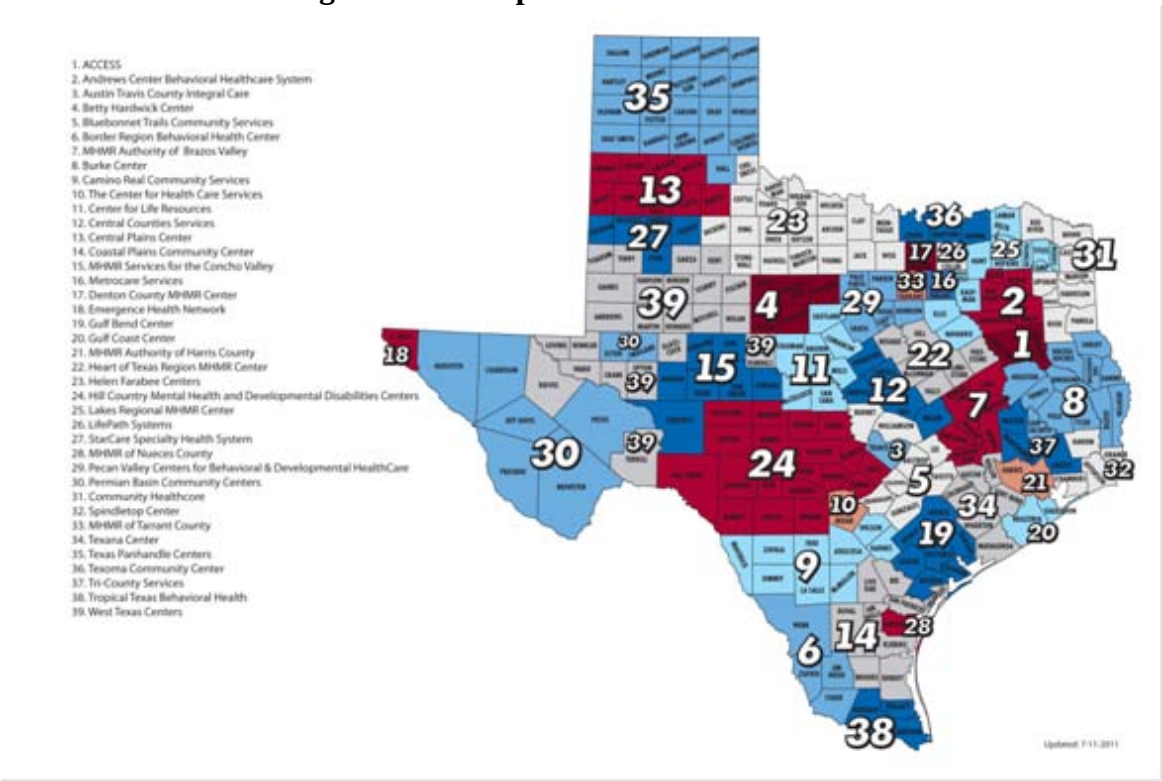
The LMHA can also serve as provider of services under a set of guidelines also set forth in Section 533.035 of the Texas Health and Safety Code. Additional details on the distinction between the provider and authority functions of the LMHAs are described in the "provider of last resort" legislation under HB 2292.

[10] Texas Health and Safety Code, Section 533.035 – Local Mental Health and Mental Retardation Authorities. http://www.statutes.legis.state.tx.us/Docs/HS/htm/HS.533.htm

The origin of the LMHAs can be traced to 1965 when the Texas Legislature passed the Texas Mental Health and Mental Retardation Act, authorizing local agencies to assume the responsibility for the local administration of mental health, intellectual disability, and substance abuse services. Following the passing of this legislation, county authorities formed partnerships to create what were known as Mental Health and Mental Retardation Authorities (MHMRAs) in order to serve the mental health, intellectual disability, and substance abuse needs of their local communities. In the 47 years since the passing of the Texas Mental Health and Mental Retardation Act, the local authorities have transformed from MHMRAs to the current LMHAs with the number of authorities gradually decreasing to the current group of 37 LMHAs plus the NorthSTAR program.

NorthSTAR, which is described in more detail in the following section, has a Local Behavioral Health Authority (LBHA), the North Texas Behavioral Health Authority (NTBHA). NTBHA delegates some of the authority functions to ValueOptions. There are two former LMHAs, Metrocare and LifePath, that operate as specialty provider networks (SPNs) within the NorthSTAR system. A third LMHA, Lakes Regional, maintains LMHA functions for the region it covers outside of the NorthSTAR catchment area, but relinquishes the authority role to NTBHA for those functions within the NorthSTAR area, where it also functions as a SPN. The following map illustrates the local service areas for the LMHAs.

Figure III.2: Map of LMHA Service Areas



Historically, the LMHAs have filled the role of both the authority over and provider of services. In 2003, House Bill 2292, which abolished both the Texas Department of Mental Health and Mental Retardation (TDMHMR) and the Texas Commission on Alcohol and Drug Abuse (TCADA) and created DSHS, included an amendment that required the LMHAs to operate as the provider of last resort. The provider of last resort requirement was designed to encourage the LMHAs to develop a network of service providers and only fill the role of service provider if they are unable to contract with another local provider.

LMHAs, as originally required under HB 2292 and in accordance with Title 25, Chapter 412, Subchapter P of the Texas Administrative Code, are required to plan for, assemble, and maintain a network of service providers and set forth the conditions under which the LMHA may serve as a provider of services. In fulfillment of this requirement, LMHAs must develop, using input from local stakeholders, a Local Network Development Plan (LNDP). The LNDP establishes the process of procurement and contracting goals, based upon an assessment of interested providers. Under the rule, which was developed through the negotiated rule-making process, consumers must be provided the opportunity to choose from any available provider in the network, including the LMHA. This element of consumer choice precludes the LMHAs from controlling the actual utilization of external providers.

The local plan is submitted and reviewed by DSHS at least biennially. In 2007, House Bill 2439 was passed to amend Subchapter B, Chapter 533 of the Health and Safety Code to add a new section called "Local Network Development Plan Creation and Approval". This amendment essentially aligns the Health and Safety Code with the existing language in Subchapter P of the Texas Administrative Code.

To date, the LMHAs have complied with their requirements for completing LNDPs and several LMHAs have been successful in contracting for portions of their RDM services and with individual practitioners as evidenced by the significant portion of crisis and residential services provided by private providers; however, the full intent of the provider of last resort legislation has yet to be realized as there are varying levels of effort and success in LMHAs developing a sufficient provider network. As a result, many LMHAs continue to serve as the primary service provider for the DSHS eligible population as well as a primary service provider for the Medicaid population. Some communities have established local resources that provide limited mental health benefits to a relatively small number of persons with SPMI who do not have Medicaid. However DSHS and its contractors, the LMHAs, are the only statewide resource for ongoing mental health services for the DSHS eligible consumers. Additionally, as has been noted elsewhere in the report, there are not sufficient funds in the system to provide ongoing care to the entire population that DSHS is legislatively required to target. As a result, those individuals outside of the priority population are not able to be served with DSHS funds and have even further limitations on their access to services. .

Medicaid consumers while eligible to receive services through other providers, can only receive the Medicaid rehabilitation services through the LMHAs or their subcontractors. Private providers have made attempts to become an approved provider of rehabilitation services; however, none to date have completed this process. Currently, this process has been suspended as HHSC recently submitted a 1915(b) waiver to CMS that would allow the State to implement selective contracting for Medicaid rehabilitation services. If approved, the waiver would result in the LMHAs being the sole provider of these services and limit the State's ability to pursue initiatives to comprehensively redesign the public behavioral health system.

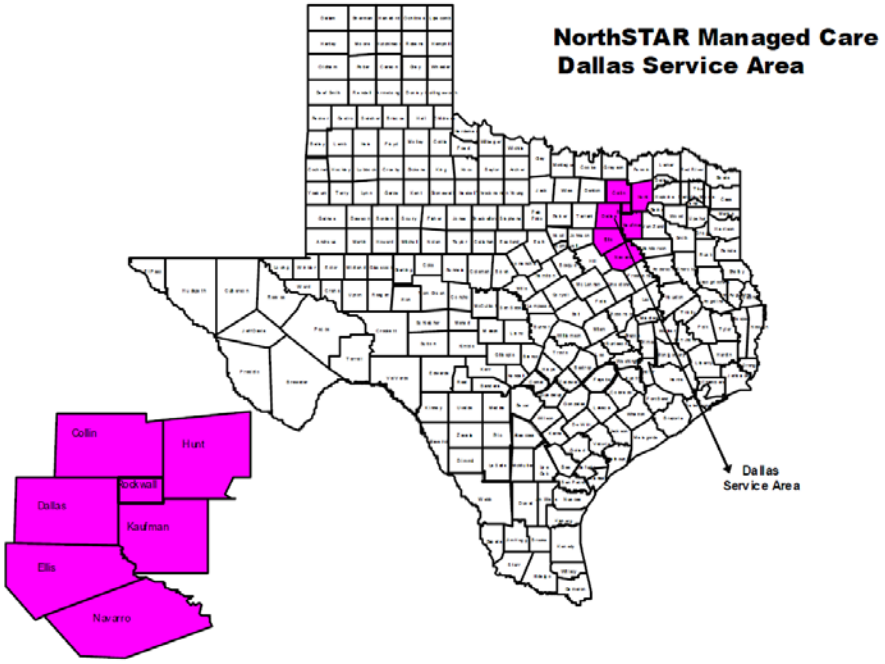
The services available through LMHAs for all populations were reflected previously in Table III.2. through Table III.4.

NorthSTAR

During the 1990's, the state underwent a series of efforts to expand Medicaid Managed Care. Texas launched a number of Medicaid waiver programs that placed physical and mental health coverage under the same service delivery model. During this time, the Dallas area was experiencing a declining trend in the number of Medicaid consumers receiving behavioral health services. In an effort to improve the delivery of behavioral healthcare in this service area, the

state opted to try a different strategy by carving out mental health and substance abuse services in a single, separate delivery system. In 1999, through the passage of a 1915(b) Waiver, NorthSTAR was implemented as a managed care carve-out pilot program to serve the Dallas and contiguous counties.

Figure III.3: Map of NorthSTAR Service Areas



DALLAS SERVICE AREA
NorthSTAR

(Counties: Collin, Dallas, Ellis, Hunt, Kaufman, Navarro, Rockwall)

Thirteen years later, the NorthSTAR pilot program continues to operate in seven North Texas counties including Dallas, Collin, Hunt, Rockwall, Kaufman, Ellis, and Navarro counties. Medicaid eligible recipients residing in the service area are automatically enrolled in NorthSTAR. Non-Medicaid eligible individuals residing in the service area may be eligible to receive NorthSTAR services through an application process if they meet the clinical and income criteria.

The program's main goal is to integrate the publicly funded systems of mental health and substance abuse services. NorthSTAR is a blended funding model, which pools finances from Medicaid, state general revenue (GR), federal block grant funds, and some local/county funds to improve the coordination and efficiency of behavioral health care. It has a separate funding

stream for Medicaid and non-Medicaid, while providing mental health and substance abuse services under one system.

The NorthSTAR model is an "at risk" model, meaning the behavioral health organization assumes the risk for the delivery of all covered services administered. NorthSTAR initially contracted with two behavioral health organizations (BHOs): Magellan, and ValueOptions. In October 2000, Magellan did not renew its contract and the Magellan enrollees were transitioned to ValueOptions. ValueOptions became and still remains the sole BHO for NorthSTAR.

As the BHO, ValueOptions is responsible for subcontracting and developing a specialty provider network (SPN) for treatment services and service coordination. The SPN is comprised of agencies that specialize in providing managed care for mental health services. Some NorthSTAR services are exclusively provided by the SPN such as ACT teams, rehabilitation, supported housing, supported employment, and case management. ValueOptions is also required to maintain an adequate network for other provider specialties for behavioral health such as psychiatrists, psychologists, licensed therapists, substance abuse treatment facilities, and hospitals.[11]

NorthSTAR is required to provide guaranteed access to care for the Medicaid eligible and DSHS eligible population. As a result, it does not have waiting lists for services or medications. As the DSHS eligible population seeking services continues to outpace funding, NorthSTAR providers may need to refer clients to alternative network providers to ensure all medically necessary services are available under the current reimbursement model. NorthSTAR has an expansive provider network, allowing for competition among providers and service choice and availability for consumers. Similar to LMHAs, NorthSTAR also provides universal access for crisis and emergency services.

As was described in the LMHA narrative above, NorthSTAR separates authority and provider functions under the NTBHA. The NTBHA was formed during the implementation of NorthSTAR to serve as a local behavioral health authority to ensure for local oversight and community input for the delivery of publicly funded mental health and substance abuse care.

NorthSTAR, as a publicly funded behavioral health program, is required to follow the RDM model. The services available through NorthSTAR for all populations were reflected previously in Table III.2 through Table III.4.

NorthSTAR has a series of additional value added services which include consumer-run drop in centers, minority and specialty populations outreach and advocacy, family support groups, peer

[11] HHSC Medicaid Reports: Medicaid Managed Care, Chapter 6, p. 10
http://www.hhsc.state.tx.us/medicaid/reports/PB8/PDF/Chp-6.pdf

education, support and counseling, school based services (children), dual diagnosis support groups, telephonic recordings of publications and event notification, and targeted transportation services.

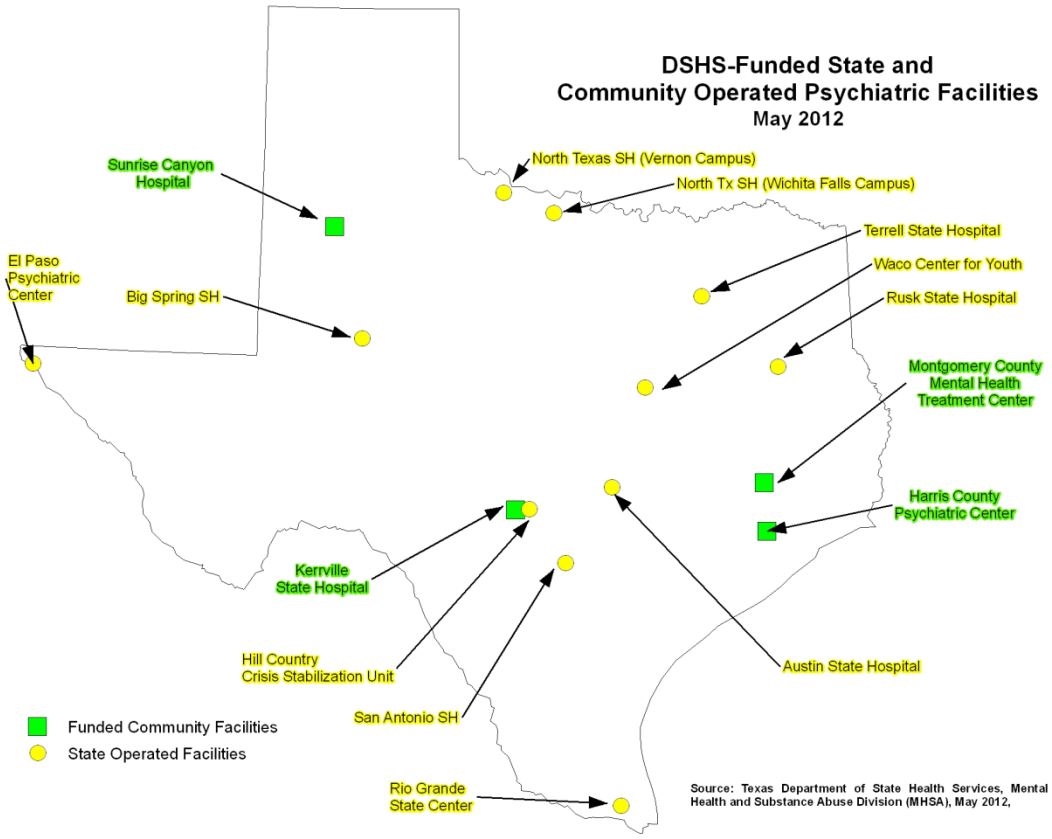
In the 2011 Government Effectiveness and Efficiency Report, the Texas Legislative Budget Board (LBB) conducted a comparative study on the data across NorthSTAR and other service delivery areas, including the LMHAs. While the study noted that it was generally less expensive to serve DSHS eligible clients in NorthSTAR and that a lower percent of NorthSTAR clients receive a core service; however those that do receive a core service receive as much or more service hours than the comparison groups. Further, the LBB report did not reach any conclusions regarding the effectiveness of the NorthSTAR program compared to other service delivery areas. The LBB concluded that the comparison of NorthSTAR's effectiveness against other service delivery areas was not feasible due to the incomplete and unreliable existing outcome data.

Inpatient Hospital Services

In addition to providing community based services, the State of Texas also provides inpatient hospital services through state-owned and operated facilities across the State. DSHS is responsible for managing nine state-owned mental hospitals and one state-owned residential treatment facility for adolescents. The state hospitals are one component of the statewide mental health delivery system that includes inpatient care and community based care. The state mental hospitals' primary purpose is to stabilize the patients admitted by providing inpatient mental health treatment.

The location of the state mental hospitals are illustrated in the following map and briefly described in the text below.

Figure III.4: Map of DSHS State and Community Hospitals



- **Austin State Hospital** (ASH) provides psychiatric care to a 38 county region in Central Texas. It has 299 inpatient beds, and offers services to adults, children, and adolescents for South Central Texas. ASH also provides child and adolescent psychiatric services for counties in East Texas. For 2010, the average length of stay was 25 days, and the average cost per patient served was $10,321.[12]

- **Big Spring State Hospital** (BSSH) provides psychiatric care to a 58 county area in West Texas and Texas South Plains. It has 200 beds and offers services to adults only. Forty (40) of the 200 beds are residential rehabilitation beds for persons who have achieved a reasonable level of psychiatric stabilization, but continue to need rehabilitation services. BSSH is one of the three psychiatric hospitals providing

[12] "Managing and Funding State Mental Health Hospitals in Texas": Legislative Primer, Legislative Budget Board Staff, Submitted February 2011, p.2

treatment for patients on forensic commitments including competency restoration for persons no longer requiring a maximum security setting. BSSH also contracts with the Veterans Administration. For 2010, the average length of stay was 51 days, and the average cost per patient served was $16,424.[13]

- **El Paso Psychiatric Center** (EPPC) provides hospitalization services in far West Texas. It has 74 beds and provides services to adults, adolescents, and children. EPPC programs include acute and sub-acute care, as well as long term care and forensic services. EPPC also teaches and trains health care professionals and engages in research. For 2010, the average length of stay was 28 days, and the average cost per patient served was $12,974.[14]

- **Kerrville State Hospital** (KSH) provides services to individuals hospitalized on a forensic commitment. It has 202 beds, and treats adults only. KSH programs provide care for persons judged to be not guilty by reason of insanity, and not competent to stand trial. KSH provides traditional care for persons not requiring a maximum security setting. In 2010, the average length of stay was 777 days, and the average cost per patient served was $30,006.[15]

- **North Texas State Hospital** (NTSH) has two campuses: Wichita Falls and Vernon. This is the largest state hospital in the Texas mental health system. The Wichita Falls campus has 257 beds and serves persons with mental illness and mental illness/mental retardation who reside in the North Texas area. The Vernon campus is a 343 bed statewide facility and provides a maximum security setting for adults and adolescents needing forensic psychiatric services. In 2010, the average length of stay was 97 days, and the average cost per patient was $18,100 for the combined (Vernon and Wichita Falls) NTSH.[16]

- **Rio Grande State Center** (RGSC) offers healthcare, inpatient mental health services, and ICF-MR services. It is a 130 bed facility, which has a 55 bed unit for mental

[13] "Managing and Funding State Mental Health Hospitals in Texas": Legislative Primer, Legislative Budget Board Staff, Submitted February 2011, p.2
[14] "Managing and Funding State Mental Health Hospitals in Texas": Legislative Primer, Legislative Budget Board Staff, Submitted February 2011, p.2
[15] "Managing and Funding State Mental Health Hospitals in Texas": Legislative Primer, Legislative Budget Board Staff, Submitted February 2011, p.2
[16] "Managing and Funding State Mental Health Hospitals in Texas": Legislative Primer, Legislative Budget Board Staff, Submitted February 2011, p.3

health services. For 2010, the average length of stay was 18 days, and the average cost per patient served was $7,425.[17]

- **Rusk State Hospital** (RSH) is a 335 bed inpatient hospital that provides psychiatric care for persons with severe mental illness residing in the East Texas area. Forty (40) of the 335 beds are residential rehabilitation beds for persons who have achieved a reasonable level of psychiatric stabilization, but continue to need rehabilitation services. RSH is one of three psychiatric hospitals providing treatment for patients on forensic commitments. For 2010, the average length of stay was 113 days and the average cost per patient served was $19,805.[18]

- **San Antonio State Hospital** (SASH) offers intensive inpatient diagnostic, treatment, rehabilitative, and referral services for seriously mentally ill persons from South Texas. It has 302 beds, and treats adults and adolescents. Forty (40) of the 302 beds are residential rehabilitation beds for persons who have achieved a reasonable level of psychiatric stabilization, but continue to need rehabilitation services. SASH specialty services include psychiatric treatment for adolescents, adult forensic services, and long term geriatric care for persons age 60 and older. For 2010, the average length of stay was 44 days, and the average cost per patient served was $15,825.[19]

- **Terrell State Hospital** (TSH) is a 316 bed facility that offers psychiatric inpatient services to adults, adolescents and children within 19 counties in the North and Northeastern areas of Texas. THS programs include adult acute care, child and adolescent services, forensic services, geriatric care, as well as, intensive behavioral and intermediate care services. THS is responsible for providing services to adolescents in the TSH service area as well as one half of the RSH service area. TSH is also responsible for providing services to children in the TSH area as well as all of the RSH service area. For 2010, the average length of stay was 37 days, and the average cost per patient served was $10,760.[20]

- **The Waco Center for Youth** is a 78 bed facility which provides statewide residential psychiatric services for adolescents ages 13 to 17 who are emotionally disturbed or

[17] "Managing and Funding State Mental Health Hospitals in Texas": Legislative Primer, Legislative Budget Board Staff, Submitted February 2011, p.3
[18] "Managing and Funding State Mental Health Hospitals in Texas": Legislative Primer, Legislative Budget Board Staff, Submitted February 2011, p.3
[19] "Managing and Funding State Mental Health Hospitals in Texas": Legislative Primer, Legislative Budget Board Staff, Submitted February 2011, p.4
[20] "Managing and Funding State Mental Health Hospitals in Texas": Legislative Primer, Legislative Budget Board Staff, Submitted February 2011, p.4

have behavioral problems. In 2010, the average length of stay was 175 days, and the average cost per patient served was $23,298.[21]

In addition, DSHS provides funds to purchase beds at four community psychiatric hospitals. These hospitals are briefly described below:

- **Sunrise Canyon Hospital** provides services for adults, children and adolescents who have a diagnosis of mental illness, developmental disabilities or substance abuse. It provides services to individuals across the Texas South Plains and Panhandle region. It is operated by and integrated with the Lubbock Regional MHMR Center.

- **University of Texas Harris County Psychiatric Center** is a teaching hospital which delivers a comprehensive program of psychiatric and psychosocial services to adults, adolescents, and children with mental illnesses.

- **Montgomery County Mental Health Treatment Facility (MCMHTF)** is a licensed hospital serving forensic mental health patients with over 100 beds. It treats patients who are determined by the court system to be incompetent to proceed with their trial. The County partners with the State and GEO Care, Inc. to deliver a comprehensive service plan.

DSHS also contracts with Gulf Coast Center in Galveston for community beds. Prior to Hurricane Ike in 2008, Gulf Coast Center contracted with the University of Texas Medical Branch (UTMB) in Galveston for community psychiatric beds; however, UTMB was so extensively damaged by the hurricane that it no longer could provide access to patients referred by Gulf Coast Center. Since that time, DSHS provides funds to Gulf Coast Center to "purchase" at least 16 psychiatric beds from other hospitals in its region, and to provide access to crisis respite services for at least 10 persons.

Access to the state mental health hospitals has become increasingly difficult over the last decade due in large part to the increasing forensic population across the state. As more state hospital beds are occupied by forensic commitments, the community system is forced to treat a greater portion of the civil commitments. While there have been successful pilots of Outpatient Competency Restoration (OCR) programs, there remains a significant forensic population in the state hospitals with a number of individuals in jails across the state that could be served in state hospitals beds instead of the jails.

[21] "Managing and Funding State Mental Health Hospitals in Texas": Legislative Primer, Legislative Budget Board Staff, Submitted February 2011, p.4

The recent ruling by the 419th District Court in the *Taylor v. Lakey* case provides for additional concerns around the access to state mental health hospital beds for civil commitments. Under this ruling, any detainee found to be incompetent would need to have a forensic bed available for them within 21 days of the criminal court's commitment order. The current wait time for a detainee that is found to be incompetent to gain access to a forensic bed is estimated to be no more than three months. The court's ruling is expected to place increasing strains on a system that is already being stretched to its limits. At a stakeholder meeting, a local Judge expressed concerns that the ruling would result in a decrease in the use of successful community based programs like the OCR program as judges are able to have detainees committed in a shorter time frame and have less desire to utilize the available community resources.

HHSC System of Care

HHSC has been the single state agency for oversight of the Texas Medicaid program since 1993. Under the Medicaid program, there are various programs through which consumers may be eligible for services including the traditional Medicaid Fee for Service (FFS) program and Medicaid Managed Care programs including STAR and STAR+Plus, and NorthSTAR. Prior to March 1, 2012, Medicaid included a third program known as Primary Care/Case Management (PCCM), however this program was terminated. In addition to the Medicaid program, HHSC is also responsible for the oversight of the Texas CHIP program.

Unlike the service delivery models outlined under the DSHS section, the service delivery model for Medicaid eligible consumers is viewed as having greater freedom of choice for consumers. That is, under the Medicaid FFS program, consumers have, with some exceptions, a "freedom of choice" in their providers as they may seek services through "any willing provider" that is enrolled as a Texas Medicaid provider. The exception to the "any willing provider" exists for the Medicaid Rehabilitation and Targeted Case Management services, for which the LMHAs currently serve as the sole provider of these services.

Under the Medicaid Manage Care program, there is a limit to the "freedom of choice" for consumers as services are only available through those providers that are under contract with the Medicaid Managed Care Organization (MCO). The Medicaid Rehabilitation and Targeted Case Management services for the Priority Population are carved out of the managed care plans and handled as Medicaid FFS services with the LMHAs serving as the sole provider. NorthSTAR, with the "freedom of choice" provision waived under the 1915(b) waiver, is similar to the Medicaid Managed Care program in that the provider network is limited by the Behavioral Health Organization (BHO). However, both NorthSTAR and the Medicaid MCOs are required to develop sufficient provider networks.

The CHIP program also mirrors the Medicaid Managed Care program as all services are provided under managed care arrangements.

As has been noted previously, while there are no current exceptions to the any willing provider for Medicaid services in state rules and regulations, the Medicaid rehabilitation and targeted case management services are currently provided solely through the LMHAs and their subcontractors and NorthSTAR. Providers have been able to apply to become a provider of these services; however none outside the LMHAs and their subcontractors have completed this process. The state has taken steps, through the 1915(b) waiver submission to CMS to formally establish the exception to the any will provider provision for the Medicaid rehabilitation services. It is important to note that while Medicaid consumers must receive these services through the LMHAs or NorthSTAR, they are free to seek their other services through any Medicaid provider. Medicaid clients who are enrolled in the NorthSTAR program must seek services from a NorthSTAR network provider.

Medicaid consumers can also access non-Medicaid funded services such as supported employment, crisis respite, and supported housing through a DSHS provider.

While the Medicaid consumers do have more choice in accessing services, they, like the DSHS eligible consumers, must receive an initial screening and assessment to determine their diagnosis and subsequently whether that diagnosis places them in the Priority Population. The Priority Population diagnosis for Medicaid consumers is important in determining a Medicaid consumer's eligibility for the Medicaid Rehabilitation Service. Unlike the DSHS eligible population, the Priority Population designation does not limit a Medicaid consumer from receiving a comprehensive continuum of care.

Medicaid Fee-for Service (FFS)

Fee for Service (FFS) reimbursement is the traditional healthcare payment system in which providers receive a payment for each unit of service they provide. Medicaid FFS is offered in every county that does not have a managed care program. With the expansion of Medicaid managed care programs, particularly in urban areas, the Medicaid FFS model is most prevalent in the rural counties in Texas. The Medicaid FFS program covers an average of 1.2 million members per month, accounting for nearly one third of the monthly Medicaid population. While these figures have remained relatively consistent since fiscal year 2009, it is expected that the recent Medicaid Managed Care expansion in March 2012 will result in these figures to dramatically decrease.

All Medicaid FFS consumers are able to gain access to Medicaid-funded services through "any-willing provider" enrolled with the Medicaid program, which includes the same LMHAs. These providers are not, however, required to take all Medicaid consumers and in some cases have chosen to limit the number of Medicaid consumers they accept which can result in a shortage of accessible services.

Individuals in the Priority Population served through the Medicaid FFS program are eligible to receive the Medicaid Rehabilitation Services and the Targeted Case Management service; however, these services are currently only provided through the LMHAs or through NorthSTAR. The same would apply for individuals in the Priority Population served through the Medicaid Managed Care program. These individuals would receive the Medicaid Rehabilitation Services and Targeted Case Management service under a FFS arrangement through the LMHAs or NorthSTAR.

Medicaid Managed Care

The 1991 Texas Legislature passed House Bill 7 which directed the state to establish Medicaid managed care pilot programs in response to the rising health care costs and growing interest in finding cost effective ways to provide health care. These pilots, initially called LoneSTAR and eventually shortened to STAR, underwent continual expansion. Initially starting in Travis County, the pilot was expanded in 1996 to include other counties such as Lubbock, Bexar, and Tarrant County. In 1997, STAR was expanded to the Houston area.

In 1997, Texas also created a new pilot program in Harris County called STAR+PLUS. This program was aimed to integrate acute care and long term services and supports for SSI and SSI-related Medicaid clients in Harris County. The implementation of STAR and STAR+PLUS in the Harris County Service Area doubled the number of Texas Medicaid clients in managed care. Dallas and El Paso were added to the Medicaid managed care service area in 1999.

In 2005, Primary Care Case Management (PCCM) expanded to 197 counties outside of the STAR service areas. By December 2006, PCCM was phased out of the STAR Service Areas with the exception of Jefferson, Chambers, Orange, Hardin, and Liberty counties. PCCM continued to serve Medicaid clients in 202, primarily rural, counties until it was phased out and included in the Medicaid managed care expansion as of March 1, 2012.[22]

STAR Health was implemented on April 1, 2008 as a result of Senate Bill 6 of the 79th Legislature which directed HHSC and the Department of Family and Protective Services (DFPS) to form a healthcare delivery model for Medicaid children in foster care. The program was designed to more effectively manage the healthcare of children in foster care and kinship care.

In February 2007, as a result of House Bill 1771 of the 79th Legislature, the STAR+PLUS Hospital Carve-out model, which integrated acute and long-term services and supports, replaced the existing STAR+PLUS model in the Harris Service Area. STAR+PLUS was expanded to the Bexar, Harris Expansion, Nueces, and Travis Service Areas. In 2006, Nueces was added to the

[22] HHSC Medicaid Reports: Medicaid Managed Care, Chapter 6, http://www.hhsc.state.tx.us/medicaid/reports/PB8/PDF/Chp-6.pdf

STAR Service Areas. In 2011, STAR+PLUS was expanded to the Dallas and Tarrant Service Areas.

STAR and STAR+Plus are Texas' largest managed care programs, and provide managed care to more than one million enrollees. Both STAR and STAR+Plus contract with multiple HMOs across their various service areas with most HMOs serving multiple service areas and operating on a fee-per-member basis.

The following table provides a breakdown of the Managed Care enrollment by program. It should be noted in reviewing the following table that the non-NorthSTAR programs only enroll Medicaid clients and the figures therefore represent only Medicaid clients. Conversely, the figure included for NorthSTAR includes both Medicaid and non-Medicaid enrollees as NorthSTAR is responsible for both populations. It should also be noted that NorthSTAR is a behavioral health "carve out" of the STAR and STAR+Plus programs and as such does not provide physical healthcare.

Table III.5: Managed Care Enrollment by Program

Program	Total Enrolled
STAR	1,738,488
NorthSTAR	917,857
Primary Care Case Management (PCCM)	802,199
STAR+PLUS	279,952
STARHealth	31,401
Total Unduplicated	3,379,897

Source: Texas HHSC Medicaid Managed Care Monthly Confirmed Eligible Report – Feb.2012[23]

Managed Care Expansion

Texas recently submitted a request to CMS to expand their Medicaid Managed Care program. On December 12, 2011, CMS signed off on this request to expand its existing risk-based Medicaid managed care program to 174 counties in the rural parts of the state over a period of five years. Currently 1.9 million of the 3 million people enrolled in Medicaid are enrolled in a managed care program. This expansion is expected to shift a majority of the remaining 1.1

[23] Texas HHSC Medicaid Managed Care Monthly Confirmed Eligible Report, Feb. 2012, http://www.hhsc.state.tx.us/medicaid/mc/about/reports/confirmed_eligibles_report.html

million FFS enrollees into managed care.[24] A more detailed description of the results of this expansion can be found on the HHSC website.[25]

State of Texas Access Reform (STAR)
The STAR program is provided through Managed Care Organizations (MCOs) in 9 urban areas of the state. STAR operates under the Federal 1915(b) waiver. The program predominately serves non-disabled children, low-income families, and pregnant woman. STAR Clients have access to a PCP who coordinates their care through a medical home. Those who join one of the MCOs also have access to value-added services and additional benefits not available under the PCCM or FFS program. As a STAR program enrollee, individuals would be able to access services through any provider under contract with one of the MCOs. The STAR program currently operates in the Bexar, Dallas, El Paso, Harris, Harris Expansion, Lubbock, Nueces, Tarrant, and Travis Service Areas.

STAR MCOs are responsible for providing a benefit package to Members that includes all Medically Necessary services covered under the traditional, FFS Medicaid programs with the exception of Non-capitated services. STAR covered services include inpatient mental health services for children (birth through age 20), outpatient mental health services, psychiatry services, counseling services for adults, outpatient substance abuse disorder treatment, and residential substance use disorder treatment services. STAR MCOs may also include Value-added Services in their benefit packages, if approved by HHSC. Rehabilitative and Targeted Case Management services are carved out from these contracts. These services are solely provided through the LMHA's. All remaining services can be provided by any provider that has contracted with one of the MCOs to serve STAR enrollees.

STAR+PLUS
STAR+PLUS aims to integrate the delivery of acute and long-term services and supports for SSI and SSI-related clients with chronic and complex conditions who need more than acute care services. SSI and SSI-related adults are required to participate in the program. MCOs provide all acute and long-term services and supports through one service delivery system. The program also ensures that each member has a PCP. The emphasis is on providing home and community based services to avoid the need for institutionalization. STAR+PLUS required federal approval of both a 1915(b) and a 1915(c) waiver in order to mandate participation and provide home and community based services.

[24]American Medical News "Texas Medicaid Managed Care Expansion Approved", posted January 2, 2012, http://www.ama-assn.org/amednews/2012/01/02/gvsc0102.htm, Statistics provided by HHSC
[25]HHSC "Medicaid Managed Care Changes Effective March 2012, posted September 13, 2011, http://www.hhsc.state.tx.us/medicaid/MMC/managed-care-tentative.pdf

STARHealth
STARHealth is a statewide program implemented in 2008 designed to provide coordinated care services to children and youth in foster and kinship care. HHSC administers the program under contract with a single managed care organization. STARHealth members receive medical, dental, vision, and behavioral health benefits, including unlimited prescriptions, through a medical home.

Children's Health Insurance Program (CHIP)
CHIP is a joint state-federal program administered by HHSC which provides medical coverage to eligible children up to 19 years of age who do not already have insurance and are not eligible for Medicaid under a mandatory category of eligibility provided in Section 1902 of the Social Security Act. Texas' CHIP program was created in 1999. During fiscal year 2011, the CHIP program served approximately 562,550 children per month.[26] Texas CHIP program members are enrolled in a managed care organization with services provided by providers under contract with the managed care organizations. Unlike the DSHS eligible and Medicaid populations, the CHIP program does not utilize the Priority Population designation to further define eligibility for services.

Description of Services
The following sections provide details on the services identified in Tables III.2, III.3, and III.4 above. The Resiliency and Disease Management model of DSHS is described, followed by descriptions of the Medicaid services, and finally descriptions of the services covered as part of the CHIP benefit package.

Resiliency and Disease Management
DSHS has taken steps over the last ten years to create greater standardization in the services provided in the public behavioral health system. These efforts, known as Resiliency and Disease Management (RDM), are a major component of the public behavioral health system for mental health services as it exists today.

RDM, created under House Bill 2292 and placed into effect in September 2004, was designed to change the way publicly funded mental health services were provided in Texas. The RDM initiative created standardized service packages and promulgated clinical guidelines that identified the evidence-based services, and the amount, duration, and scope of the delivery of the services, as well as the population to be served. Separate guidelines were established for adult and children services.[27]

[26] HHSC: "Introduction to the Medicaid Program in Texas", December 2011
[27] For the adult and children's guidelines see, retrieved on 2-28-2012 , http://www.dshs.state.tx.us/mhsa/umguidelines/

Adult RDM services fall in to one of four packages:

- Service Package 1: Basic RDM Services,
- Service Package 2: Basic RDM Services with Counseling Services,
- Service Package 3: Intensive RDM Services with Team Approach, and
- Service Package 4: Assertive Community Treatment (ACT)

The Child RDM services fall in to one of seven packages:

- Service Package 1.1: Externalizing Disorders
- Service Package 1.2: Internalizing Disorders
- Service Package 2.1: Multi-Systemic Therapy (not currently provided)
- Service Package 2.2: Externalizing Disorders
- Service Package 2.3: Internalizing Disorders
- Service Package 2.4: Major Disorders
- Service Package 4: Aftercare Services

The Adult RDM and Child RDM services both include two additional service packages not identified in the lists above. One service package, defined as Service Package 0 for both includes Crisis Services. This package is designed to provide brief interventions to ameliorate a crisis situation and prevent the need and utilization of more intensive services. The second package, defined as Service Package 5 for both adults and children, provides up to 90 days of service post crisis.

There is very little distinction between adult and child crisis services. The scope of admissions for adults is not limited to non-residential settings. Adults may be provided with crisis services in a variety of settings including:

1. Crisis Respite Units
2. Crisis Residential Units
3. Crisis Stabilization Units
4. Extended Observation Units
5. Any other residential setting where such services would be appropriate

Adult crisis services are not defined by, nor restricted by rule to, any particular service location (whether the particular crisis service is defined in the LOC-0 service array or within the crisis "add-on" array within a regular Level of Care). If a service is provided in a location that is restricted from Medicaid reimbursement, the service may be provided using State or local funds. LOC-0 is only available at intake, but every Level of Care has an array of crisis services that may be provided if they are needed.

Detailed descriptions for each of the service packages identified in the lists above are provided in Appendix I: Detailed Mental Health and Substance Abuse Service Descriptions or through the DSHS website[28].

Application of RDM

DSHS eligible clients who receive services through the LMHAs or NorthSTAR funded by DSHS would be subject to the RDM service model. Often, county, local, and other state agency funds are blended with DSHS funds to provide services. In all such cases the RDM model must be used. The RDM model may not apply only if the non-DSHS funds are used exclusively to purchase that person's service.

A similar distinction can be made for Medicaid consumers. A Medicaid consumer must go through the LMHAs in order to receive the targeted case management and rehabilitation services; however, they have options for receiving any of the other Medicaid services (including other behavioral health services). When a Medicaid consumer receives their services through the LMHAs, their services would follow the RDM model. If a Medicaid consumer receives their services through a private provider, it is recommended but not required that the provider follow the RDM model. It should also be noted that a Medicaid consumer has the ability to receive some of their services through the LMHAs while receiving other services outside the LMHAs. For example, a Medicaid consumer may elect to receive all services through a LMHA with the exception of counseling services, which could be received through a private provider. All of the services provided through the LMHA would follow the RDM model but the counseling services provided through a private provider would not be required to follow RDM.

Crisis Services

In addition to the services outlined within the RDM packages, DSHS also provides crisis stabilization services. The 80th Legislature appropriated $82 million for the FY 08-09 biennium to redesign the community mental health crisis system with the goal of improving the response to behavioral health crises. An initial evaluation report on the community mental health crisis system was submitted in accordance with Rider 69 of the 80th legislature.

In response to this analysis, these funds were used to offset emergency room or the use of more restrictive settings through ensuring statewide access to competent rapid response services, avoidance of hospitalization, and reduction in need for transportation. DSHS's *Crisis Services* Report provides a summary of the crisis services implemented, which are listed below.[29]

[28] DSHS: Mental Health and Substance Abuse Services, Resiliency and Disease Management, http://www.dshs.state.tx.us/mhprograms/RDM.shtm

[29] DSHS: Mental Health and Substance Abuse Crisis Services Redesign, http://www.dshs.state.tx.us/mhsacsr/default.shtm

- **Crisis hotline services:** Service providers must operate a crisis hotline 24 hours, seven days a week.

- **Mobile Crisis Outreach Teams (MCOT):** operate in conjunction with crisis hotlines to respond at the crisis site or safe location in the community.

$17.6 million of the initial $82 million appropriation was designated to be used for community investment projects. Using these funds, communities were able to develop or expand local alternatives to incarceration or State hospitalization on a competitive basis. Competitive Funds Projects include:

- **Crisis Stabilization Units** (CSU): provide immediate access to emergency psychiatric care and short-term residential treatment for acute symptoms. Two CSU's were funded.

- **Extended Observation Units:** provide 23-48 hours of observation and treatment for psychiatric stabilization. Three Extended Operation Units were funded.

- **Crisis Residential Services:** Provide 1-14 day crisis services for individuals with risk of harm to self or others in a clinically staffed, safe residential setting. Four Crisis Residential Units were funded.

- **Crisis Respite Services:** Provide 8 hours to 30 days of short-term crisis care for individuals with low risk of harm to self or others**.** Seven Crisis Respite Units were funded.

- **Crisis Step-Down Stabilization in Hospital Setting:** Provides 3-10 days of psychiatric stabilization in a psychiatrically staffed local hospital setting**.** Six Step-Down stabilization beds were funded.

- **Outpatient Competency Restoration Services:** Provide community treatment to individuals with mental illness involved in the legal system. Provides psychiatric stabilization and participant training in courtroom skills and behavior**.** Four Outpatient Competency Restoration Projects were funded

In Accordance with Senate Bill 1 of the 81st Legislature, Rider 65, DSHS contracted with an independent entity, Texas A&M University, to complete an evaluation of the DSHS funded community mental health crisis services. Texas A&M University's final report provided an analysis of the implementation of crisis services and the impact of these services on the clients,

local communities, mental health and health care providers, and law enforcement. The report produced ten findings that included evidence that more consumers of crisis services were served than ever before and that the measurable cost savings from crisis redesign sufficiently covered the cost of the program. As a result of these findings, the 81st Legislature continued funding for these crisis services, and appropriated $52 million for FY 2010-2012 to be used for transitional and intensive ongoing services in the crisis system. These services, described below, have been shown to be effective, and successful in reducing recidivism rates.

- **Transitional Services:** provided to those homeless, in need of substance abuse treatment and primary healthcare, involved in the criminal justice system, or experiencing multiple psychiatric hospitalizations
  - Provides temporary assistance for up to 90 days
  - Provides individuals with serious mental illness that do not have ongoing care a linkage to existing services

- **Intensive Ongoing Services to Children and Adults:**
  - Provides team-based psychosocial rehabilitation services and Assertive Community Treatment (ACT) services to engage high need adults in recovery-oriented services.
  - Provides intensive wraparound recovery-oriented services for children with mental health needs.
  - Expands availability of ongoing services for persons entering mental health services as a result of a crisis encounter, hospitalization, or incarceration.

Medicaid Rehabilitative Services and Targeted Case Management

Regardless of the Medicaid program under which a Medicaid consumer is enrolled, two main components of their continuum of care are the rehabilitative and case management services. As has been discussed previously, these two services are only available to Medicaid consumers through the LMHAs or NorthSTAR. Descriptions of the two services are provided below.

Medicaid Rehabilitative Services

Texas' Medicaid State Plan outlines the five mental health rehabilitative services that are covered by the Medicaid program.[30] These services are medication training and support, psychosocial rehabilitation services, skills training & development, crisis intervention, and day program for acute needs. Basic definitions of these services are provided below.

- **Medication Training and Support** is a curriculum based training and guidance that serves as an initial orientation for the individual in understanding the nature of their

[30] Texas Medicaid State Plan: Appendix(IIIb) 1 to Attachment 3.1-A
http://www.hhsc.state.tx.us/medicaid/StatePlanDocs/BasicStatePlan.pdf

mental illness or emotional disturbances and the role of medications in ensuring symptom reduction and increased tenure in the community.

- **Psychosocial Rehabilitation Services** is defined to include social, educational, vocational, behavioral, and cognitive interventions. When appropriate, this service addresses the impact of co-occurring disorders upon the individual ability to decrease symptomatology and aims to increase community tenure. There are five core training services that psychosocial rehabilitation includes. These are training in independent living, coordination, employment related service, housing related service, and medication related service.

- **Skills Training & Development** is defined as skills training and/or supportive interventions that focus on the improvement of communication skills, appropriate interpersonal behaviors, & other skills necessary for independent living or, when age appropriate, functioning effectively with family, peers and teachers. Individuals receiving Skills Training and Development are not eligible to simultaneously receive Psychosocial Rehabilitation Service.

- **Crisis intervention** is defined as an intensive community-based one-to-one service provided to individuals who require services in order to control acute symptoms that place the individual at immediate risk of hospitalization, incarceration, or placement in a more restrictive treatment setting.

- **Day program for acute needs** offers a short-term, intensive, site-based treatment in a group modality to an individual who requires multidisciplinary treatment in order to stabilize acute psychiatric symptoms or prevent admission to a more restrictive setting or reduce the amount of time spent in the more restrictive setting.

Targeted Case Management Services

The goal of Case Management Services is to assist individuals in gaining and coordinating access to necessary care and services. Texas Medicaid provides case management services to individuals who have a single or multiple chronic mental disorders, excluding mental retardation or pervasive development disorders, and who have been determined through a uniform assessment process to be in need of case management services.

The Targeted Case Management services outlined in the Texas State Plan are listed below. For a more detailed description of the services offered, please consult *Supplement 1 to Attachment 3.1-A of the Texas State Plan.*

- **Assessment**: Determines need for any medical, education, social, or other services. This may include taking client history, gathering information from other sources, identifying the needs of the individual, and completing related documentation.

- **Care planning**: Includes ensuring active participation of individual and working with individual and others to develop goals and identify a course of action to respond to the assessed needs. The care plan outlines the goals and actions address medical, social, educational, and other services needed by the individual.

- **Referral & Linkage**: Includes activities that help link individual with medical, social, educational providers and/or other programs and services that can provide needed services. Activities include making referrals to providers for needed services, and scheduling appointments.

- **Monitoring/Follow-up**: Includes activities and contacts necessary to ensure the care plan is effectively implemented and that the needs of the individual are adequately addressed. Activities and contacts may be with the individual, family members, providers, or other entities to ensure services are being adequately provided and furnished, and appropriate changes are being addressed.

The Texas State Plan describes the two levels of case management offered: site-based and community-based. Site-based case management consists of primarily face to face contact provided at the provider's place of business; while community-based case management consists of primarily face-to-face contact provide at the individual's home, work place, school or other location. Both levels also include telephone contacts with community based agencies, support groups, providers and other individuals as required to meet the individual's needs.

Additional Medicaid Covered Services

In addition to the Rehabilitation and Targeted Case Management services described above, Medicaid consumers are eligible to receive an array of services ranging from psychotherapy and counseling services to physician services and inpatient hospital services. The list of additional Medicaid covered mental health services is provided below with brief descriptions of these services provided in Appendix I: Detailed Mental Health and Substance Abuse Service Descriptions.

- Physician Services
- Psychologist and LPA Services
- Electroconvulsive Therapy (ECT)
- Pharmacological Regimen Oversight and Pharmacological Management Services
- Psychiatric Diagnostic Interviews

- Psychological and Neuropsychological Testing
- Psychotherapy/Counseling
- Narcosynthesis
- Psychiatric Services for Hospitals

Non-covered Medicaid Services
The following services are not currently benefits of Texas Medicaid:

- Adult and individual activities
- Day-care
- Family psychotherapy without client present
- Hypnosis
- Intensive outpatient program services (excluding substance use disorder [SUD] services)
- Marriage counseling
- Multiple family group psychotherapy
- Music/dance therapy
- Psychiatric day treatment program services
- Psychiatric services for chronic disease, such as intellectual disability
- Psychoanalysis
- Recreational therapy
- Services provided by a psychiatric nurse, mental health worker or psychiatric assistant (excluding Master's level LPA), Thermogenic therapy
- CDTF[31] services for caffeine or nicotine withdrawal[32]

CHIP Mental Health Services
Mental health services covered under the CHIP benefit package include the following services:

- **Case management/Care Coordination services:** Medically necessary case management services are provided to all members. For children with Complex Special Health Care Needs, additional covered services include outreach, informing, intensive case management, care coordination and community referral.

- **Outpatient Mental Health Services:** Mental health services provided on an outpatient basis include neuropsychological and psychological testing, medication

[31] LCDCs can provide services under the CDTF. The services would be billed by the CDTF.
[32] Texas Medicaid Provider Procedures Manual, Volume 2: Provider Handbooks. Texas Medicaid & Healthcare Partnership (TMHP). Section 7.13, page BH-54

management, rehabilitative day treatment, residential treatment services, sub-acute outpatient services and skills training.

- **Inpatient Mental Health Services**: These include inpatient mental health services furnished in a free-standing psychiatric hospital, psychiatric units of general acute care hospitals and state operated facilities. The inpatient mental health services package additionally includes neuropsychological and psychological testing.

Descriptions of Consumers served by the DSHS Mental Health System

The following sections provide additional details regarding the consumers receiving DSHS funded behavioral health services. Further descriptions of the consumers served through the DSHS mental health system are provided according to primary diagnosis; demographics including age, sex, and race/ethnicity; geographic indicators; and financial indicators including Medicaid eligibility status.

Primary diagnosis of consumers

In 2011, of all diagnosed adults, 20.84% were diagnosed with schizophrenia, 33.34% with a bipolar disorder, 31.37% with major depression, and 14.45% with "other". Approximately half of all children diagnosed were said to have an Attention-Deficit Hyperactivity Disorder (ADHD), although it is not clear from the data if the diagnosis of ADHD was the single diagnosis or part of multiple diagnoses.

Psychiatric Diagnoses of Adults Served by LMHAs

States customarily establish both financial and "functional" eligibility requirements before paying for social services for persons. Functional eligibility for these DSHS programs is established in Title 7 of the Health and Safety code, Sec. 533.0354 (a) "A local mental health authority shall ensure the provision of assessment services, crisis services, and intensive and comprehensive services using disease management practices for adults with bipolar disorder, schizophrenia, or clinically severe depression and for children with serious emotional illnesses."[33] Functional eligibility for adults is thus established to include only bipolar disorders, schizophrenia or clinically severe depression and functional eligibility for children is defined to be a serious emotional illness.

Bipolar disorders are defined in the Diagnostic and Statistical Manual of Mental Disorders 4th Edition (DSM-IV) published by the American Psychiatric Association:[34]

- *Bipolar* is a mood disorder in which persons can be manic or both manic and depressed. About 43 different DSM codes are used to diagnosis bipolar disorders and the codes

[33] See section 533.0354 at, http://law.justia.com/codes/texas/2005/hs/007.00.000533.00.html
[34] See http://www.psych.org/MainMenu/Research/DSMIV/whatisdsm.aspx

distinguish between the severity, duration, degree of depression and or mania and the presence of psychotic factors.[35]

- Briefly described, *schizophrenia* is a psychotic disorder whose symptoms may include delusions and hallucinations, and or disorganized behavior and/or speech.[36] DSM-IV uses approximately 24 codes to characterize psychotic disorders of which seven are used to characterize types of schizophrenia.

- *Major depression* is a mood disorder and DSM uses approximately 14 codes to categorize it depending on its severity, recurrence, and the presence of psychotic features.[37]

Appendix II: Additional Data on Consumers Served by DSHS provides further details on the number and percentage of adults by LMHA that were diagnosed with bipolar, schizophrenia, major depression or another diagnosis during 2011, based on diagnostic information on 170,736 adults and 43,986 children. The table shows that of adults diagnosed: 35,573 with were diagnosed with schizophrenia, 56,929 with a bipolar disorder, 53,560 with major depression, and about 24,674 adults had an "other diagnosis." The percentage of persons diagnosed with schizophrenia ranges from 12.24% to 28.11%. The percentage of persons diagnosed with bipolar ranges from 9.42% to 54.54%. The percentage of persons diagnosed with major depression ranges from 16.06% to 49.35%. The percentage of persons diagnosed with Other Diagnoses ranges from 3.40% to 50.40%.

Appendix II: Additional Data on Consumers Served by DSHS also includes data showing the DSM-IV codes used in the Other Diagnoses category, including all codes for which more than 2,000 adults were assigned. The codes are all deferred diagnoses or codes for conditions that did not clearly meet the thresholds to be classified as bipolar, schizophrenia, or major depression.

Psychiatric Diagnoses of Children Served By LMHAs

Title 7 of the Texas Health and Safety code, Sec. 533.0354(a) requires that children with a severe emotional disturbance be eligible for services by a LMHA. Tables in Appendix II: Additional Data on Consumers Served by DSHS illustrate that the most common diagnosis for children is ADHD, which alone does not qualify a child for the Priority Population. While it is possible that a number of the children diagnosed with ADHD, or any of the other diagnoses for that matter, have an additional diagnosis, it is difficult, in the absence of more detailed diagnostic data, to

[35] For a fuller elaboration of bipolar characteristics see http://allpsych.com/disorders/mood/bipolar.html

[36] For a fuller elaboration of schizophrenic characteristics see http://allpsych.com/disorders/psychotic/schizophrenia.html and http://psychcentral.com/disorders/schizophrenia/

[37] For a list of the DSM codes on depression see http://allpsych.com/disorders/disorders_alpha.html

Data analysis performed by: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA)

determine the number of these children that also have a diagnosis that would classify them as being SED which would qualify them for the Priority Population

The most common diagnoses for children, limited to only those diagnostic codes for which more than 300 children were diagnosed, include twelve codes, of which 26,897 of the 30,934 children were diagnosed as having one of these mental health conditions. The most common condition cited was ADHD; approximately 14,837 children, or about half of all children were coded with one of three DSM-IV codes referring to ADHD.

While less common in children than with adults, and not required for a priority population designation, the 2011 data showed that 202 children were described as schizophrenic, 2,990 were classified as having a bipolar disorder, and 2,933 were classified as having major depression. There were 30,934[38] children with another diagnosis, the majority of which are identified in Table AII.4 in Appendix II. Additional Data on Consumers Served by DSHS.

Consumers with Co-Occurring Psychiatric and Substance Abuse Disorders
Estimates of the percentage of persons with dual diagnosis vary widely, as evidenced by the responses to interviews conducted by PCG identifying this percentage to be anywhere from 40% to 60%. Studies of dual diagnosis in specific populations have found this percentage to cover an even broader range.[39] The reported estimate of 23% to 27% in the NorthSTAR population of persons with a dual diagnosis is close to estimates of national averages. Data from the Substance Abuse and Mental Health Services Administration indicate that of an estimated 10,950,000 adults with SMI in 2009, 25.7% (2,814,000) were dependent on or abused either illicit drugs or alcohol.[40]

[38] There were 6,927 children for whom no diagnostic data were provided.
[39] For example, see the 17% dual diagnosis finding in their study of 836,000 veterans by Watkins, K., et al (2011, November), *Care for Veterans with Mental and Substance Use Disorders: Good Performance, But Room to Improve On Many Measures*, *Health Affairs*, 30, no.11 (2011):2194-2203. Health Affairs is a subscription publication and a copy of this report is available at cost from Health Affairs. Studies of prison populations show high percentages. See for example, PCG's work on cost estimates of substance abuse and mental illness to West Virginia. Public Consulting Group, (2007 April), Inte*grated Funding Analysis of Behavioral Health Programs in West Virginia*, Boston, MA retrieved on 12-20-2011 from http://www.wvcbhc.org/PDFs/PCG_IntegratedFundingAnalysis.pdf
[40] Substance Abuse and Mental Health Services Administration, (2009), *Results from the 2009 National Survey on Drug Use and Health*: Mental Health Detailed Tables, Washington, D.C. Tables 1.4A for estimate of 10,950,000 and Table 1.9A for estimate of 2,814,000.
http://www.samhsa.gov/data/2k10/2k9MHDetailedTables/HTML/Sect1peMHtabs.htm#Tab1.9B
Raw, de-identified data supplied by: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA)
Data analysis performed by: PCG

Demographics

In examining data based on age and gender, the demographic representing the greatest number and highest percentage of LMHA clients for all years between 2008 and 2011 is adult females, who accounted for 43.51% of clients in 2011. Male adults accounted for 37.79% of clients during this time, while male and female children represented 11.51% and 7.18%, respectively, of clients.

Table III.6: Number of Clients Treated by LMHAs by Age and Sex, 2008-2011

	2008	2009	2010	2011
Male Adults	75,076	81,751	86,812	89,688
Female Adults	93,211	98,900	101,848	103,265
Male Children	26,917	26,492	27,172	27,316
Female Children	15,614	15,584	16,218	17,041
Total	**210,818**	**222,727**	**232,050**	**237,310**

Source: Raw, de-identified data supplied by: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA), Data analysis performed by: PCG

Table III.7: Percentage by Age and Sex of Clients Treated by LMHAs, 2008-2011

Year	% Male Adults	% Female Adults	% Male Children	% Female Children
2008	35.61%	44.21%	12.77%	7.41%
2009	36.70%	44.40%	11.89%	7.00%
2010	37.41%	43.89%	11.71%	6.99%
2011	37.79%	43.51%	11.51%	7.18%

Source: Raw, de-identified data supplied by: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA), Data analysis performed by: PCG

Further distinctions can be made beyond the gender and adult versus child distinctions made above. Below are tables representing the client breakout according to specific age groups and race and ethnicity.

Table III.8: Age of Clients Served by State Mental Health Authority (SMHA), 2010

	Age Range					
	0 to 12	13 to 17	18 to 20	21 to 64	65 to 74	75 and over
Percentage of Total Clients	9.92%	9.59%	5.03%	73.01%	1.90%	0.56%

Source: Texas 2010 National Outcome Measures (NOMS) Reporting System

Table III.9: Race of Clients Served by SMHA, 2010

Race	Number of Clients	Percent
American Indian or Alaska Native	777	0.30%
Asian	2,272	0.80%
Black or African American	70,331	23.40%
White	219,300	72.90%
More Than One Race	8,022	2.70%
Not Available	158	0.10%

Source: Texas 2010 National Outcome Measures (NOMS) Reporting System

Table III.10: Ethnicity of Clients Served by SMHA, 2010

Ethnicity	Number of Clients	Percent
Hispanic or Latino Ethnicity	82,292	27.40%
Not Hispanic or Latino Ethnicity	218,427	72.60%
Ethnicity Not Available	141	0.00%

Source: Texas 2010 National Outcome Measures (NOMS) Reporting System

The same data further indicates that:

- For adults with known employment status, 14.3% were employed, 16.3% were unemployed and 69.3% were not in the labor force.

- For those with known living situation status, 92.1% lived in private residences, 3.5% in residential care, 3% in homeless shelters and 1.1% in jails. Others lived in institutional settings, foster homes, residential treatment centers, crisis residences or other arrangements.

Geographic

According to U.S. Census Data, the land area of Texas is 261,232 square miles, representing over 7 percent of the total land area of the United States. The DSHS-funded network of mental health and substance abuse providers covers this vast area; accordingly, considerable variation exists among service areas in terms of number of clients served. The table below shows the number of clients served by LMHA for the fiscal years 2007-2011, broken out by children and adults. The table also includes the number of clients serviced by NorthSTAR for the same period with the same breakout of children and adults.

Table III.11: DSHS Clients by LMHA, 2007-2011

LMHA	Clients[41]	Adults	Children
Betty Hardwick	8,802	8,439	1,536
Texas Panhandle	9,694	7,425	2,389
Austin-Travis	34,563	29,062	5,840
Central Counties	14,285	11,482	2,942
Center for Health Care	39,544	31,596	10,499
Center Life Resources	4,857	4,109	957
Central Plains	3,370	2,542	1,080
El Paso MHMR	22,990	17,174	6,407
Gulf Coast	10,620	9,054	1,740
Gulf Bend MHMR	5,913	4,890	1,103
Tropical Texas	37,052	27,252	11,372
Spindle Top	16,308	14,402	2,363
Lubbock Regional	11,049	10,282	2,262
Concho Valley	3,359	2,393	998
Permian Basin	10,565	9,085	1,614
Nueces County MHMR	10,873	8,830	2,264
Andrews Center	12,397	10,656	2,361
MHMR Tarrant County	34,286	29,272	5,430
NE Texas MHMR	1,120	983	137
Heart of Texas	9,127	8,171	1,338
Helen Farabee	15,938	13,866	2,289
Community HealthCore	20,264	16,130	4,422
Brazos Valley	6,953	6,402	824
Burke Center	14,069	11,383	3,192
Harris MHMRA	73,627	56,996	17,477
Texoma MHMR	6,694	5,842	916
Pecan Valley	14,194	11,981	2,436
Tri-County MHMR	16,305	13,719	2,899
Denton Co MHMR	13,686	11,606	2,233
Texana Center	14,285	10,949	3,796
Access	5,747	4,662	1,401
West Texas Center	9,794	7,883	2,451
Bluebonnet Trails	22,979	18,145	5,261
Hill Country	18,567	15,402	4,016
Coastal Plains	13,898	10,470	3,694

[41] The Clients column shows the unduplicated count of adults and children.

Lakes Region MHMR	12,056	10,665	1,557
Border Region MHMR	12,430	6,778	5,906
Camino Real MHMR	8,950	6,629	2,616
Total for all LMHAs	**555,910**	**445,926**	**127,800**
Total for NorthSTAR	**178,025**	**129,581**	**51,878**

Source: Raw, de-identified data for LMHAs supplied by: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA), Data analysis performed by: PCG.
Source: NorthSTAR data from the NorthSTAR Data Book[42]

Financial Eligibility

For DSHS contracted providers and the NorthSTAR program, financial eligibility is assumed to be 200% of the Federal Poverty Level. Approximately 84 percent of clients who received DSHS-funded services in 2011 have income below 100 percent of the FPL. Within that group, over 45 percent have income at or below 49.9 percent of the FPL, representing a household income of less than $11,175 for a family of four.

Table III.12: 2011 DSHS Clients by Income Level

	0-49.9% FPL	50-99.9% FPL	100-138% FPL	139-200% FPL	> 200% FPL
Total Number of Clients	61,803	49,029	13,436	6,181	49
Percentage of Clients	45.52%	38.37%	10.93%	5.13%	0.05%

Source: Raw, de-identified data supplied by: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA), Data analysis performed by: PCG

The table below further breaks out the 2011 DSHS client count by income level as well as the servicing LMHA. A few highlights concerning this data:

- Of the thirty seven LMHAs, for all but one at least 75 percent of clients served in 2011 had income at or below 100% of the FPL.
- The LMHA with the highest percentage of clients at or below the FPL was Lubbock Regional MHMR, with 96.1% of clients meeting this threshold. The LMHA with the lowest percentage, Permian Basin, had 73.7% of clients at or below the FPL.
- No LMHA had greater than 0.17% of clients with income above 200% of the FPL.
- NorthSTAR is not included in this data as the only breakout available through the NorthSTAR data book was for clients above 200% FPL.

[42] NorthSTAR, Q1 2012 Data Book. http://www.dshs.state.tx.us/mhsa/NorthSTAR/databook.shtm.

Table III.13: 2011 DSHS Clients by Income Level and LMHA

LMHA Name	Total Clients	0-49.9 % (FPL)	50-99.9 % (FPL)	100-138 % (FPL)	139-200 % (FPL)	> 200% FPL
Betty Hardwick	1,234	31.52%	45.71%	14.59%	8.10%	0.08%
Texas Panhandle	2,802	46.47%	31.69%	13.74%	8.07%	0.04%
Austin Travis	7,777	47.33%	40.43%	8.94%	3.30%	0.00%
Central Counties	2,325	38.97%	46.67%	10.11%	4.17%	0.09%
Center for Health Care	8,157	46.23%	42.11%	8.94%	2.68%	0.04%
Center for Life Resources	831	31.05%	47.41%	13.60%	7.82%	0.12%
Central Plains	917	49.40%	30.75%	13.20%	6.54%	0.11%
El Paso MHMR	5,861	42.98%	45.50%	8.38%	3.14%	0.00%
Gulf Coast Center	2,775	35.96%	46.05%	12.40%	5.59%	0.00%
Gulf Bend MHMR	1,298	33.20%	48.38%	13.64%	4.70%	0.08%
Tropical Texas	8,142	44.57%	42.82%	8.99%	3.56%	0.06%
Spindle Top	3,888	45.76%	39.33%	10.65%	4.27%	0.00%
Lubbock Regional	844	69.91%	26.18%	2.49%	1.42%	0.00%
Concho Valley	900	45.44%	35.67%	11.78%	7.11%	0.00%
Permian Basin	2,516	37.20%	36.49%	16.45%	9.74%	0.12%
Nueces County MHMR	2,957	56.27%	34.76%	6.39%	2.54%	0.03%
Andrews Center	2,725	50.06%	29.80%	13.39%	6.68%	0.07%
MHMR Tarrant County	8,226	77.43%	16.27%	4.24%	2.07%	0.00%
Heart of Texas	1,677	41.44%	46.39%	8.11%	4.05%	0.00%
Helen Farabee	4,275	41.08%	34.97%	14.27%	9.66%	0.02%
Community HealthCore	4,097	34.22%	51.31%	9.96%	4.52%	0.00%
Brazos Valley	2,154	40.99%	45.17%	10.17%	3.62%	0.05%
Burke Center	3,048	44.23%	43.24%	9.12%	3.35%	0.07%
Harris County MHMR	16,224	50.71%	33.97%	9.69%	5.56%	0.06%
Texoma MHMR	1,170	29.23%	47.01%	16.24%	7.35%	0.17%
Pecan Valley	2,466	48.95%	33.05%	11.56%	6.41%	0.04%
Tri-County MHMR	3,470	52.13%	34.67%	9.11%	4.06%	0.03%
Denton County MHMR	1,074	81.56%	12.48%	3.82%	2.05%	0.09%
Texana Center	4,391	57.12%	28.54%	10.16%	4.19%	0.00%

Access	1,674	39.67%	39.31%	13.74%	7.23%	0.06%
West Texas Center	2,365	45.07%	36.74%	11.97%	6.13%	0.08%
Bluebonnet Trails	4,560	38.03%	40.22%	15.99%	5.72%	0.04%
Hill Country MHMR	4,206	41.16%	37.30%	14.50%	6.99%	0.05%
Coastal Plains	3,112	49.87%	35.09%	11.02%	4.02%	0.00%
Lakes Region MHMR	1,760	34.66%	43.81%	14.77%	6.65%	0.11%
Border Region MHMR	2,595	43.12%	45.55%	8.55%	2.77%	0.00%
Camino Real MHMR	2,005	41.15%	45.04%	9.88%	3.94%	0.00%
TOTALS	**130,498**	**45.52%**	**38.37%**	**10.93%**	**5.13%**	**0.05%**

Source: Raw, de-identified data supplied by: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA), Data analysis performed by: PCG

Medicaid and Non-Medicaid Status

With regard to Medicaid status, the overall percentages of Medicaid and non-Medicaid clients served by all LMHAs in 2011 were 51.87% and 41.13%, respectively. The percentages of Medicaid and non-Medicaid clients varied significantly by LMHA. Border Region MHMR had the highest percentage of Medicaid clients, at 71.1%, while Permian Basin had the lowest, at 37.9%. It is important to note in reviewing the data presented that NorthSTAR is not included in this table. A key distinction between the LMHAs and NorthSTAR is that the LMHAs serve those they enroll while all "enrolled" clients in NorthSTAR don't necessarily receive services as NorthSTAR "enrolls" all Medicaid recipients. For NorthSTAR, data on clients served and Medicaid status indicates that in 2011 32,687 Medicaid clients were served while 45,464 Non-Medicaid clients were served.

Table III.14: 2011 DSHS Clients by Medicaid Status[43]

LMHA Name	Medicaid	% Medicaid	Non-Medicaid	% Non-Medicaid	Total
Betty Hardwick	722	54.41%	605	45.59%	1,327
Texas Panhandle	1,252	42.59%	1,688	57.41%	2,940
Austin Travis	4,622	58.12%	3,331	41.88%	7,953
Central Counties	1,421	55.94%	1,119	44.06%	2,540
Center for Health Care	4,437	52.71%	3,981	47.29%	8,418
Center for Life Resources	467	52.59%	421	47.41%	888
Central Plains	431	44.76%	532	55.24%	963
El Paso MHMR	3,869	64.24%	2,154	35.76%	6,023
Gulf Coast Center	1,759	48.17%	1,893	51.83%	3,652

[43] The client count included in this table may include duplicative clients as a client that changed status during the year would show up as both a Medicaid and a Non-Medicaid client.

Gulf Bend MHMR	749	55.94%	590	44.06%	1,339
Tropical Texas	5,561	64.09%	3,116	35.91%	8,677
Spindle Top	1,980	49.16%	2,048	50.84%	4,028
Lubbock Regional	1,143	63.18%	666	36.82%	1,809
Concho Valley	526	54.23%	444	45.77%	970
Permian Basin	1,031	37.93%	1,687	62.07%	2,718
Nueces County MHMR	1,595	53.26%	1,400	46.74%	2,995
Andrews Center	1,178	41.12%	1,687	58.88%	2,865
MHMR Tarrant County	5,268	53.67%	4,548	46.33%	9,816
Heart of Texas	1,027	59.85%	689	40.15%	1,716
Helen Farabee	1,742	38.63%	2,768	61.37%	4,510
Community HealthCore	2,987	68.82%	1,353	31.18%	4,340
Brazos Valley	1,199	54.77%	990	45.23%	2,189
Burke Center	1,878	59.28%	1,290	40.72%	3,168
Harris County MHMR	7,929	46.28%	9,203	53.72%	17,132
Texoma MHMR	538	44.76%	664	55.24%	1,202
Pecan Valley	1,232	40.10%	1,840	59.90%	3,072
Tri-County MHMR	1,796	48.96%	1,872	51.04%	3,668
Denton County MHMR	1,116	50.61%	1,089	49.39%	2,205
Texana Center	2,133	45.42%	2,563	54.58%	4,696
Access	842	47.76%	921	52.24%	1,763
West Texas Center	1,324	51.58%	1,243	48.42%	2,567
Bluebonnet Trails	2,287	47.87%	2,491	52.13%	4,778
Hill Country MHMR	1,810	39.64%	2,756	60.36%	4,566
Coastal Plains	1,676	47.79%	1,831	52.21%	3,507
Lakes Region MHMR	863	46.30%	1,001	53.70%	1,864
Border Region MHMR	2,002	71.14%	812	28.86%	2,814
Camino Real MHMR	1,384	63.66%	790	36.34%	2,174
TOTALS	**73,776**	**51.87%**	**68,076**	**48.13%**	**141,852**

Source: Raw, de-identified data supplied by: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA), Data analysis performed by: PCG

For NorthSTAR, the unduplicated count of Medicaid enrollees for FY2011, including both SSI and TANF, was 472,443.[44] This count includes all enrollees as Medicaid clients are mandatorily enrolled in NorthSTAR and is therefore not specific to those who received mental health or substance abuse services during this period. For all but one age group, an over 20% increase in

[44] NorthSTAR, Q4 2011 Data Book. http://www.dshs.state.tx.us/mhsa/NorthSTAR/databook.shtm.

enrollees was realized during the FY2008-2011 period, and that the average for all groups during this time was 30.26%, marking an increase of 109,758 unique enrollees.

Table III.15: NorthSTAR Medicaid Enrollees, 2008-2011 (Averages)

	SFY 2008	SFY 2009	SFY 2010	SFY 2011	% change, 2008-2011
SSI Child	15,497	17,140	18,658	20,024	29.21%
SSI Adult	33,148	35,167	37,806	40,534	22.28%
SSI Aged	16,990	17,092	17,615	17,951	5.65%
TANF Child	282,666	299,809	343,631	375,667	32.90%
TANF Adult	15,254	15,675	17,065	19,233	26.09%
Unique Count	**362,685**	**384,028**	**433,530**	**472,443**	**30.26%**

Source: Medicaid Services Unit, Mental Health and Substance Abuse Division (MHSA)

Substance Abuse Systems of Care

In addition to offering mental health services, the State of Texas provides access to substance abuse services. Medicaid recipients are eligible to receive these services as well as DSHS eligible consumers. As previously discussed the DSHS eligible consumers access services following the order defined by the substance abuse priority population and under certain financial eligibility criteria On the following pages, we have outlined the services and programs covered and offered to Texans.

The following tables provide details regarding the services available to each of the populations defined and the system of care through which the services are rendered, including the providers from which they may receive those services, the model under which those services are reimbursed, and the state agency responsible for oversight and monitoring of the services. Detailed descriptions of the systems of care are provided in the sections following these tables.

Table III.16: Medicaid Substance Abuse Services Matrix

Medicaid Population				
Services	Provider(s)	Oversight Agency	Service Available to Adults	Service Available to Youth
Screening	Enrolled Medicaid Providers and MCO Contracted Providers	HHSC	Yes	Yes
Assessment	Enrolled Medicaid Providers and MCO Contracted Providers	HHSC	Yes	Yes
Residential Intensive	Enrolled Medicaid Providers and MCO Contracted Providers	HHSC	Yes	Yes
Residential Supportive	Enrolled Medicaid Providers and MCO Contracted Providers	HHSC	Yes	Yes
Inpatient Detox (in acute care hospital)	Enrolled Medicaid Providers and MCO Contracted Providers	HHSC	Yes	Not Available
Residential Detox	Enrolled Medicaid Providers and MCO Contracted Providers	HHSC	Yes	Not Available
Ambulatory Detox	Enrolled Medicaid Providers and MCO Contracted Providers	HHSC	Yes	Not Available
Outpatient Services	Enrolled Medicaid Providers and MCO Contracted Providers	HHSC	Yes	Yes
Individual	Enrolled Medicaid Providers and MCO Contracted Providers	HHSC	Yes	Yes
Group	Enrolled Medicaid Providers and MCO Contracted Providers	HHSC	Yes	Yes
Medicaid Assisted Therapy (MAT)	Enrolled Medicaid Providers and MCO Contracted Providers	HHSC	Yes	Yes
HIV Residential Wraparound Services	DSHS Contracted Providers	DSHS	Yes	Not Available
Youth Sp Female Intensive Residential Wraparound Services- Room & Board	DSHS Contracted Providers	DSHS	Not Available	Yes
Youth Intensive Residential Wraparound Services- Room & Board	DSHS Contracted Providers	DSHS	Not Available	Yes
Adult Specialized Female with Child Residential Wraparound Services - Less than 21	DSHS Contracted Providers	DSHS	Yes	Not Available
Adult Specialized Female with Child Residential Wraparound Services - 21 and Over	DSHS Contracted Providers	DSHS	Yes	Not Available

Table III.17: CHIP Substance Abuse Services Matrix

CHIP Population				
Services	Provider(s)	Oversight Agency	Adult	Youth
Screening	CHIP Managed Care Contracted Provider	HHSC	Not Available	Yes
Assessment	CHIP Managed Care Contracted Provider	HHSC	Not Available	Yes
Inpatient Detox	CHIP Managed Care Contracted Provider	HHSC	Not Available	Yes
Residential Detox	CHIP Managed Care Contracted Provider	HHSC	Not Available	Yes
Residential Rehabilitation	CHIP Managed Care Contracted Provider	HHSC	Not Available	Yes
Outpatient Services	CHIP Managed Care Contracted Provider	HHSC	Not Available	Yes
Individual	CHIP Managed Care Contracted Provider	HHSC	Not Available	Yes
Group	CHIP Managed Care Contracted Provider	HHSC	Not Available	Yes
Education Services	CHIP Managed Care Contracted Provider	HHSC	Not Available	Yes
Life Skills Training	CHIP Managed Care Contracted Provider	HHSC	Not Available	Yes
Intensive Outpatient Services	CHIP Managed Care Contracted Provider	HHSC	Not Available	Yes
Partial Hospitalization	CHIP Managed Care Contracted Provider	HHSC	Not Available	Yes

Table III.18: DSHS Eligible Substance Abuse Services Matrix

DSHS Eligible Population				
Services	Provider(s)	Oversight Agency	Service Available to Adults	Service Available to Youth
Screening	DSHS Contracted Providers	DSHS	Yes	Yes
Assessment	DSHS Contracted Providers	DSHS	Yes	Yes
Residential Intensive	DSHS Contracted Providers	DSHS	Yes	Yes
Residential Intensive Specialized Female	DSHS Contracted Providers	DSHS	Yes	Yes
Residential Intensive (Women and Children)	DSHS Contracted Providers	DSHS	Yes	Not Available
Residential Supportive	DSHS Contracted Providers	DSHS	Yes	Yes
Residential Supportive Specialized Female	DSHS Contracted Providers	DSHS	Yes	Yes
Residential Supportive (Women and Children)	DSHS Contracted Providers	DSHS	Yes	Not Available
Residential Detox	DSHS Contracted Providers	DSHS	Yes	Not Available
Residential Detox Specialized Female	DSHS Contracted Providers	DSHS	Yes	Not Available
Ambulatory Detox	DSHS Contracted Providers	DSHS	Yes	Not Available
Ambulatory Detox Specialized Female	DSHS Contracted Providers	DSHS	Yes	Not Available
HIV Residential	DSHS Contracted Providers	DSHS	Yes	Not Available
Outpatient Services	DSHS Contracted Providers	DSHS	Yes	Yes
Individual	DSHS Contracted Providers	DSHS	Yes	Yes
Group	DSHS Contracted Providers	DSHS	Yes	Yes
Adolescent Support	DSHS Contracted Providers	DSHS	Not Available	Yes
Family Counseling	DSHS Contracted Providers	DSHS	Not Available	Yes
Family Support	DSHS Contracted Providers	DSHS	Not Available	Yes
Psychiatrist Consultation	DSHS Contracted Providers	DSHS	Not Available	Yes
Outpatient Services Specialized Female	DSHS Contracted Providers	DSHS	Yes	Yes
Individual Specialized Female	DSHS Contracted Providers	DSHS	Yes	Yes
Group Specialized Female	DSHS Contracted Providers	DSHS	Yes	Yes
Opiod Substitution Therapy (OST)	DSHS Contracted Providers	DSHS	Yes	Not Available
Co-occurring Psychiatric & Substance Abuse Disorders	DSHS Contracted Providers	DSHS	Yes	Yes

DSHS System of Care

The DSHS system of care for substance abuse services is the primary resource available to Texans in need of substance abuse services. The DSHS system provides substance abuse services to the DSHS eligible population and DSHS contracted providers may also serve as providers under the HHSC System of Care for the Medicaid and CHIP populations.

Services under the DSHS system of care are furnished by substance abuse providers that are contracted through DSHS. DSHS has several kinds of contracts, each containing various service types including, but not limited to, adult services, specialized female services, youth services. Depending on the services awarded and the populations served, one or more contracts may be issued.

The table below provides a list of the service types, and the number of providers for each service.

Table III.19: Service Types and Number of Providers for Substance Abuse

Service Type	No. of Providers
Ambulatory Detoxification	10
Ambulatory Detoxification (Specialized Female)	6
Co-Occurring Psychiatric and Substance Abuse Disorder (COPSD)	32
HIV Residential	1
Intensive Residential	37
Intensive Residential (Specialized Female)	19
Intensive Residential (Woman and Children Wrap Around)	6
Intensive Residential (Women and Children)	13
Intensive Residential (Youth Medicaid Wrap Around – Room/Board)	9
Opioid Substitution Therapy	9
Outpatient	69
Outpatient (Specialized Female)	25
Residential Detoxification	14
Residential Detoxification (Specialized Female)	8
Supportive Residential	20
Supportive Residential (Specialized Female)	14
Supportive Residential (Women and Children)	7

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA). FY2011 DSHS

DSHS Substance Abuse Services - Adults

Substance abuse providers directly contract with DSHS to provide substance abuse services through a competitive procurement process. Contracts are program specific, meaning the provider contract must authorize providers to deliver each service. Contracts are awarded on the basis of regional and local needs.

As the table above illustrated, DSHS contracts for an array of services for the Adults and the Adult Specialized Female, including Women and Children, populations. These services include:

- Screening and Assessments
- Residential Intensive
- Residential Supportive
- Residential Detox
- Ambulatory Detox
- HIV Residential
    - HIV Residential Wraparound Services (Medicaid Adult – 21 and over)
- Outpatient Services
    - Outpatient Group
    - Outpatient Individual
- Opioid Substitution Therapy (OST) (Buprenorphine and Methadone)
- Specialized Female Women and Children Residential Intensive
    - Adult Specialized Female with child Residential Wraparound Services – Less than 21
    - Adult Specialized Female with child Residential Wraparound Services – 21 and Over

It should be noted that the wraparound services identified in the above listing for HIV Residential and Adult Specialized Female with child Residential services are a supplemental rate paid for Medicaid clients that need more specialized care than what is provided under the Medicaid benefit.

Residential Treatment provides intensive and supportive inpatient care. Programs provide 24-hour, 7 days a week clinical support for addiction recovery, comprehensive chemical dependency treatment services and a structured therapeutic environment with access to an array of treatments. Outpatient Treatment provides comprehensive chemical dependency treatment and services to clients who do not require as structured of an environment

DSHS also provides a Co-occurring Psychiatric & Substance Abuse Disorders (COPSD) service for those individuals that are dually diagnosed with mental illness and substance abuse disorders.

DSHS currently contracts with 488 outpatient chemical dependency/substance abuse treatment facilities, and 160 residential chemical dependency/substance abuse treatment facilities.[45]

DSHS also began funding the Outreach, Screening, Assessment and Referral (OSAR) Centers in September 2005 to provide drug and alcohol screenings and assessments, referrals for state-funded inpatient and outpatient drug and alcohol treatment, brief interventions, education and support, and case management to assist in accessing supportive services. The OSARS were initially expected to be the first point of contact for consumers seeking substance abuse treatment; however, their role has changed in recent years with the substance abuse treatment providers now conducting the screening and assessments and making referrals. Some OSARS continue to function under their original intent; however, now most focus their efforts on coordinating client access to services in their respective regions and all are operating under reduced budgets from DSHS.

In addition to the OSARs, DSHS funds several other intervention programs, each targeting specific populations.

- Rural Border Intervention Program: designed to address the specific needs of the rural border communities by providing distinct but integrated prevention and intervention services and access to a continuum of behavioral health services to members of the rural border community who have, or are at high risk of developing, substance use disorders.

- Pregnant and Postpartum Intervention Program: provides community based, gender specific outreach and intervention services for pregnant and postpartum females with substance use disorders or who are at risk of developing substance use disorders.

- HIV Early Intervention Program: promotes HIV disease management and recovery from substance abuse and dependence by providing comprehensive case management services for persons with both HIV infection and problems with substance use/abuse or dependence and providing support to their families and significant others.

- HIV Outreach Program: increases the number of HIV infected persons who know their status through the provision of targeted HIV testing, prevention education and evidence-based interventions to people who are at high risk for HIV infections due to use or abuse of alcohol or other drugs.

[45] Provided by Ellen Cooper, M.S.W., R.N., M.S.N. Manager for Facility Licensing Group Division for Regulatory Services on behalf of DSHS

It is important to note that any programs providing treatment must be licensed to do so and as a result, intervention programs do not provide treatment.

DSHS Substance Abuse Services – Youth

As with adult substance abuse services, youth substance abuse providers directly contract with DSHS to provide substance abuse services through a competitive procurement process. Contracts are program specific, meaning the provider contract must authorize providers to deliver each service. Contracts are awarded on the basis of regional and local needs.

Substance abuse services for the youth population include those for the youth population as well as for the youth specialized female population. The youth substance abuse services provided under DSHS include:

- Screening and Assessments
- Residential Intensive
    - Youth Specialized Female Intensive Residential Wraparound Services – Room & Board
    - Youth Intensive Residential Wraparound Services – Room & Board
- Residential Supportive
- Outpatient Services
    - Outpatient Group
    - Outpatient Individual
    - Adolescent Support
    - Family Counseling
    - Family Support
    - Psychiatric Consultation

There are currently 41 funded youth treatment providers, 15 of which provide residential services, and 35 of which provide outpatient services. Nine of the residential providers also provide outpatient treatment.

Youth Residential Treatment provides intensive and supportive inpatient care. Programs provide 24-hour, 7 days a week clinical support for addiction recovery, comprehensive chemical dependency treatment services and a structured therapeutic environment with access to an array of treatments.

Youth Outpatient Treatment provides comprehensive chemical dependency treatment and services to youth clients who do not require as structured of an environment. DSHS funded Youth Outpatient Treatment Providers use an evidence-based treatment model called Cannabis Youth Treatment Series (CYT) that includes Motivational Enhancement Therapy (MET),

Cognitive Behavioral Therapy (CBT), and Family Support Network (FSN). Providers may also use other curriculum identified as evidence-based, or reviewed and approved by DSHS.[46]

Substance Abuse Prevention Services

Texas has 11 Prevention Resource Centers (PRCs) which provide communities and schools with prevention resources materials, and general information on alcohol, tobacco, and other drugs (ATOD), coordinate regional trainings, and provide merchant education on the Texas tobacco laws. Each Prevention Resource Service Area, defined by region, has a. prevention resource center coordinator and a tobacco specialist.

DSHS has authorized direct services funding through 2013 for Universal, Selective, and Indicated prevention contracts. The Universal Prevention Programs target the general population in the State of Texas. The Selective Prevention Programs provide services to subsets of the total population who are considered to be at risk for substance abuse based on identified risk factors in specific population segments. The Indicated prevention programs provide services to subsets of the general population who exhibit early signs of substance abuse, such as experimentation and are having behavior problems.[47]DSHS will fund 36 Universal Indirect Services prevention contracts through 2013. The contracts will include 11 Prevention Resource Centers (PRCs), 23 Community Coalition Partnerships, 1 Prevention Media Campaign, and 1 Prevention Statewide Coordinated Training Service.[48]

In 2010, DSHS funded 60 Selective Service contracts. The contractors continue to provide services that target those at higher than average risk for substance abuse and are identified by the Institute of Medicine Classifications as Selective, e.g. children with low school performance or behavioral problems, and programs for children of substance abusers. In 2010, DSHS funded 54 Indicated Services. These contractors continue to provide services which target individuals already using drugs or engaged in other high risk behaviors (such as delinquency), to prevent chronic use.

NorthSTAR Substance Abuse Services

NorthSTAR also provides additional substance abuse treatments, specifically *Chemical Dependency (CD) Residential services, CD Non Residential services, and Hospital Detoxification.* A list of the Chemical Dependency treatment benefits is provided below. A description of these services can be found on the ValueOptions NorthSTAR website and include the following:[49]

[46] DSHS: Child and Adolescent Services
http://www.dshs.state.tx.us/sa/child-adolescent-services/
[47] Texas Uniform Application FY2011: Substance Abuse Prevention and Treatment Block Grant (2/1/2012), p. 59
[48] Texas Uniform Application FY2011: Substance Abuse Prevention and Treatment Block Grant (2/1/2012), p 57-77
[49] ValueOptions NorthSTAR: Services Grid

- Clinical Screening
- Clinical Assessment
- Hospital Inpatient Services (Medicaid enrollees only)
- Medically Monitored 24 Hour Residential Detoxification
- Medically Monitored Outpatient Detoxification
- 24 Hour Residential Rehabilitation Program
- Partial Hospitalization Rehabilitation Program
- Intensive Outpatient Rehabilitation Program
- Outpatient Program
- Outpatient Service
- Pharmacological Maintenance Therapy
- Specialized Female Services
- Dual Diagnosis Services
- Recovery Peer Support Services

HHSC System of Care

Like the HHSC system of care previously defined for mental health services, the HHSC system of care for substance abuse consists of three main programs; Medicaid FFS, Medicaid Managed Care, and CHIP. Medicaid FFS and Managed Care consumers would be eligible to receive the same set of substance abuse services as part of the Medicaid benefit. CHIP consumers would eligible for a different set of substance abuse services based on the CHIP benefit package.

Medicaid Substance Abuse Services

The 2009 Texas Legislature authorized the HHSC to implement a Substance Use Disorder (SUD) benefit for adults enrolled in Medicaid as a means to demonstrate cost benefit (HHSC language). HHSC expanded the existing substance use disorder coverage for children. Service modalities include residential and ambulatory detoxification (for adults), and intensive residential treatment, and outpatient programs.

Medicaid Substance Use Disorder Benefit

Treatment for SUD is a benefit of Texas Medicaid. SUD treatment services are age appropriate medical and psychotherapeutic services designed to treat a client's substance use disorder and restore function. Services and provider requirements associated with this benefit are found in Texas Department of Insurance (TDI) regulations (28 TAC, part 1 subchapter 3 subcategory HH) and 25 TAC Chapter 448 for chemical dependency treatment facility licensure. Medical necessity for substance abuse services will be determined based on the TDI regulations and

http://www.valueoptions.com/NorthSTAR/servicesgrid.htm

nationally recognized standards such as those from the American Society of Addiction Medicine (ASAM) or the Center for Substance Abuse Treatment (CSAT).

The following SUD services are a benefit of Texas Medicaid:

- Assessment by a LCDC (in a CDTF) for admission into a SUD treatment program.
- Detoxification services that are provided in an acute care hospital, residential, or ambulatory CDTF setting.
    - Crisis stabilization is not considered a component of detoxification. Crisis stabilization for a mental health condition may be provided as needed when the service is medically necessary and the clinical criteria for psychiatric care are met.
- Residential SUD treatment services.
- Ambulatory SUD treatment services provided by a CDTF.
- Medicaid assisted therapy (MAT) in an outpatient setting.

SUD services provided by a CDTF are limited to those provided by facilities that are licensed and regulated by DSHS to provide SUD services within the scope of that facility's DSHS license.[50]

Additional details on the services included in the Medicaid Substance Abuse benefit can be found in Appendix I: Detailed Mental Health and Substance Abuse Service Descriptions.

CHIP Substance Abuse Services

Substance Abuse services covered under the CHIP benefit package include the following services[51]:

- **Inpatient Substance Abuse Treatment Services:** Includes, but is not limited to, inpatient and residential substance abuse treatment services including detoxification and crisis stabilization, and 24-hour residential rehabilitation programs.
- **Outpatient Substance Abuse Treatment Services:** Outpatient treatment services are defined as consisting of at least one or two hours per week providing structured group and individual therapy, education services, and life skills training. Outpatient treatment services include but are not limited to:

[50] Texas Medicaid Provider Procedures Manual, Volume 2: Provider Handbooks. Texas Medicaid & Healthcare Partnership (TMHP). Section 9.1, page BH-61.
[51] CHIP Evidence of Coverage, Schedule A.

- Prevention and intervention services that are provided by physician and non-physician providers, such as screening, assessment and referral for chemical dependency disorders;
- Intensive outpatient services;
- Partial hospitalization; and
- Intensive outpatient services, which is defined as an organized non-residential service providing structured group and individual therapy, educational services, and life skills training that consists of at least 10 hours per week for four to 12 weeks, but less than 24 hours per day.

C. Utilization and Cost Analysis of MH/SA Services and Programs

This section of the report focuses on the utilization trends and cost statistics for mental health and substance abuse services provided within the State of Texas, specifically those provided by the LMHAs, contracted substance abuse providers, and NorthSTAR. In addition, we have provided an introductory comment that provides a high level overview of the services provided within the various Medicaid programs.

The caseload and cost data outlined on the following pages is from different data reporting systems with unique customary ways of reporting services, depending on whether services were provided by the LMHAs, contracted substance abuse treatment providers, or delivered through the NorthSTAR system of care. Therefore the data is not presented for comparative purposes, but instead reported to provide information on the utilization and cost trends within these systems of care.

The LMHA cost data is self-reported in accordance with the Cost Allocation Methodology (CAM). CAM was designed to use a standard format to provide LMHAs and DSHS uniform and comparable cost data[52]. CAM data, which captures all funds, including those from DSHS, is monitored and required to be reported accurately as outlined in the contract requirements between DSHS and the LMHAs. Therefore, this data does not necessarily represent how much it costs DSHS for the provision of services. Moreover, the funding to the LMHAs from DSHS may not be consistent with the costs incurred by the LMHAs to render the services since LMHAs use other funds such as grants or local funds to provide services.

Differences in the reporting of information include the following;

- The SPNs, as well as most network providers, submit claims or encounters to the Behavioral Health Organization (BHO) which reflect a negotiated rate for the services rendered by the provider;

[52] http://www.dshs.state.tx.us/mhprograms/RDM.shtm

- NorthSTAR data reporting includes expenditures that the LMHA system of service does not cover: emergency room care, community inpatient, and state hospital costs for Medicaid clients;

- NorthSTAR providers do not submit a document comparable to the CAM that outlines each provider's cost to deliver a unit of service. NorthSTAR providers submit claims data for reimbursement for the service as do other Medicaid managed care programs;

- In addition to the CAM, LMHAs also submit CARE Report III which includes all self reported expenditures they make

- State hospital utilization is treated differently. The state allocates bed-days to LMHAs and the DSHS state hospital division calculates how many days were actually used. Theoretically, if an overage resulted in a financial penalty, then the penalty would be recorded as an expenditure in CARE Report III. Also Medicaid clients who are fee-for-service (not Medicaid managed care) will have their bed day costs charged to the DSHS funded allocation. t

- NorthSTAR program also receives a hospital bed-day allocation for DSHS eligible (non-Medicaid) population. The DSHS state hospital division calculates any NorthSTAR overage. Again as with LMHAs, if too many bed days are used there is the possibility of a penalty.

- For persons with Medicaid and served by the LMHAs, HHSC has data regarding Medicaid purchased ER and community hospitalization costs but DSHS does not report these data unless DSHS funded the service. However these data are not included in LMHA data reporting.

- NorthSTAR data system includes detailed pharmacy data reporting for all DSHS non-Medicaid recipients that is available to prescriber and drug quantity level.

Except where separately identified, the data shown below for NorthSTAR, LMHAs, and substance abuse contractors represents the expenditures incurred in servicing both the Medicaid and DSHS eligible populations. Each utilization review will begin with an overview of the total number of individuals served, the cost per unduplicated individual served, and other utilization and cost patterns of significance based upon PCG's review of the data.

Overview of Medicaid Behavioral Health Utilization

The mental health and substance abuse services provided by the LMHAs and NorthSTAR take place in the context of a statewide Medicaid program that also pays for behavioral health

services. This section outlines high-level service trends within the Medicaid program in order to provide information on the breadth of services that Medicaid pays for and the number of consumers that access mental health and substance abuse services through this program/funding source.

The Medicaid statistics presented here overlap with the information within the analysis section of the report outlined on the following pages on the NorthSTAR, LMHAs, and substance abuse providers. This is due to the fact that Medicaid is an important funding source for mental health services provided by the LMHAs. The data provided by HHSC and DSHS was de-identified, thus, PCG was not able to determine the extent of overlap to determine an accurate unduplicated count of Medicaid recipients served across the Medicaid and DSHS systems of care. [53]

Medicaid is a significant funding source within the behavioral health system. Data for 2008 provided by HHSC shows that Medicaid and CHIP spent approximately $186 million on behavioral health services for persons in fee-for-service, PCCM, managed care, and the Children's Health Insurance Program (CHIP).[54] The Table below shows the Texas Medicaid program makes substantial payments for services to persons with behavioral health issues. The Table includes data on all adult and children enrolled in fee-for-service (FFS) and primary care case management (PCCM) programs for all behavioral services.[55] The dollars include case management, rehabilitation and other behavioral health services. The data indicates that there has been a consistent increase in both total funds and the number of persons served over the last four years. While the number of persons went up the last two years, expenditures per person have been relatively flat over the four year period.[56]

[53] The analysis of service cost and utilization required complex data matching between DSHS and HHSC files. The results of the data matching did not seem to add much to an already complex report.
[54] Information on managed care and CHIP behavioral health expenditures were not available for 2009 and subsequent years. The 2008 figures do not include case management and rehabilitation services.
[55] These dollars are in incomplete representation of Medicaid funding since PCG was only provided behavioral health capitation data for some plans and cannot provide a definitive count of the behavioral spend in Medicaid managed care plans. Moreover, these expenditures are primarily for mental health since Medicaid did not have a broad substance abuse benefit.
[56] Cost estimates provided by the LMHAs cannot be added to Medicaid expenditures to estimate total behavioral health spending since LMHAs receive funds from Medicaid.

Table III.20 Medicaid Fee-for-Service and Primary Care Case Management Expenditures for Behavioral Health, 2008-2011 (does not include managed care)

Adults and Children	FY2008	FY2009	FY2010	FY2011
Case Management and Rehabilitation	$48,422,606	$56,457,805	$83,814,823	$85,769,966
All Other Behavioral Health Services	$107,502,358	$106,562,431	$107,289,031	$102,563,473
Total Expenditures	**$155,924,964**	**$163,020,236**	**$191,103,854**	**$188,333,439**
Total Number Adults and Children	**155,042**	**152,554**	**165,293**	**176,646**
Cost Per Person for Year	$1,006	$1,069	$1,156	$1,066
Percent Change in Persons		-1.60%	8.35%	6.87%
Percent Change in Cost Per Person		5.89%	8.19%	-7.78%

Source: HHSC**,** Strategic Decision Support Division

In addition to FFS and PCCM programs, Medicaid also pays for behavioral health through its managed care program. Managed care companies report encounter claims which state which person uses what service but the claims do not contain cost information since the state payment to the managed care plans is through capitation payments which include a component to pay for behavioral health. The table below presents information on the combined number of persons using Medicaid behavioral health services. The number of unique persons in FFS/PCCM programs was added to the number of unique persons in managed care programs. The table shows that there has been a steady expansion of persons using behavioral health services over the four year period.[57]

Table III.21: Change in Number of Persons using Medicaid Behavioral Health Services, 2008-2011.

Adults and Children	FY2008	FY2009	FY2010	FY2011
Persons in FFS/PCCM Program	155,042	152,554	165,293	176,646
Persons in Managed Care Programs	61,507	73,034	83,691	94,194
Total Number Adults and Children	**216,549**	**225,588**	**248,984**	**270,840**
Percent Change in Persons		4.17%	10.37%	8.78%

Source: HHSC, Strategic Decision Support Division

Overview of the Utilization of Substance Abuse Services and Mental Health Services

In the next table PCG has outlined the unduplicated count of individuals served from 2008 through 2011.

[57] The table above could contain potential duplications of persons to the extent that persons shift programs during the year. Additional research would be required to analyze parameters estimating this shift.

The table shows that the state-funded behavioral health services provide services to large number of individuals. Approximately 555,000 persons received mental health services through an LMHA in the four-year period from 2008-2011 and approximately 127,000 persons received mental health services through the NorthSTAR program. Utilization of DSHS substance abuse services has declined in 2011 while the utilization of LMHA mental health and NorthSTAR substance abuse and mental health services has expanded. As the population in the State of Texas continues to grow, the demand for mental health and substance abuse services is also expected to continue to increase year to year.

In the table below, the four rows showing the "Unduplicated Total" are not the sum of the children and the adults. Some children become adults in the course of the year and these persons are counted once as a child and once as an adult. The rows showing the unduplicated total removes this duplicate counting and shows the number of unduplicated individuals that received services each year.

Table III.22: Counts of Persons that Received DSHS-Contracted Substance Abuse Services and Mental Health Services from LMHAs and NorthSTAR 2008-2011

	FY 2008	FY 2009	FY 2010	FY 2011	Unduplicated Count of Persons Served during 2008-2011
DSHS Contracted Substance Abuse Services					
Children	6,078	6,120	5,852	5,609	27,017
Adults	36,904	36,324	37,417	33,073	155,348
Unduplicated Total	**42,891**	**42,348**	**43,051**	**38,578**	**181,726**
Mental Health Services Provided by LMHAs					
Children	42,531	42,076	43,390	44,357	127,806
Adults	168,311	180,666	188,678	192,963	445,990
Unduplicated Total	**205,968**	**219,644**	**229,572**	**234,808**	**555,760**
Substance Abuse Services Provided by NorthSTAR					
Children	717	633	755	901	2,690
Adults	9,780	11,102	11,578	11,007	32,108
Unduplicated Total	**10,452**	**11,675**	**12,273**	**11,857**	**34,255**
Mental Health Services Provided by NorthSTAR					
Children	12,735	14,908	17,086	18,956	37,462
Adults	37,097	43,117	46,191	50,296	95,386
Unduplicated Total	**48,832**	**57,010**	**62,072**	**68,180**	**127,426**

Note: The unduplicated totals are the unduplicated counts of individuals receiving services. They are the not the sum of the adult and children that receive services because some children become adults during the year and show up in both the children and adult counts. The total unduplicates the overlap between the adult and children counts.

DSHS-CONTRACTED SUBSTANCE ABUSE SERVICES
Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA)
MENTAL HEALTH SERVICES PROVIDED BY THE LMHAs
Source: Raw, de-identified data supplied by: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA), Data analysis performed by PCG
SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES PROVIDED BY NORTHSTAR
Source: Medicaid Services Unit, Mental Health and Substance Abuse Division (MHSA)

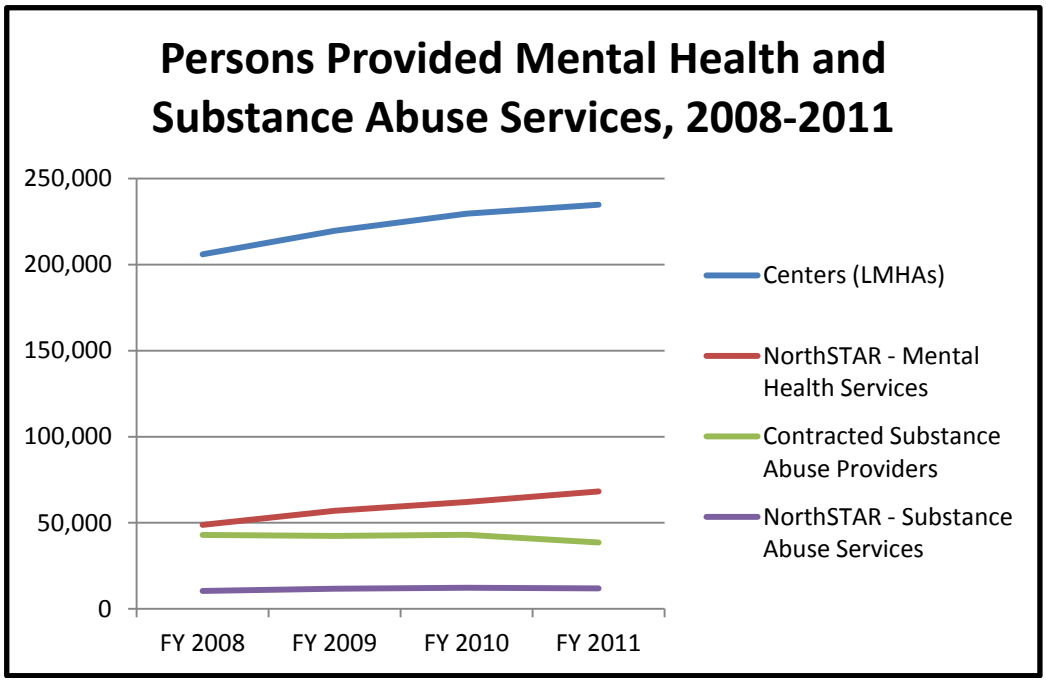
The next table shows the percentages of individuals that are served in the various behavioral health systems of DSHS. This representation of the data does not take into account the persons that are served in both the mental health and substance abuse systems. It is a view that shows the relative magnitude of persons served in each system.

Table III.23: Percentage of Services Provided by Fiscal Year

Delivery System	FY 2008	FY 2009	FY 2010	FY 2011	Average Unduplicated Count of Persons Served
Substance Abuse Providers	13.92%	12.81%	12.41%	10.92%	20.21%
LMHAs Mental Health	66.84%	66.42%	66.17%	66.44%	61.81%
NorthSTAR Substance Abuse	3.39%	3.53%	3.54%	3.35%	3.81%
NorthSTAR Mental Health	15.85%	17.24%	17.89%	19.29%	14.17%

Source: Table III.22: Counts of Persons that Received DSHS-Contracted Substance Abuse Services and Mental Health Services from LMHAs and NorthSTAR 2008-2011

Figure III.5: Unduplicated Count of Persons Served by Service Delivery System and Year, 2008-2011



Source: Table III.22: Counts of Persons that Received DSHS-Contracted Substance Abuse Services and Mental Health Services from LMHAs and NorthSTAR 2008-2011

Despite the steady increase in the demand for mental health and substance abuse services in the aggregate there are discernible differences in the individual trends when mental health and substance abuse services are examined individually. For example, despite an increase in population within the State of Texas, the DSHS substance abuse contracted providers have seen a downward trend in terms of the unduplicated count of individuals receiving these services. Specifically, there has been a decline in the unduplicated count of individuals receiving DSHS substance abuse services over the past four years. The most significant reduction has occurred from 2010 to 2011. The NorthSTAR delivery system has seen an increase in the number of person using substance abuse services over the past four years. From Table III.22 above, the increase in NorthSTAR substance abuse services is greater than 10%. NorthSTAR has also seen a decrease of -3.39% from 2010 to 2011 in the number of adults and children that received substance abuse services, implying that a smaller proportion of enrollees are receiving the service.

A high level analysis of mental health service utilization trends reveals that there has been an 18.9% increase in the l number of individuals, some 48,000 more, receiving mental health services in 2011 compared to 2008. However, the percent in growth varies considerably when examining the services delivered by the LMHAs versus the NorthSTAR delivery system. The

growth within the LMHAs was 14% i and the NorthSTAR system of care has realized an approximate 40% increase in the number of consumers served from 2008 to 2011, which equates to an annual average increase of about 11.8% per year.

One method in measuring the effectiveness of the community based system of care is to evaluate prevalence estimates compared to the number of individuals served within the systems of care. Prevalence estimates for 2009 for the entire state of Texas by Holzer and Nguyen indicate that there are approximately 291,551 children under 200% of the federal poverty level (FPL) that require mental health and services, as well as 459,855 adults under 200% FPL that require mental health services within the State of Texas, including the NorthSTAR service area.58 For the NorthSTAR area, it is estimated there are approximately 49,966 children under 200% of the federal poverty level (FPL) that require mental health and services, as well as 66,253 adults under 200% FPL that require mental health and services.[59]

Table III.24: Projected Consumers Needing Services versus Consumers Receiving Services for 2009

System of Care	Projected Adults Under 200% FPL Needing Services	Adults Served	% of Adults Served	Projected Children Under 200% FPL Needing Services	Children Served	% of Children Served
LMHAs	393,605	180,666	45.90%	244,583	42,076	17.20%
NorthSTAR	66,253	43,117	65.08%	46,959	14,908	31.75%

Source: Holzer and Nguyen, 2009.

[58] Holzer, C., & Nguyen, H., (2010, August), *2009 CPES Based Estimates of Need for Mental Health Services For States (only) Using Age Squared Model*, Version 8. Retrieved on 11-25-2011 from http://66.140.7.153/estimation/state09_htm/w1xmhm2asq_3_tx000.htm The latest data that Holzer and Nguyen provide is for 2009. They do not distinguish between serious mental illness (SMI) and serious emotional disturbance (SED). They use groupings of DSM IV diagnostic codes, days of disability and the Sheehan scale to characterize the population into four mental health categories. The data used in the report comes reflects there MHM2 category. See, retrieved on 11-25-2011 from http://66.140.7.153/estimation/documentation/CPES/MHMdefinition.htm

[59] The NorthSTAR numbers were calculated by applying Holzer and Nguyen percentages to the numbers of persons under 200 of the Federal Poverty Level in the NorthSTAR counties. According to DSHS staff, 84% of the persons served by the LMHAs are at 100% of the FPL.

The results of the prevalence analysis demonstrates significant differences in the percentage of individuals that are receiving services within the NorthSTAR and LMHA service delivery systems of care versus the needs of the community. NorthSTAR appears to be serving higher proportions of both adults and children.[60]

Overview of the Utilization of Substance Abuse Services Provided By DSHS Providers

The next table provides an overview of substance abuse services funded by DSHS. As outlined in prior sections, there has been a decline in the number of unduplicated persons receiving substance abuse services. In addition, the level of DSHS funding and the total number of encounters provided over the five-year period from 2007-2011 has also decreased, further supporting this trend despite an increase in the Texas population of approximately 2,000,000 persons during this period.[61]

The next table outlines that funding for these services has generally been flat over the past five years. There have been small increases in substance abuse expenditures from year to year since 2007; however there was a significant decrease in funding of approximately $10M from FY 2010 to FY 2011.

Table III.25: DSHS Funded Substance Abuse Services, Cost and Utilization Data, 2007-2011

	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Persons	44,935	42,891	42,348	43,051	38,578
Expenditures	$72,544,259	$73,310,809	$73,970,425	$79,043,813	$68,692,882
Units of Service	2,066,851	1,881,399	1,888,128	1,985,533	1,683,514
Cost per Person	$1,614	$1,709	$1,747	$1,836	$1,781

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).[62]
Note: These are total unduplicated counts of all persons receiving substance abuse services and are not equal to the sum of adults and children shown in Table III.22.

The table below illustrates the concentration of substance abuse services. The table shows, by service, the number of providers, the number of patients, the percent of patients treated by the five largest providers and the percent treated by the largest provider. Approximately half of the

[60] Persons have proffered various reasons why this difference exists, however, PCG has not systematically studied potential reasons and quantified their impacts and therefore presents no analysis of why this difference exists.
[61] In 2007, the population of Texas was estimated to be 23,904,380, see retrieved on 12-20-2011 from http://www.dshs.state.tx.us/chs/popdat/ST2007.shtm . In 2011 the population of Texas was estimated to be 25,883,999. See, retrieved on 12-20-2011 from http://www.dshs.state.tx.us/chs/popdat/ST2011.shtm Bottom of Form
[62] The dollars in this table do not include DSHS administrative costs and thus underestimate the amount spent on substance abuse treatment.

services are performed by ten or fewer providers. Only five of the 17 services are performed by 20 or more providers. Although a provider can offer services in multiple locations, the small number of providers and the concentration of substance abuse providers raise the issue of statewide availability of services. During public hearings held in different regions of Texas, comments and concerns were raised on the availability and access to substance abuse services.

Table III.26: Concentration of Substance Abuse Treatment Services, FY 2011

	Number of Providers	Number of Persons	Percent of Persons served by the Largest Provider	Percent of Persons served by Five Largest Providers
HIV Residential	1	96	100.00%	100.00%
Intensive Residential (Women and Children Medicaid Wrap Around)	6	49	59.18%	97.96%
Ambulatory Detoxification (Specialized Female)	6	91	62.64%	97.80%
Supportive Residential (Women and Children)	7	205	40.98%	97.56%
Residential Detoxification (Specialized Female)	8	835	32.69%	85.15%
Opioid Substitution Therapy	9	2,081	29.41%	79.87%
Supportive Residential (Specialized Female)	14	521	29.37%	75.05%
Ambulatory Detoxification	10	586	25.43%	92.61%
Intensive Residential (Women and Children)	13	616	25.00%	72.40%
Intensive Residential (Youth Medicaid Wrap Around-Room/Board)	9	4,265	12.57%	49.24%
Residential Detoxification	14	5,763	18.06%	60.11%
Outpatient (Specialized Female)	25	3,183	16.53%	46.50%
Intensive Residential	19	1,959	15.21%	48.95%

	Number of Providers	Number of Persons	Percent of Persons served by the Largest Provider	Percent of Persons served by Five Largest Providers
(Specialized Female)				
Supportive Residential	20	1,417	14.75%	57.23%
Intensive Residential	37	7,532	12.80%	36.55%
COPSD	32	4,265	12.57%	49.24%
Outpatient	67	19,205	6.62%	23.95%
Number Distinct Providers and Persons	**79**	**38,566**		

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA)
Note: Two of these services are DSHS-paid "wrap around" services providing supplemental benefits to Medicaid beneficiaries.

The next table outlines the total payments by service category for substance abuse services. How the data are reported changes from year to year so empty cells in the following table do not mean that no dollars were reported for that service rather the service was likely redefined, e.g. Buprenorphine and Methadone reporting were consolidated in 2010 into a new reporting category called Opioid Substitution Therapy.

Table III.27: Payments for Substance Abuse Treatment Services, FY 2007-FY 2011

	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Adolescent Support	$81,290	$292,786	$420,426		
Ambulatory Detoxification	$722,008	$791,657	$879,363	$1,038,323	$472,845
Ambulatory Detoxification (Specialized Female)	$99,918	$113,560	$132,515	$169,745	$73,457
Buprenorphine	$39,520	$49,511	$42,246		
COPSD	$3,693,744	$3,800,048	$3,655,371	$3,606,815	$2,972,566
Family Counseling	$232,091	$1,123,888	$2,150,089		
Family Support	$65,029	$281,833	$418,150		
HIV Residential	$331,821	$517,968	$516,456	$591,096	$441,072
Intensive Residential	$21,678,819	$21,285,592	$20,265,656	$22,116,787	$20,185,990
Intensive Residential (Specialized Female)	$4,303,875	$4,611,763	$4,764,329	$5,669,173	$4,395,017

	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Intensive Residential (Women and Children Medicaid Wrap Around)					$133,591
Intensive Residential (Women and Children)	$6,265,550	$5,980,411	$6,208,275	$6,292,759	$4,382,749
Intensive Residential (Youth Medicaid Wrap Around-Room/Board)					$110,245
Methadone	$5,325,939	$5,617,357	$5,650,747		
Opioid Substitution Therapy				$5,808,806	$4,964,322
Outpatient - Group/Specialized Female	$2,358,588	$2,050,706	$2,154,791		
Outpatient - Individual/Specialized Female	$1,355,418	$1,238,172	$1,130,228		
Outpatient-Group	$11,218,377	$10,404,356	$10,185,407		
Outpatient-Individual	$5,045,888	$4,622,781	$4,556,190		
Outpatient				$19,180,589	$17,013,315
Outpatient Female				$3,373,532	$3,022,334
Psychiatrist Consultation	$125	$7,469	$20,313		
Residential Detoxification	$4,225,735	$4,740,058	$5,148,167	$5,688,816	$4,979,202
Residential Detoxification (Specialized Female)	$631,022	$681,009	$653,597	$857,071	$707,316
Supportive Residential	$2,631,182	$2,298,627	$2,783,388	$2,561,432	$2,318,006
Supportive Residential (Specialized Female)	$1,215,487	$1,402,250	$1,085,460	$1,130,217	$1,253,019

	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Supportive Residential (Women and Children)	$1,022,835	$1,399,008	$1,149,261	$958,652	$1,267,837
Total	**$72,544,259**	**$73,310,809**	**$73,970,425**	**$79,043,813**	**$68,692,882**

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).

The next table and figure show the services provided for 2011. Over half the treatment services funds are spent on two services: intensive residential and outpatient.

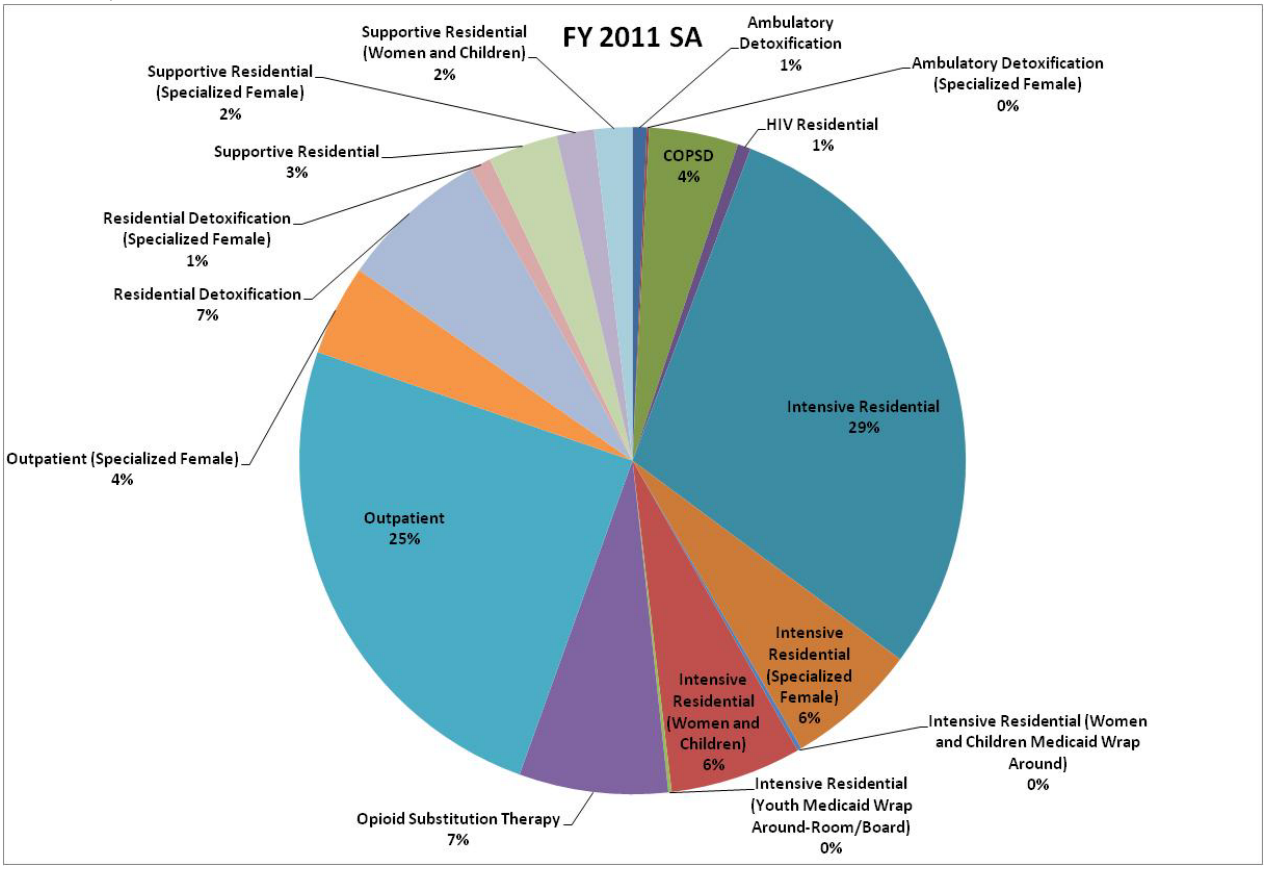
Table III.28: Percentage Distribution of Substance Abuse Treatment Services, FY 2011

	FY 2011	% of Total Services
Intensive Residential	$20,185,990	29.39%
Outpatient	$17,013,315	24.77%
Residential Detoxification	$4,979,202	7.25%
Opioid Substitution Therapy	$4,964,322	7.23%
Intensive Residential (Specialized Female)	$4,395,017	6.40%
Intensive Residential (Women and Children)	$4,382,749	6.38%
Outpatient (Specialized Female)	$3,022,334	4.40%
Co-Occurring Psychiatric and Substance Use Disorders	$2,972,566	4.33%
Supportive Residential	$2,318,006	3.37%
Supportive Residential (Women and Children)	$1,267,837	1.85%
Supportive Residential (Specialized Female)	$1,253,019	1.82%
Residential Detoxification (Specialized Female)	$707,316	1.03%
Ambulatory Detoxification	$472,845	0.69%
HIV Residential	$441,072	0.64%
Intensive Residential (Women and Children Medicaid Wrap Around)	$133,591	0.19%
Intensive Residential (Youth Medicaid Wrap Around-Room/Board)	$110,245	0.16%
Ambulatory Detoxification (Specialized Female)	$73,457	0.11%
Total	**$68,692,882**	**100.00%**

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA)

The figure below shows the same data as is in the table above. However, the data are shown as a pie chart where each slice represents a substance abuse service and the size of the slice represents the % of total spending that was spent on that service.

Figure III.6: Percentage Distribution of Persons using Substance Abuse Treatment Services, FY 2011



Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA)

Trends in Utilization Data

PCG analyzed five years of substance abuse services utilization and cost data to outline service trends. The following paragraphs outline some of the findings as a result of this analysis. For more detailed analysis on utilization trends please see Appendix IV: Substance Abuse Service Cost and Utilization Analysis.

The substance abuse data for DSHS-contracted programs for the period 2007-2011 show declines in the number of persons receiving treatment, the dollars spent on substance abuse treatment and the encounters reported. The decline impacted all programs types: outpatient, residential, and detoxification programs. A few smaller specialized programs for women and children did not drop. The payments to providers confirm the general across the board reductions seen in the numbers of persons receiving treatment. The funding level for 2011 is noticeably lower than the funding levels in the four previous years.

Only five of the 17 substance abuse services have 20 or more providers. In the five services where there are 20 or more providers the proportion of services provided by the top five providers ranges from approximately 24 percent to 57 percent.

There are two large programs: intensive residential (approximately $20 million) and outpatient (approximately $17 million). These two programs accounted for about 54% of all substance abuse treatment spending. Ambulatory detoxification services are relatively concentrated. Only ten DSHS providers provided ambulatory detoxification services and of the ten, the four largest providers provided services to 85% of the total persons.

Intensive Residential services was a distributed service with 37 providers. Unlike some other services, providers do not appear to be concentrated although one hospital provider treats substantially more persons than the other providers.

Nine agencies provided Opioid substitution therapy. Treatment services were concentrated in that the four largest providers treated 71% of the 1,959 persons receiving the service.

Overview of Mental Health Services Delivered by LMHAs

The next sections of this report provide high-level descriptions of mental health services provided through the LMHAs. As shown in the next table, per-person spending for the DSHS services provided through the LMHAs has slightly increased from roughly the $1,721 level in 2007-2008 to the $1,754 level in 2011. DSHS funded services have increased by almost $80 million over the 2007-2011 period helping to fund the increase of 42,000 persons served over the 2007 to 2011 time period. However, similar to substance abuse services the per-person funding has remained essentially flat despite a continuing increase in healthcare costs over this time period.

Table III.29: Contracted Per Person Spending By LMHAs on Mental Health Services, 2007-2011

	2007	2008	2009	2010	2011
Dollars	$331,391,522	$348,596,597	$385,931,809	$410,247,999	$411,903,220
Unduplicated Persons	192,600	205,968	219,644	229,572	234,808
Cost Per person	$1,721	$1,692	$1,757	$1,787	$1,754

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA), Data analysis performed by: PCG

On the one hand, LMHAs are required to report dollars expended and all service delivered by themselves or contractors. On the other hand, the LMHAs report little data on the use of hospital

emergency rooms and hospital observation rooms.[63] The omission of this essential information creates substantial limitations in this analysis NorthSTAR data includes information on emergency and observation room use and is based on paid claims. The data NorthSTAR receives from ValueOptions are considered encounters. Some are records from paid claims.

The following table shows the number of persons that received specific mental services in 2011 and the percentage of total persons that received each service. The table provides a summary look at which services are used by how many persons. For examples, as a percentage of total individuals, 57.75% received service and care management, 53.79% received a medication management service, and 44.47% had an assessment. As a percent of total dollars, the three services with the greatest expenditures on them were medications, psychosocial rehabilitation, and service and care management.

Table III.30: Count and Percent of Individuals Receiving Specific Mental Health Services from LMHAs and Dollars by Service in 2011.

	Number Receiving Service in 2011	% of Total Persons Receiving Service	Dollars by Service	% of Total Dollars Spent on Service
Service and Case Management	135,611	57.75%	$59,611,641	14.47%
Medications	126,319	53.79%	$78,287,810	19.01%
Assessment	104,419	44.47%	$38,822,217	9.43%
Screening	81,564	34.73%	$11,632,546	2.82%
Crisis Intervention Rehab.	80,640	34.34%	$37,690,227	9.15%
Skills Training and Development	42,414	18.06%	$37,974,861	9.22%
Psychosocial Rehabilitation Services	27,802	11.84%	$74,609,597	18.11%
Counseling	12,677	5.40%	$10,586,897	2.57%
Inpatient Professional	10,491	4.47%	$33,450,863	8.12%
Crisis Stabilization Beds	2,931	1.25%	$6,147,400	1.49%
Family Partner	2,770	1.18%	$2,073,702	0.50%
Day Respite Services	2,753	1.17%	$2,373,346	0.58%
Crisis Residential	2,728	1.16%	$11,892,717	2.89%

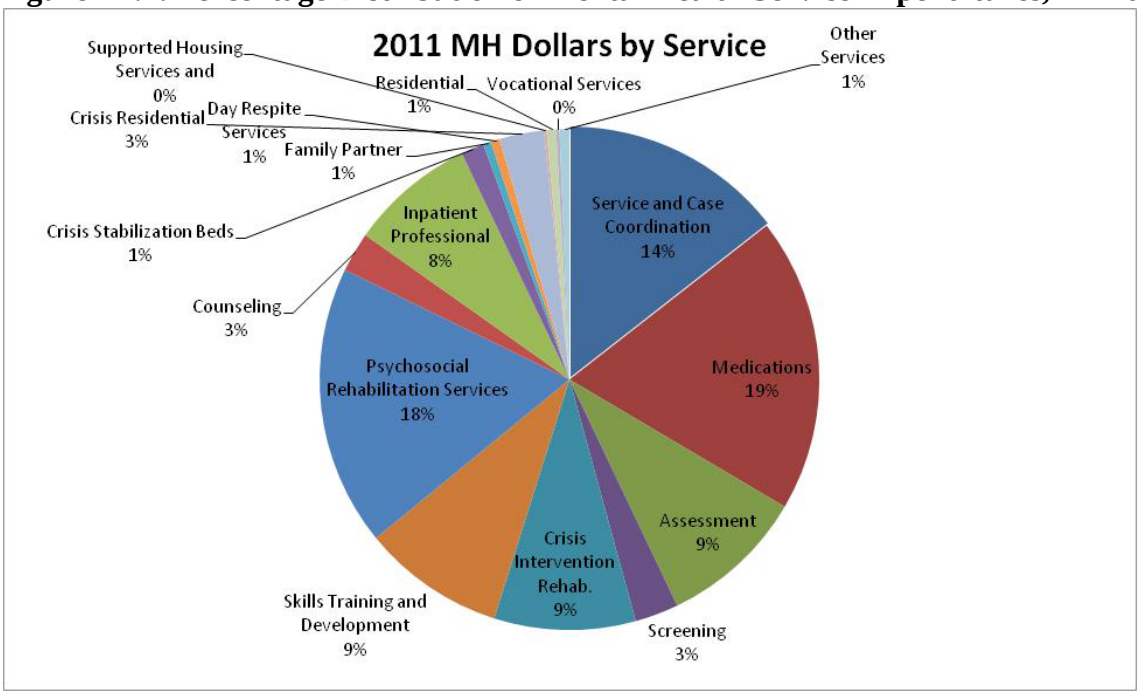
[63] Information on hospital utilization is presented in DSHS quality measures. According to the LMHA Performance Contract, when LMHAs staff assess consumers, information regarding psychiatric hospitalization should be collected. This is necessary to complete the Uniform Assessment's Hospitalization domain in the TRAG.. Apparently information collected during the TRAG process may not make it into the LMHA CARE reporting system. LMHA information on the physician visits to hospital patients is more complete and this is an RDM service.

	Number Receiving Service in 2011	% of Total Persons Receiving Service	Dollars by Service	% of Total Dollars Spent on Service
Supported Housing Services and	1,370	0.58%	$708,552	0.17%
Residential	1,161	0.49%	$2,515,316	0.61%
Vocational Services	914	0.39%	$888,011	0.22%
Other Services			$2,637,518	0.64%
Total Number of Unduplicated Persons	**234,808**		**$411,903,220**	

Source: Raw, de-identified data supplied by: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA), Data analysis performed by: PCG
Note: Percentages do not total to 100% because a person can receive more than one service. This is a total unduplicated count of all persons.

The pie chart below is another way of representing the tabular data shown above. The pie chart shows the relative size of expenditures.

Figure III.7: Percentage Distribution of Mental Health Service Expenditures, FY 2011



Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA)

Trends in Utilization Data

PCG analyzed five years of mental health services utilization data in order to outline service utilization and cost trends. For more detailed analysis on utilization trends please see Appendix III: Mental Health Service Cost and Utilization Analysis for LMHAs. The following paragraphs outline some of the findings as a result of our analysis.

An examination of multi-year data from 2007 to 2011 shows that more persons are getting screenings.[64] However, the encounters per person, the number of hours per person, the number of hours per encounter, the dollars per person, the cost per encounter and the cost per hour all declined. For example, there was a 20.47% decrease in the time per person taken to perform screenings.

[64] Decision support units within the Mental Health and Substance Abuse Division provided data by LMHA on the services provided. The information contained both the general type of service and the detailed service down to the procedure code level, the number of "encounters", the number of units of service provided as well as the age and gender of the person receiving the service and the estimated cost of providing the service. PCG aggregated the data and created reporting categories such as the cost per person, cost per unit of service, cost per encounter and developed reporting tables showing data by adults and children. PCG is solely responsible for the analysis of data as the Decision Support Unit only provided and explained the data and made no comments of any kind as to how the data should be analyzed.

Assessment services have also declined. The number of adults and children receiving assessments has declined and the total number of hours and encounters have declined. Assessment costs have increased due to a 61.54% increase in the cost per encounter.

The number of adults receiving counseling services increased 48.19% between 2007 and 2011, but the total population receiving this service remained small. Only 4.41% of all adults in 2011 received a mental health counseling service. Additionally only 9.59% of children that received a mental health treatment received a counseling service. The number of children receiving counseling services decreased 19.15% over the period 2007-2011. Trends in counseling treatment are working in opposite directions in adult and children's services. Simply summarized, only a small percentage of persons get counseling, and counseling services for adults have been going up while counseling services for children have been going down.[65]

Psychiatric inpatient service payments increased substantially over the five-year period, 2007-2011. The number of people utilizing inpatient care, total encounters and hours paid all increased. Inpatient utilization among adults has increased faster than utilization among children. More than ninety percent of those receiving psychiatric room and board services are adults. Between 2007 and 2011 the percentage of adults receiving these services grew from 3.83% to 4.88%. In 2007 5,989 adults received psychiatric inpatient psychiatric treatment compared to 9,735 in 2011. The percentage of children receiving these services has remained constant at 1.70%.

Approximately five out of six people receiving medication services are adults and one out of six is a child. Over the four-year period from 2008 to 2011 the growth in utilization and cost of this service was low. While the population of adults receiving any kind of mental health service increased from 156,467 in 2007 to 192,953 in 2011, the number of adults receiving a medication service only increased from 99,962 to 104,712.

Crisis intervention rehabilitation services have expanded substantially over the five-year period from 2007 to 2011 as funding for these services was provided. As discussed above in section III B, the 80th Legislature appropriated significant funding to support the DSHS Crisis Redesign initiative and the impact of this funding shows up in the changed utilization data. The number of persons using crisis intervention rehabilitation services increased from 30,954 in 2007 to 80,640 in 2011.

DSHS reports to the Legislative Budget Board (LBB) on the number of persons using crisis residential services. In the LBB reporting this is broad category covering five services:

[65] PCG has been provided numerous comments about the relative lack of services provided children but has not attempted to quantify the factors responsible and, in this purposefully descriptive report, has focused on documenting in detail where the service differentials exist.

- respite,
- crisis residential,
- crisis stabilization unit,
- extended observation, and
- inpatient psychiatric.

DSHS reported to LBB that in FY 2011 approximately $34.4 million was spent providing these five services to approximately 15,800 unique person at an average cost of about $2,400 per person.

In the DSHS data system these five services are categorized differently. For example, respite is shown as a "training and supports" service and crisis residential and crisis stabilization are included in the "residential" services along with a service simply called residential

These next paragraphs summarize the detailed tables in the Appendices for these three services that the DSHS data system includes in the "residential" service category. Again these services are crisis residential, crisis stabilization, and residential.

Crisis residential program costs have risen 624% from 2007 to 2011. This growth coincides with increases in GR funding for crisis services. This resulted in significant start-up costs associated with financing a new crisis delivery infrastructure across the State. While additional funds for crisis stabilization were needed, state financial oversight and monitoring of these cost changes might be useful. On the one hand, the number of service hours per person has increased 33%, from 275 hours in 2007 to 366 hours in 2011, so the average person is now receiving more services. On the other hand, what used to cost $59.13 per day in 2007 now costs $285.25. This part of the state's crisis program is only serving 300 more persons in 2011 than it did in 2007, but at a cost of more than $10 million more.

LMHAs purchase local psychiatric beds from providers such as hospitals to provide crisis stabilization services. The crisis stabilization bed category also registered a substantial cost increase of 231.72%. The number of people using the service increased 133%. Total hours of service increased 164%. This service was also part of the Crisis Redesign initiative. The crisis stabilization bed service is a rapidly expanding program, but the cost per unit only increased 25% over the five year period. Unlike the crisis residential program, the cost growth in this program is due more to the increasing numbers of persons using the program and amount of service they receive rather than increases in unit costs.

More people are receiving residential treatment services, but the number of services received per person is declining. Between 2007 and 2011, the number of people using the program increased 108%, but the number of treatment hours they received declined by approximately 50%.

For the period 2007-2011, the number of people using DSHS-funded mental health case coordination services increased by approximately 10% while service-hours per person declined by approximately 5%. There were declines in the percentages of all adults and children receiving the services. More persons are receiving case coordination services, but as a percentage of everyone served, the percentage of persons receiving case coordination is declining.

The total reported cost for all MHSA funded mental health training and support services was basically flat over the five-year period. But trends in total costs masked a fundamental shift since, during the period 2007-2011, the LMHAs provided a million more hours of low cost respite care, and the cost of this was offset by a 12 percent cut in more expensive psychosocial rehabilitation services.

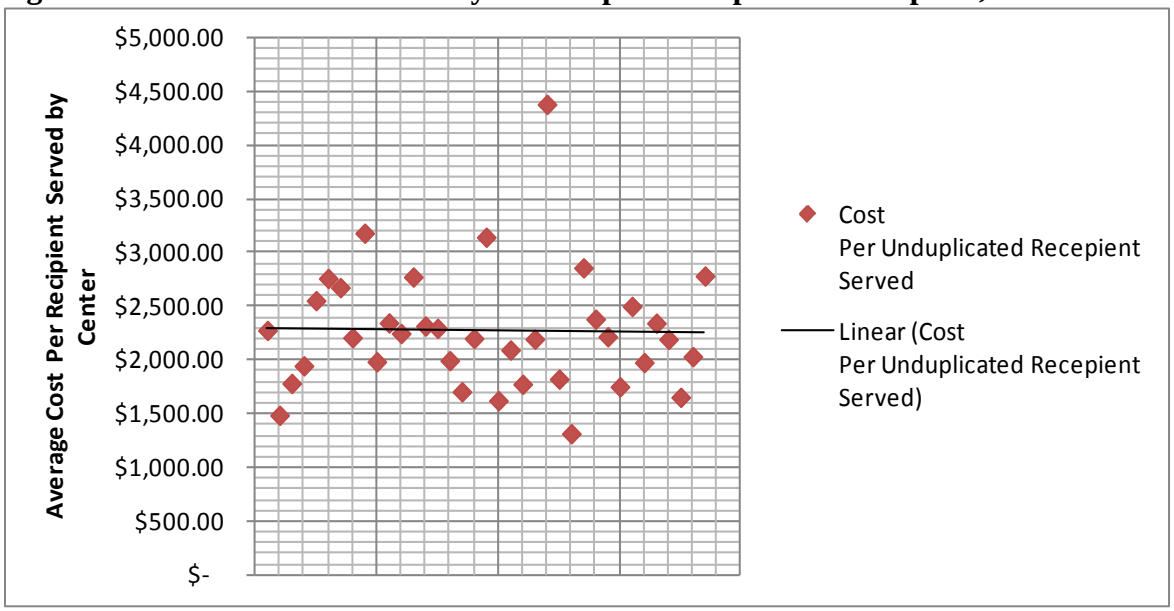
The mix of training and support services provided between 2007 and 2011 showed changes. The share of adults receiving training and support declined, but the share of children receiving this service increased. By 2011, nearly half of all children that received a mental health service also received a training and supports service. There were declines in the number of adults using psychosocial rehabilitation, skills training and development, and vocational support. Adults are receiving more respite services and housing supports.

Center Cost Comparison Analysis

In addition to examining service utilization costs and trends across programs and services, PCG also examined the average cost per consumer served by LMHAs. The basis for this analysis was CAM cost data submitted by each LMHA for individuals that were assessed and approved for services and subsequently an RDM service package was assigned. As the chart below outlines, there is considerable variability in the cost each LMHA incurs in providing mental health services.[66] The average cost per recipient served ranged from a low of $1,325 to a high of $4,389.

[66] The cost data was supplied by the Decision Support Unit, of the Mental Health and Substance Abuse Division (MHSA). The data file contained de-identified data on approximately 15 million individual-level records and PCG aggregated the data by LMHA. Each line item contained a code identifying the LMHA that arranged the service and an estimated cost to provide the service. Costs for each LMHA were obtained by aggregating the line items into summary worksheets. This aggregation relies on the reporting of each LMHA and does not factor funding sources or administrative costs to the extent that these costs are not included in the LMHA estimates.

Figure III.8: Mental Health Cost by LMHA per Unduplicated Recipient, FY 2011



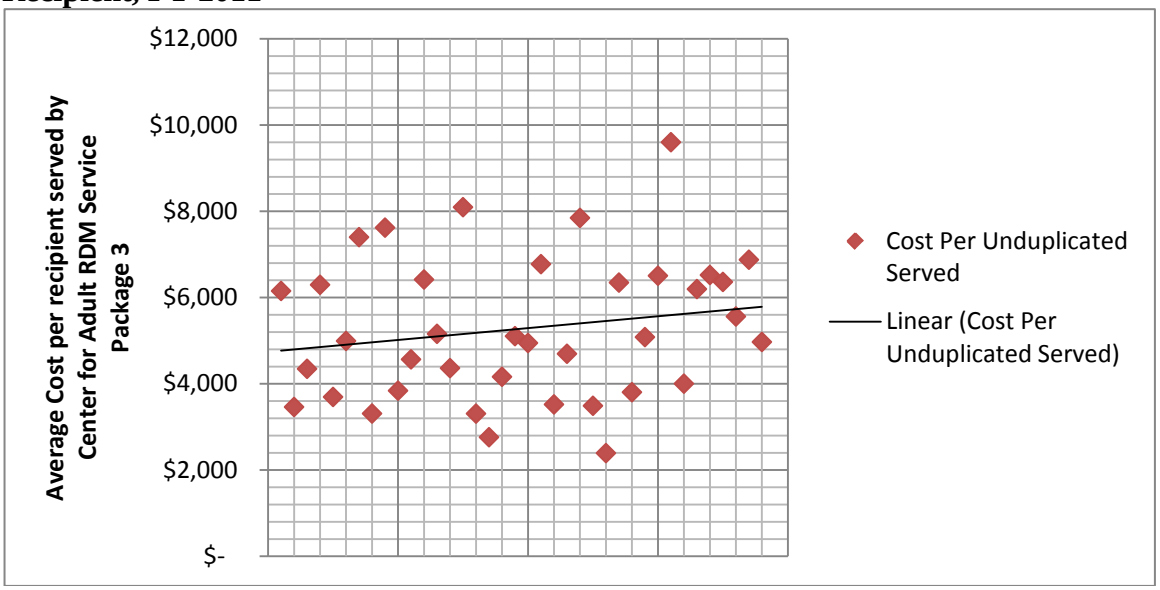
Source: De-identified data supplied by: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA), Data analysis performed by: PCG

Some of the variance in cost could be due to the differences in the patient populations each LMHA serves, as well as geographical cost differentials for wages and other administrative and overhead costs. A further explanation in the variance of costs may be explained by how LMHAs are financed. For example, one LMHA may be provided the use of a building at little or no cost, whereas another LMHA may be required to purchase or rent a building to provide similar services. These variables also may impact service costs when comparing between and across LMHAs.

PCG further examined costs by RDM service package to remove the differences that may be explained in differences of caseload, however, it does not account for the other differences outlined in the prior paragraph. In looking at the cost per consumer served, the variability across LMHAs still remains. For example the chart below outlines the average cost per recipient served for adults within RDM service package 3. As outlined previously, RDM is a standardized clinical model to ensure a consistent and evidenced-base treatment is provided to Texans seeking services. Therefore, it might be reasonable to assume that the needs of the patients from a clinical standpoint should be similar across the LMHAs. However, even after controlling for this variable the data demonstrates there is still considerable variability[67]

[67] PCG has not attempted to study the causes of the different average costs in Figure III-9. Similar variability exists regardless of which adult service package is shown. When discussed with state staff, persons said the variability could be due to multiple reasons. For example, the data reported for the service package has not been sorted by

Figure III.9: Mental Health Cost by LMHA for RDM Service Package 3 per Unduplicated Recipient, FY 2011



Source: De-identified data supplied by: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA), Data analysis performed by: PCG

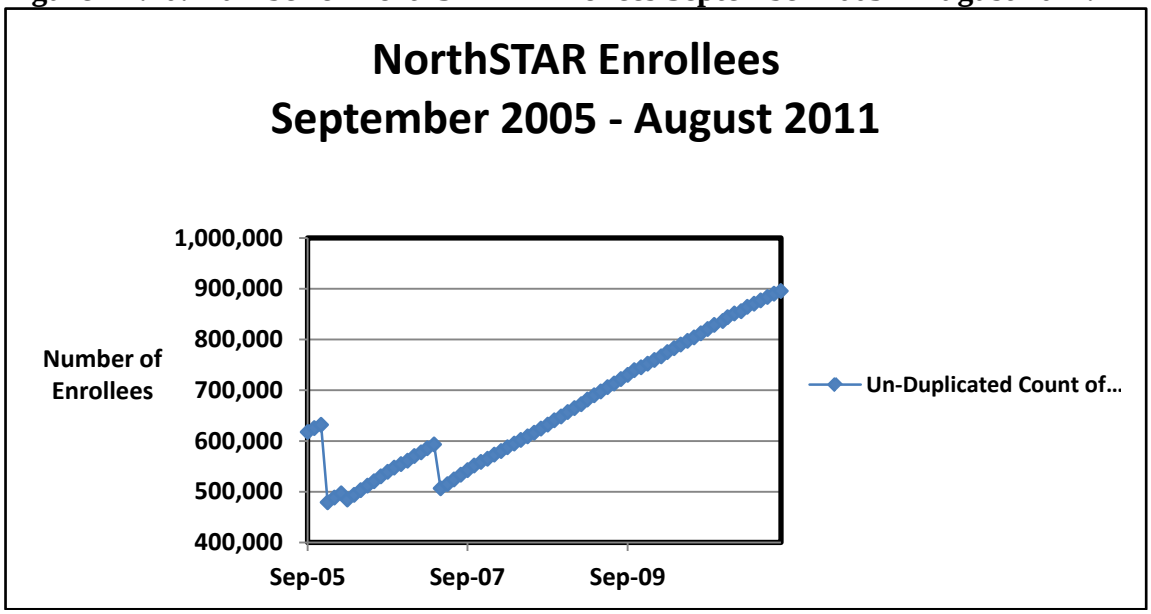
Overview of NorthSTAR Utilization

The next sections of this report describe mental health and substance abuse services provided through the NorthSTAR program. The NorthSTAR Program is a publicly funded managed care approach to the delivery of mental health and chemical dependency services to the eligible residents of Dallas, Ellis, Collin, Hunt, Navarro, Rockwall and Kaufman counties. The NorthSTAR program publishes extensive quantitative information on its services.[68] NorthSTAR began July 1, 1999 with coverage for non-Medicaid indigent individuals and limited Medicaid eligible individuals. On December 1, 1999, all NorthSTAR Medicaid eligible individuals were required to participate in NorthSTAR**.** The Figure below shows historical enrollment levels in NorthSTAR. The Figure shows the unabated increase in enrollment at a steady rate of approximately one per cent per month. The two drops in the graph are due to program officials periodically closing client enrollments due to inactivity. Many of these dis-enrolled clients were mandatorily enrolled Medicaid clients who never received a service and had lost Medicaid eligibility. The last mass disenrollment for the report period occurred in the spring of 2007.

length of time that persons were in the service package and some LMHAs could have a small number of persons in the package during the year leading to variability in the average cost..

[68] See the NorthSTAR data website page at http://www.dshs.state.tx.us/mhsa/NorthSTAR/databook.shtm Retrieved on 11-20-2011.

Figure III.10: Number of NorthSTAR Enrollees September 2005 – August 2011.



Source: Department of State Health Services, NorthSTAR Data Book and Trending Reports

As shown in the next table, per-person spending for the DSHS services provided through NorthSTAR has decreased from roughly the $2,060 per served individual level in 2008 to the $1,877 level in 2010. DSHS funded services have increased by almost $20 million over the 2008-2010 period helping to fund the increase of 15,000 persons more served from the 2008 to 2010 time period. The costs in the table below include all costs incurred for services provided and administrative costs in the NorthSTAR system. NorthSTAR array of services include services not provided by the LMHAs, including but not limited to emergency room services, after hour clinics, community inpatient services, and Medicaid state hospital services (for FY 11).

Table III.31: Amount Paid for Service by ValueOptions, Amount Paid By State to ValueOptions, Per Person Costs, and Medical Loss Ratios, 2008-2011.

	FY 2008	FY 2009	FY 2010	FY 2011
Total Premiums Paid to Value Options.	$136,272,643	$148,386,360	$157,215,702	$164,780,622
Paid for Services	$124,276,371	$138,394,520	$141,900,375	$146,968,822
Persons Served	53,619	61,937	67,568	73,359
Cost per Person Paid to Value Options	$2,541	$2,396	$2,327	$2,246
Cost per Person Paid by Value Options	$2,318	$2,234	$2,100	$2,003
Dollars per Person	91.20%	93.27%	90.26%	89.19%

Source: Medicaid Services Unit, Mental Health and Substance Abuse Division (MHSA)
Note: The person counts shown in this table are the total number of unduplicated individuals served in the NorthSTAR program. In this and other tables containing person counts, counts of adults and children overlap in that some children become adults during the year and if they receive a service as a child they show up in the count of children. If they also receive a service as an adult they show up in the count of adults. Efforts to unduplicate this overlap are made consistently throughout this report.

The following table shows all payments made by ValueOptions for NorthSTAR services for the period 2008-2011. The data provided PCG is difficult to draw conclusions from because of reporting changes from year to year. However, it is clear that community inpatient and state hospital expenses comprise about 30% of the expenditures. Medication and rehabilitation services comprise another 7% each. These services and changes in their costs are discussed at length below.

Table III.32: Payments Made by ValueOptions for NorthSTAR Services, 2008-2011.

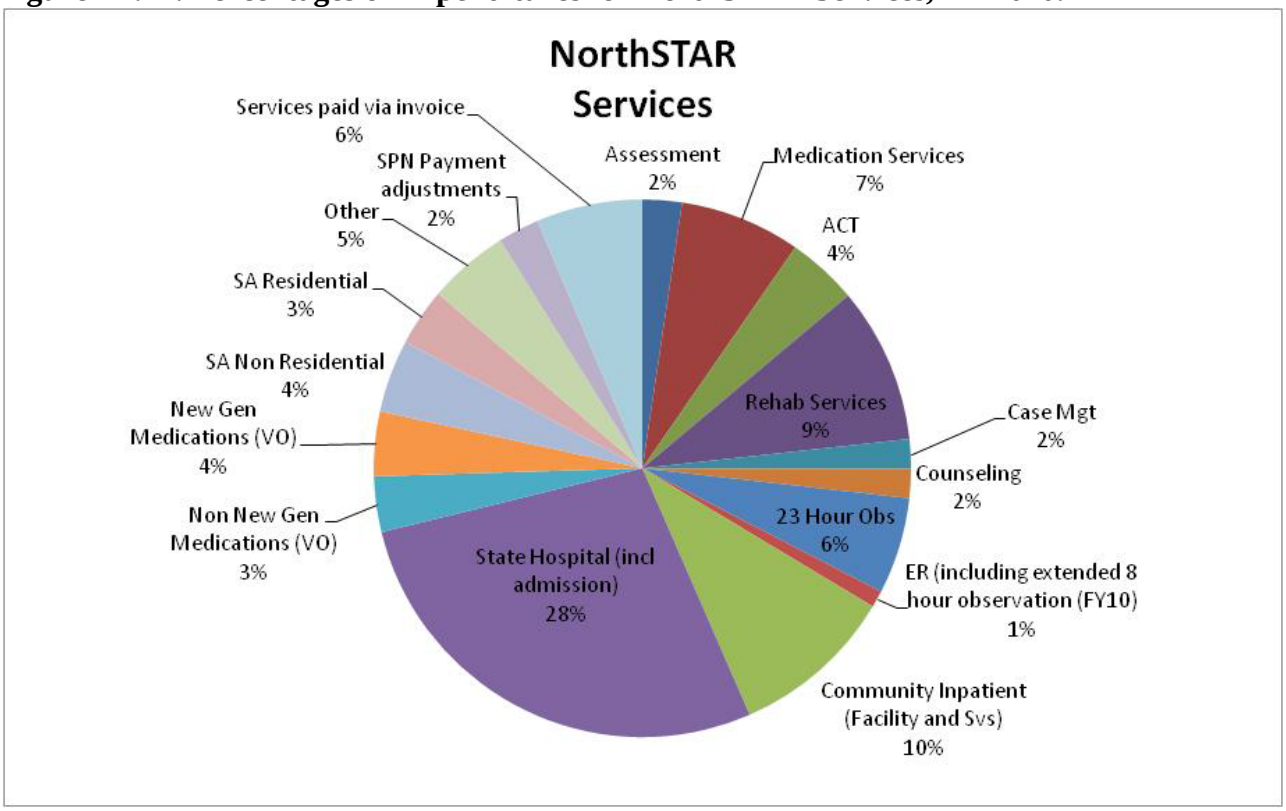
	FY08	FY09	FY10	FY11
Assessment	$2,307,171	$3,280,461	$3,359,772	$3,311,669
Medication Services	$6,893,162	$9,319,387	$10,326,842	$10,217,032
Assertive Community Treatment (ACT)	$4,391,895	$5,149,375	$6,021,935	$5,892,015
Rehabilitation Services	$15,216,204	$22,362,332	$13,292,911	$10,685,992
Case Management	$2,885,426	$3,462,662	$2,515,635	$2,401,195
Counseling	$1,835,656	$2,247,216	$2,481,846	$2,583,529
23 Hour Observation	$7,341,354	$7,900,110	$8,237,358	$7,761,672

	FY08	FY09	FY10	FY11
ER (including extended 8 hour observation (FY10/11)	$830,066	$970,481	$1,431,571	$1,768,365
Community Inpatient (Facility and Services)	$13,974,770	$13,325,085	$14,005,193	$16,562,692
State Hospital (including admissions)	$35,775,947	$35,159,759	$39,339,308	$36,559,691
Non -New Gen Medications	$3,569,381	$4,364,674	$4,746,439	$5,494,700
New Gen Medications	$3,438,076	$5,759,326	$5,499,553	$5,155,213
SA Non Residential	$5,258,500	$6,226,112	$6,246,204	$6,010,277
SA Residential	$4,150,078	$4,145,834	$4,890,400	$4,340,415
Other	$6,554,582	$7,307,624	$6,896,847	$8,274,185
SPN Payment adjustments	$2,440,021	$0	$3,537,550	$3,512,912
Services paid via invoice	$7,414,082	$7,414,082	$9,071,010	$9,086,601
State Hospital Costs Paid for Medicaid Adults (paid via invoice)	*	*$0	*$0	$7,350,667
TOTAL	**$124,276,371**	**$138,394,520**	**$141,900,375**	**$146,968,822**

Source: Medicaid Services Unit, Mental Health and Substance Abuse Division (MHSA)
*= Data not reported separately for this year.

The next figure shows the percentage distribution of expenditures for FY 2010 for NorthSTAR services. The largest single expenditure is for state hospital services, followed up community inpatient and rehabilitation. The new and non-new Gen Medication expenditures are ingredient costs of pharmaceuticals. State hospital allocation data and community inpatient services are not accounted for in the LMHA data.

Figure III.11: Percentages of Expenditures for NorthSTAR Services, FY 2010.



Source: Medicaid Services Unit, Mental Health and Substance Abuse Division (MHSA)

Trends in Mental Health Service Utilization Data

PCG analyzed five years of mental health services utilization data to outline service utilization and cost trends. For more detailed analysis on utilization trends please see Appendix V: NorthSTAR Mental Health Service Cost and Utilization Analysis. The following paragraphs outline some of the findings as a result of our analysis.

The steady growth in NorthSTAR enrollments has generated significant percentage increases in assessment procedures and costs. Over the five-year period the number of persons who received assessments went up from roughly 15,000 per year to 27,000 per year. The units of service per year went from 16,000 to 43,000.[69] As a percentage of enrollment, there have been declines in the percentage of people using both inpatient and outpatient services over the period 2005-2011.

[69] The word assessment probably has multiple meanings when used across a geographical area as large as Texas. It can mean a "Uniform Assessment using Texas Recommended Assessment Guidelines (TRAG) or it can mean a more informal action. Counts of "assessments" could thus include counts of actions that vary in depth and breadth. Uniform Assessment using Texas Recommended Assessment Guidelines are not represented in the NorthSTAR service data.

This decrease in percentage based on total enrollment may be caused by the increase in Medicaid enrollees who are mandatorily enrolled in the program but never seek services. Also Medicaid clients who lose Medicaid eligibility are not automatically dis-enrolled from the program.

In terms of the number of persons that use services, inpatient usage has risen in the last five years. Emergency room use, 23-hour observations and admissions to local psychiatric beds are all up. However, a smaller percentage of NorthSTAR enrollees are using these inpatient services. As a percentage of all persons receiving services, the percentage drops in the number of persons using these inpatient services are smaller than the percentage drops in the persons using counseling and rehabilitation.

There has been a higher increase in the proportion of persons receiving medication than the increase in the number of persons receiving services i.e., a higher proportion of persons were being prescribed drugs as 52% received medications in 2006 and in 2010 60% received medications. For example in 2010, there was a 15.52% increase in the number of persons receiving medications while the unduplicated count of NorthSTAR users went up about 9%.

Annual expenditures for medication services doubled. The number of persons receiving medications increased from about 25,000 in 2006 to 41,000 in 2010. While pharmaceutical users have gone up, ValueOptions works to keep pharmaceutical costs reasonable because they have found a way for program participants to qualify for the 340B Drug Pricing Program. The 340B Drug Pricing Program was authorized in the Veterans Health Care Act of 1992. The 340B Drug Pricing Program is managed by the Health Resources and Services Administration (HRSA) Office of Pharmacy Affairs (OPA). Section 340B limits the cost of covered outpatient drugs to fourteen types of health care providers including, for example, community health centers, Title X family planning centers, federally-qualified health center look-alikes and qualified hospitals. ValueOptions, which administers the NorthSTAR benefits, works with the University of Texas Medical Branch (UTMB) and NorthSTAR enrollees may be seen at UTMB hospitals. Hospital programs of UTMB receive disproportionate share funds from the state and qualify to participate in the 340B program and the HRSA Office of Pharmacy Affairs has approved the state's participation.

Over the five-year period there were declines in the number of persons receiving counseling services, the number of rehabilitation units received by persons, and declines in case management. In FY 2010 a greater percentage of persons were getting rehabilitation services but those who were getting the services were getting 41% fewer services than they would have gotten five years ago.

One distinction between rehabilitation and counseling services is in the qualifications of staff that provide them. Counseling requires higher-paid licensed staff such as social workers and psychologists. This difference can be seen in the average cost per unit of rehabilitation which

was $21.80 in FY 2010 versus $55.24 for counseling. The NorthSTAR utilization patterns show that more persons used the lower-paid rehabilitation service, and the cost of the higher use of the lower-paid service was offset by drops in the number of units of service provided.

In 2010, a lower percentage of persons were getting counseling services but they were getting 31% more services than they would have gotten five years ago. Counseling services have thus become focused on smaller numbers of persons who need more intensive services.

In FY 2010 a case rate was initiated with NorthSTAR providers in which a single rate would be paid for persons receiving one of the Resiliency Disease Management (RDM) service packages that covered service levels 1, 2 or 3. This corresponds with a change in utilization of services. The change may have constrained providers to focus on the persons who really needed the service leading to a result that fewer persons received services but those who did receive services received more. Moreover, NorthSTAR would be expected to have hospital utilization since NorthSTAR pays for emergency room and observation use. Persons using these services are often brought to the hospital by law enforcement officers. If a person was not NorthSTAR enrolled when they arrived at the hospital, then their eligibility would be determined so that the hospital could bill for the service.

The next table shows the yearly percentage change in NorthSTAR services. The table shows that across the five-year period from 2006 to 2010 the percentage change in the number of persons receiving NorthSTAR services has increased much more than overall population growth in the seven NorthSTAR counties. Two services had a significant drop from 2009 to 2010. Even though the annual unduplicated count of NorthSTAR users went up 9.04% from 2009 to 2010, the number of persons receiving rehabilitation services dropped by 25.20% though the clients receiving the service received more of the service and the number receiving case management dropped by 28.22%.

PCG has considered these changes and thinks it reasonable to infer that they are due to the reimbursement changes that took effect in 2010. The change to a case rate in 2010 had the effect of braking what was an uncontrolled use of rehabilitation services. The 2010 change brought the levels of persons served back to the 2008 level.

Case management appears to be a different situation in that case management did not see large percentage increases in utilization prior to 2010, yet service levels dropped by 28.22% in 2010. Is it reasonable to assume that 28.22% of persons were using case management services unnecessarily? NorthSTAR has been in operation over ten years and has had this decade to understand and manage utilization levels.

Counseling is another service that has seen declines over the 2006-2010 periods and its 4.53% growth from 2009 to 2010 did not keep pace with 9.06% increase in NorthSTAR utilization generally.

The next table below shows the number of persons using particular NorthSTAR services and the following table shows the percentage changes in these persons from year to year.

Table III.33: Number of Persons Using NorthSTAR Services, 2006-2010.

SERVICE CATEGORY	Fiscal Year 2006	Fiscal Year 2007	Fiscal Year 2008	Fiscal Year 2009	Fiscal Year 2010	Percent Change 2006-2010
Assessment	14,903	16,827	21,816	25,675	27,260	82.92%
Medication Services	25,118	25,736	28,926	35,256	40,726	62.14%
Assertive Community Treatment (ACT)	798	679	670	741	887	11.15%
Rehabilitation Services	19,708	22,174	24,262	32,946	24,642	25.04%
Case Management	18,633	22,083	23,748	23,207	16,657	-10.60%
Counseling	10,091	7,882	7,431	8,744	9,140	-9.42%
23 Hour Observation	5,989	5,918	6,044	6,359	6,985	16.63%
Emergency Room	4,723	4,662	4,146	4,324	5,289	11.98%
Community Inpatient	4,166	4,543	4,906	5,084	5,113	22.73%
State Hospital	2,089	2,293	2,328	2,349	2,474	18.43%
Non New Gen Medication Drug Claimants	23,250	19,928	21,928	26,467	29,648	27.52%
New Gen Medication Drug Claimants	2,241	1,352	2,859	8,063	11,559	415.8%
Substance Abuse Non Residential	5,907	6,346	7,141	8,197	8,186	38.58%
Substance Abuse Residential	3,423	3,213	2,766	2,768	3,248	-5.11%
Other	14,115	15,210	16,030	14,106	28,907	104.8%
Totals Across all Service Categories*	**48,431**	**49,271**	**53,625**	**62,016**	**67,592**	**39.56%**

Source: Medicaid Services Unit, Mental Health and Substance Abuse Division (MHSA)
Note: The person totals represent the total number of unique individuals provided services during the year and are not the sum of the column entries.

The next table shows the percentage change in the number of person receiving services from year to year.

Table III.34: Percentage Change in Number of Persons Using NorthSTAR Services and Population Change in NorthSTAR Counties, 2006-2010.

	% Change from 2006 to 2007	% Change from 2007 to 2008	% Change from 2008 to 2009	% Change from 2009 to 2010
Assessment	12.91%	29.65%	17.69%	6.17%
Medication Services	2.46%	12.40%	21.88%	15.52%
Assertive Community Treatment (ACT)	-14.91%	-1.33%	10.60%	19.70%
Rehabilitation Services	12.51%	9.42%	35.79%	-25.20%
Case Management	18.52%	7.54%	-2.28%	-28.22%
Counseling	-21.89%	-5.72%	17.67%	4.53%
23 Hour Observation	-1.19%	2.13%	5.21%	9.84%
Emergency Room	-1.29%	-11.07%	4.29%	22.32%
Community Inpatient	9.05%	7.99%	3.63%	0.57%
State Hospital	9.77%	1.53%	0.90%	5.32%
Non New Gen Medication Drug Claimants	-14.29%	10.04%	20.70%	12.02%
New Gen Medication Drug Claimants	-39.67%	111.46%	182.02%	43.36%
Substance Abuse Non Residential	7.43%	12.53%	14.79%	-0.13%
Substance Abuse Residential	-6.13%	-13.91%	0.07%	17.34%
Other	7.76%	5.39%	-12.00%	104.93%[70]
Unduplicated Annual Count of NorthSTAR Users	1.73%	8.83%	15.51%	9.06%
Monthly Number Receiving any NorthSTAR Service	1.91%	9.18%	17.81%	10.41%
Population in	2.01%	1.82%	2.19%	2.39%

[70] The number of persons reported in 2009 was 14,106 and the number reported in 2010 was 28,907. "Other" is the all other category. One known reason for the change is that NorthSTAR requested additional reporting including outreach services which contributed to this increase.

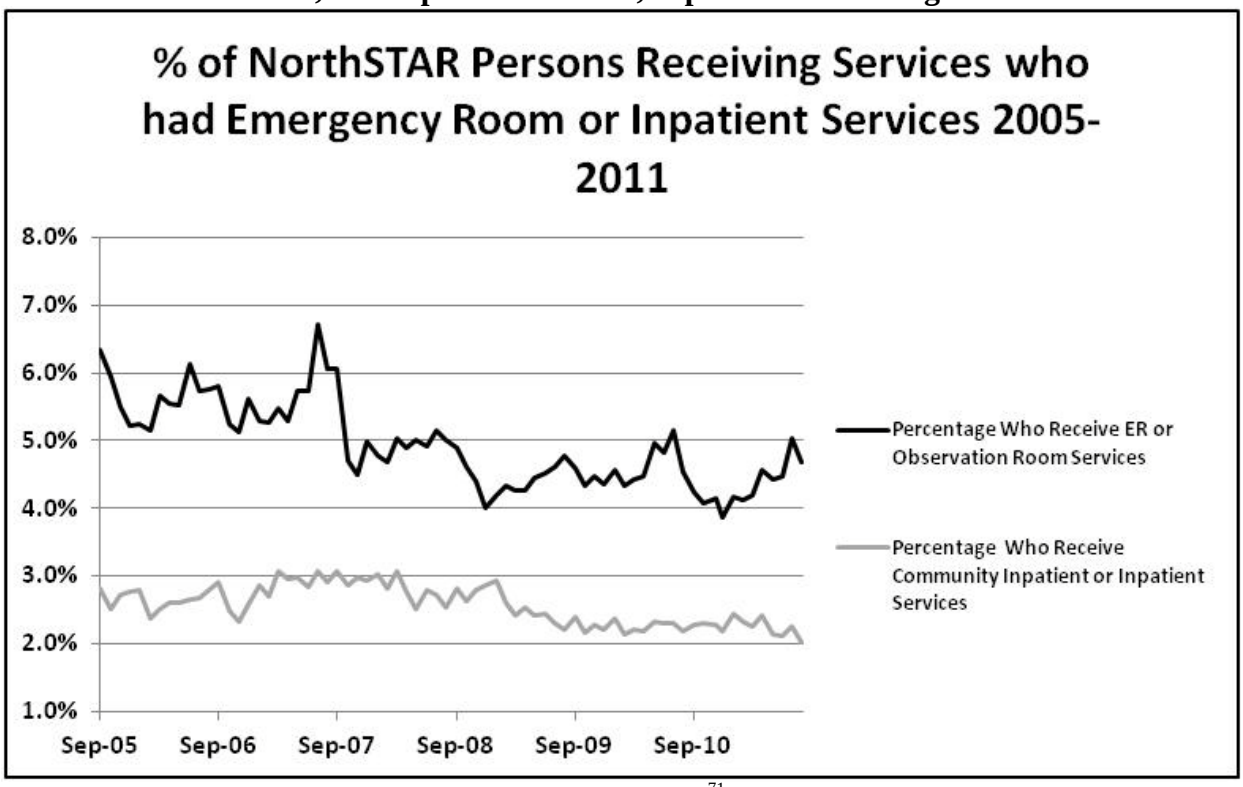
	% Change from 2006 to 2007	% Change from 2007 to 2008	% Change from 2008 to 2009	% Change from 2009 to 2010
NorthSTAR Area				

Source: Medicaid Services Unit, Mental Health and Substance Abuse Division (MHSA)

While the data in recent years show an increase in hospital usage, an examination of monthly data provides further information about the relative utilization trends for inpatient and community services.

The first figure below shows the percentage of persons receiving services that received emergency room, 23-hour observation and inpatient services. For example, in the month of August 2011, 25,355 unduplicated persons received a NorthSTAR service. Of these 25,355, 1,186 or 4.7% received emergency room or observation room services. Of the 25,355, 509 persons, or 2%, received inpatient services. The figure shows these monthly percentages from September 2005 through August 2011. On the one hand, more persons are getting services each month through NorthSTAR, but what the figure shows is that the percentage of persons using inpatient services has declined over the period 2005-2011.

Figure III.12: Percent of Persons Receiving NorthSTAR services that Received Emergency and Observation Room, and Inpatient Services, September 2005-August 2011

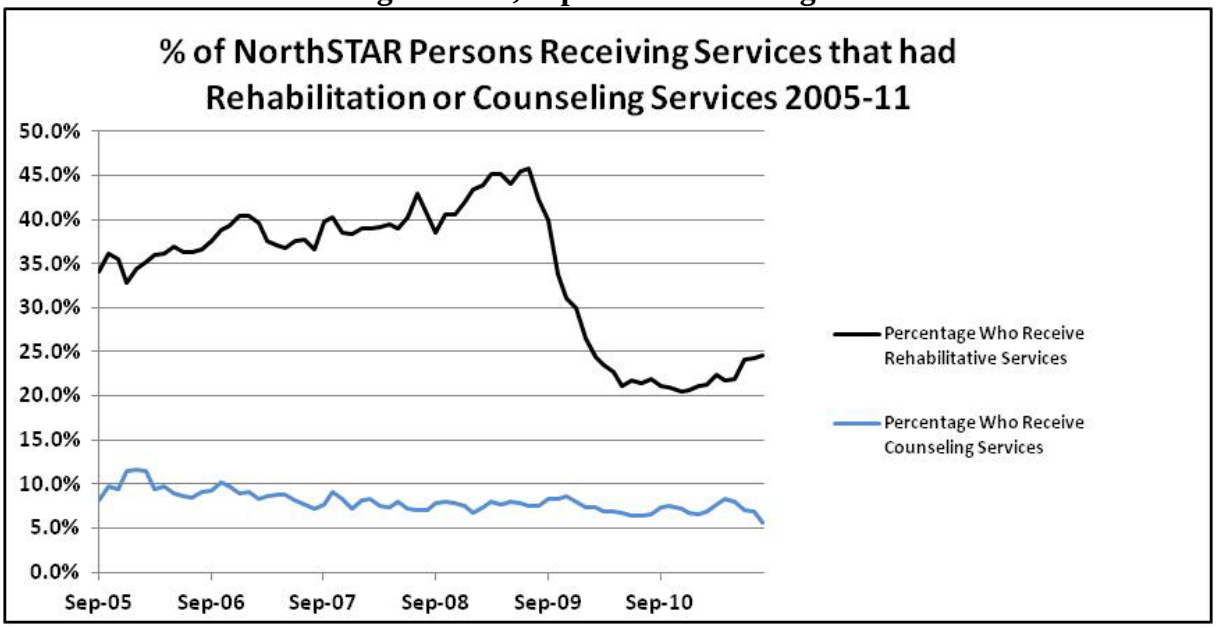


Source: Department of State Health Services, NorthSTAR website[71]

The next figure shows the use of outpatient rehabilitation and counseling services. The figure shows that of those persons who receive a service there are also declines in the percentage of persons receiving outpatient rehabilitation and counseling services. Like the figure above, the percentages in the figure are not based on NorthSTAR enrollment which, as noted earlier, can be overstated since inactive enrollees are not frequently purged from the enrollment rolls. Rather the percentages reported below are based on percentages of persons who received a service and thus are "active" enrollees.

[71] The file used is found at http://www.dshs.state.tx.us/mhsa/NorthSTAR/databook.shtm and is entitled Persons Served - FY 06 - FY 11

Figure III.13: Percent of Person Receiving NorthSTAR services that Received Rehabilitation or Counseling Services, September 2005-August 2011



Source: Department of State Health Services, NorthSTAR website

The figure above shows that the percentage of persons receiving rehabilitation or counseling services also declined across the period 2005 to 2011. Not only did the percentage receiving inpatient services decline but the percentage receiving these two outpatient services also declined.

In September of 2005, 16,163 unduplicated persons used a NorthSTAR service. In September 2011, 25,355 used a NorthSTAR service and there has been an increase in unduplicated number of persons in a given year that use NorthSTAR services from 48,431 in FY 2006 to 67,592 in FY 2010, about a 40% increase.[72]

If you look at the utilization in terms of the number of people, then the data show greater percentage increases in the total number of persons using all inpatient services and declines in either the number of persons using outpatient services or the number of units of outpatient service the persons receive. If you look at utilization in terms of the proportion of persons who receive services, then the data show an increase in assessment, but a general multi-year decline in case management, inpatient, outpatient, and substance abuse services.

[72] The counts of unduplicated NorthSTAR persons, dollars and units of service in these tables differ slightly from similar counts in other parts of this report since the different data sets were obtained at different points in time and the data base is constantly changing.

Trends in NorthSTAR Substance Abuse Utilization Data

PCG analyzed substance abuse service utilization data to outline service utilization and cost trends. For more detailed analysis on utilization trends please see Appendix VI: NorthSTAR Substance Abuse Service Cost and Utilization Analysis. The following paragraphs outline some of the findings as a result of our analysis.

The available data indicates that the percentage of NorthSTAR users that received a treatment for substance abuse during the period 2008-2011 declined from 19.2% to 16.6%. The absolute number of persons receiving a substance abuse service went up from 10,282 persons in 2008 to 11,857 in 2011. But as a percentage of all persons served, a smaller percentage of persons are receiving substance abuse services.

The unduplicated number of persons receiving substance abuse services from NorthSTAR grew greater than 10% between 2008 and 2011 and the greatest percentage increases in services were for peer support and hospital related services: community inpatient, observation rooms and emergency room services.[73]

- Alcohol and or drug assessment decreased 28% from 2,360 persons to 1,693;
- Methadone administration decreased 39% from 1,284 persons to 785;
- Unspecified alcohol and drug services decreased 23% from 4,457 persons to 3,428;
- Hourly alcohol and drug services decreased 43% from 1,314 persons to 749;
- Group peer support billed in 15-minute increments increased 248% from 451 persons to 1,570; and
- Individual peer support billed in 15-minute increments increased 533% from 329 persons to 2,083.

In PCG's experience, large percentage increases in utilization such as the 248% increase in group peer support and the 533% in individual peer support are indicative of deliberative policy implementation and are consistent with national trends toward the provision of peer and recovery support. Peer support is an evidenced-based program and has the advantage of being a lower cost treatment method.

[73] PCG requested data on peer support services provided by LMHAs. However an examination of the data indicated that the number of hours was probably not reported correctly by the LMHAs. Since the data was possibly incorrect or incomplete and therefore misleading, PCG decided not to publish it.

IV. ANALYSIS OF FUNDING FOR BEHAVIORAL HEALTH SERVICES

A. Overview of Funding Sources for Public Behavioral Health Services

The State of Texas funds behavioral health services through a variety of state, local, and federal funding sources. The three largest pools of funding are state GR, direct federal funds, and local funding. Together they represent $1.22B in total funding, or 96% of total funding in the state. There are a variety of other grants, contracts, and receipts that make up the balance of the funding. Below is a high level look at the funds available to pay for behavioral health services overseen by DSHS.

Table IV.1: 2009 DSHS BH Funding Summary

Funding Source	Total Funding	% of All MH/SA Funding
State	$ 763,033,746.01	59.8%
Federal	$ 312,694,080.00	24.5%
Local	$ 199,223,793.00	15.6%
Grand Total	***$ 1,274,951,619.01***	***100.0%***

The largest outlay of funds is made directly by the state with GR through the various agencies of HHSC. Services to patients with behavioral health service needs are also made through a variety of other state agencies: the Department of Aging and Disability Services; Department of Assistive and Rehabilitative Services; Department of Family and Protective Services; the Department of Criminal Justice, Texas Juvenile Justice Department, among many others.

Many people that are incarcerated receive behavioral health services through the Texas Department of Correctional Justice (TDCJ), Texas Juvenile Justice Department, and county jails. In 2009, TDCJ spent $125.5M dollars providing behavioral health services to incarcerated persons (which would have matched 11.6% of the DSHS budget in that year). Harris County jail, among other local facilities, provides a great deal of these services to its own incarcerated population. PCG attempted to obtain expenditure information to determine the amount of funds spent by jails to deliver these services, however the information was not made available.

Federal revenue funds the program through a variety of grant and claiming channels. The Medicaid Disproportionate Share Hospital (DSH) program provides over a quarter of a billion dollars to pay for mental health services provided at the state hospitals. These federal funds are sent directly to the State and HHSC transfers state GR to DSHS to cover these services in its budget. DSHS receives substance abuse (SABG) and mental health block grants (MHBG) from the Substance Abuse and Mental Health Services Administration (SAMHSA). The SABG and

MHBG requires a Maintenance of Effort (MOE) level of matching state GR funds in order for the grant to draw down federal funds. If MOE GR funding is reduced below the required MOE level, then there could be a corresponding reduction in the SABG or MHBG.

Local governments also play a large part in the funding of services, including local tax collections and claiming activities. Finally, the cost of treating patients with behavioral health needs is also borne by private businesses. For example, many public and private hospitals are faced with covering the cost of providing stabilization services in emergency rooms to patients that need services from the state.

The analysis of this section will focus on the funding overseen by DSHS and its member organizations to provide behavioral health services. This analysis will begin with a review of the source of all DSHS funding for behavioral health services shown in their budget, the DSHS budget by funding strategy in aggregate, and finally look at each of the strategies in isolation.

Summary of Funding Sources for Behavioral Health Services

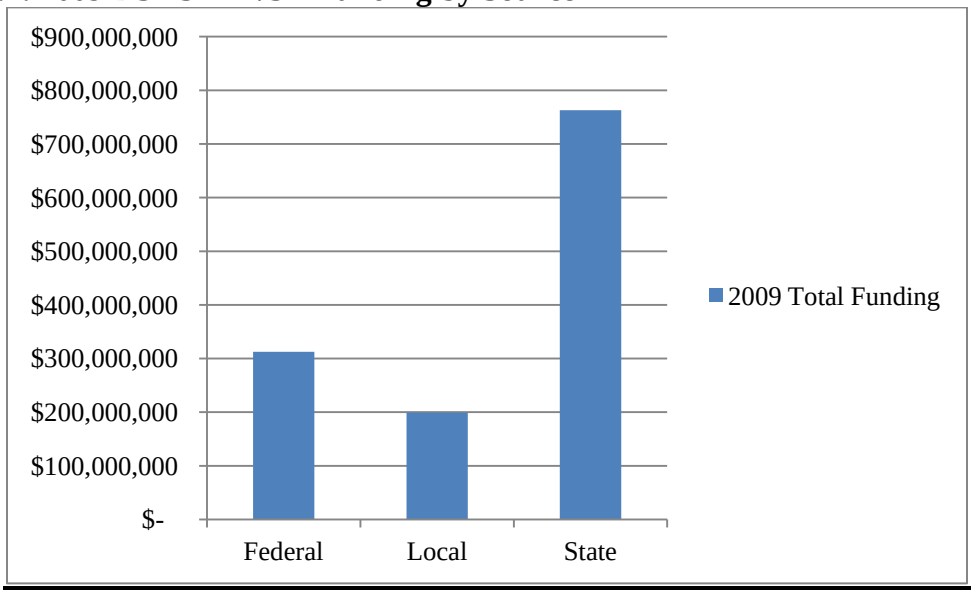
DSHS budgeting is set for two years at a time and approved through the state legislature. Unexpended balances remaining at the end of the first year of a budgeting biennium may be appropriated for the same purposes in the second year. The following page provides a table of all mental health and substance funding from DSHS, the federal government, local communities, and a variety of other sources. An illustration of the funding by source, federal, state, and local is also provided in the subsequent chart.

Table IV.2: 2009 DSHS MH/SA Funding by Source and Description

Funding Description	Funding Source	Total Funding	% of All MH/SA Funding
General Revenue Fund	State	$ 413,294,246	32.4%
Federal Funds	Federal	$ 287,902,389	22.6%
GR For MH Block Grant	State	$ 247,828,281	19.4%
Local Funds	Local	$ 199,223,793	15.6%
GR Certified As Match For Medicaid	State	$ 42,308,081	3.3%
GR For SA Block Grant	State	$ 22,754,782	1.8%
Interagency Contracts	State	$ 14,038,013	1.1%
Federal Funds ARRA	Federal	$ 12,590,114	1.0%
MH Collect-Patient Support & Maintenance	State	$ 9,207,243	0.7%
MH Medicare Receipts	Federal	$ 8,777,646	0.7%
MH Appropriated Receipts	State	$ 5,332,100	0.4%
81(R) Supp: General Revenue Fund	State	$ 5,000,000	0.4%
PATH Grant	Federal	$ 3,423,931	0.3%
DSHS Pub Hlth Medicaid Reimbursement	State	$ 3,166,000	0.2%
Appropriated Receipts	State	$ 105,000	0.0%
Grand Total		***$ 1,274,951,619***	***100.0%***

Note: Interagency Contracts excludes DADS payments to DSHS for IDD Services at RGSC. The Grand Total also excludes the UTMB indigent care Teaching Hospital Account of $3.5M

Figure IV.1: 2009 DSHS MH/SA Funding by Source



State GR

The majority of the state GR funding is shown in GR Fund and includes: GR for MHB G, GR Certified as Match for Medicaid, and GR for SA Block Grant (SABG). All mental health grant funding is for outpatient services, while substance abuse block grant funds cover both inpatient and outpatient services. All totaled, state GR represents over half of the behavioral health funding in the state. The State annually contributes a MOE balance of $247.8M for its MHBG and $22.7M for its SABG for residential and outpatient services. These state funds for the block grant are used to draw down federal funds made available to the state of Texas through federal behavioral health block grants. More detail on the funding levels of each of these block grants is provided in the analysis of their specific strategy further in this section of the report. Below is a table showing the state funds by fund description:

Table IV.3: 2009 DSHS State Funds by Funding Description

Funding Description	Funding Source	Total Funding	% of State Funds	% of All MH/SA Funding
General Revenue Fund	State	$ 413,294,246	54.2%	32.4%
GR For MH Block Grant	State	$ 247,828,281	32.5%	19.4%
GR Certified As Match For Medicaid	State	$ 42,308,081	5.5%	3.3%
GR For SA Block Grant	State	$ 22,754,782	3.0%	1.8%
Interagency Contracts	State	$ 14,038,013	1.8%	1.1%
MH Collect-Patient Support & Maintenance	State	$ 9,207,243	1.2%	0.7%
MH Appropriated Receipts	State	$ 5,332,100	0.7%	0.4%
81(R) Supp: General Revenue Fund	State	$ 5,000,000	0.7%	0.4%
DSHS Pub Hlth Medicaid Reimbursement	State	$ 3,166,000	0.4%	0.2%
Appropriated Receipts	State	$ 105,000	0.0%	0.0%
Grand Total		***$ 763,033,746***	***100.0%***	***59.8%***

Note: Interagency Contracts excludes DADS payments to DSHS for IDD Services at RGSC. The Grand Total also excludes the UTMB indigent care Teaching Hospital Account of $3.5M

In contrast to the mental health outpatient services funded through the state block grants, the state hospitals are primarily funded through Medicaid DSH funding. The Medicaid DSH program assists facilities with a high utilization by Medicaid and indigent patients. Annual DSH payments represent reimbursement to hospitals for Medicaid short-fall (or the difference between the cost of services versus the Medicaid payment to the facility) and to fund the cost of care for indigent patients that do not have the means to pay for necessary psychiatric services. It is typical that DSH funding does not fully compensate hospitals for indigent patient care costs. DSH payments are sent to DSHS, but the agency then forwards the funds on to the state for use in the general fund. As such, these funds are not represented as a separate line item in the DSHS budget. Instead, the state pays the state budgeting for state hospitals through GR and is at risk for the full cost of the state hospitals regardless of the level of federal financial participation (FFP) payments each facility receives in Medicaid DSH. As such, Medicaid DSH funding is represented in this analysis as State GR. The state has an Institute for Mental Disease (IMD) cap for Medicaid DSH funding of $292M annually. A majority of this budget is used to fund state hospitals and any public county operated IMD's that meet DSH funding eligibility requirements. The remainder, usually less than $10M in total, is allocated to private IMD hospitals in the state. In the FY 2009, the state hospitals received $262.6M in Medicaid DSH Payments including FFP of $159.0M.

Table IV.4: Medicaid DSH Funding for DSHS State Hospitals

Fiscal Year	State Share	Federal Share	All Funds
2009	$ 103,594,831	$ 159,011,671	$ 262,606,502
2010	$ 116,502,022	$ 181,015,045	$ 297,517,067
2011	$ 108,544,495	$ 170,680,120	$ 279,224,615

Note: The 2009 data represents less than a full fiscal year as the State shifted to a fiscal year basis for DSH accounting. The 2010 data represents more than a full fiscal year as the State shifted to a fiscal year basis for DSH accounting. The amounts included under Federal Share are represented in the DSHS budget as State General Revenues.

State matching funds also play a role as the state share of all Medicaid claims to draw down federal financial participation based upon the prevailing federal medical assistance percentage (FMAP) when the Medicaid claim is processed for mental health or substance abuse services. Medicaid services are claimed for both behavioral health services in Texas for services provided in both a hospital and community setting. The DSHS budget only shows Medicaid fee-for-service claim funding for Rehabilitation and Targeted Case Management services, which are provided through the LMHAs. Please note, the Medicaid substance abuse benefit was not in place in 2009, so all Medicaid federal funds under review in this analysis was under the SABG. HHSC's budget shows the remainder of the Medicaid fee-for-service claim funding for these patients.

Federal Funds

Federal funds represent the largest inflow of funds to the state to pay for behavioral health services in Texas. Federal funding comes in from a variety of avenues, including the state block grants, Medicaid and Medicare claiming, and the Medicaid DSH program. As noted previously, Medicaid DSH funding is not listed discretely on the DSHS budget because the funds are sent to HHSC to replace State GR shown on the DSHS budget. Please see the State Funds section for more details. The following is a breakout of the types of federal funds DSHS received in 2009.

Table IV.5: 2009 DSHS Federal Funds (Fund Code 555)

Funding Description	Fund Source	Total Funds	% of Federal Funds	% of All MH/SA Funding
Substance Abuse Block Grant	Federal	$ 136,081,471	46.7%	10.7%
XIX FMAP	Federal	$ 87,502,598	30.0%	6.9%
Mental Health Block Grant	Federal	$ 32,204,671	11.1%	2.5%
Project Reg. & Natl Significance	Federal	$ 8,707,720	3.0%	0.7%
Demonstration to Maintain Independence & Employment	Federal	$ 7,895,104	2.7%	0.6%
Access to Recovery	Federal	$ 5,309,895	1.8%	0.4%
Projects for Assistance in Transition Grant	Federal	$ 3,569,587	1.2%	0.3%
Crisis Counseling	Federal	$ 2,703,766	0.9%	0.2%
Social Services Block Grants	Federal	$ 2,000,000	0.7%	0.2%
TANF to Title XX	Federal	$ 1,800,000	0.6%	0.1%
UNIFORM ALCOHOL/DRUG ABUSE	Federal	$ 974,576	0.3%	0.1%
Health Care Financing Res	Federal	$ 804,300	0.3%	0.1%
Mental Health Disaster Assistance	Federal	$ 704,143	0.2%	0.1%
Exceptional Care of Texas	Federal	$ 556,138	0.2%	0.0%
Mental Hlth Data Infrastructure Grant	Federal	$ 262,419	0.1%	0.0%
DSHS Drug Courts MIS	Federal	$ 156,874	0.1%	0.0%
Mental Health Research Gr	Federal	$ 93,048	0.0%	0.0%
Grand Total		***$291,326,310***	***100.0%***	***22.8%***

Note: $379,588 in 2009 federal reimbursement for school lunch and food programs on the DSHS budget were excluded as public health expenditures not necessarily directly tied to mental health and substance abuse services

The largest federal funding source into the state is through the two state block grants for behavioral health services. In 2009, the SABG brought in federal funds of $136M and the MHBG brought in $32M. However, in the FY 2009, the FMAP for some services was higher than normal due to the enhanced FMAP's established by the American Recovery and Reinvestment Act (ARRA). ARRA, which expired in 2011, created enhanced FMAPs in which the federal government participation on Medicaid claims was greater than under non-enhanced FMAPs. Federal funds are also used to match state funds on Medicaid fee-for-service claim reimbursement based upon the prevailing federal medical assistance percentage (FMAP) when the Medicaid claim is processed for mental health or substance abuse services. Medicaid services are claimed for both mental health and substance abuse services in Texas for services provided in both the hospital and community setting.

Not represented in the table of federal funds, but of note in a review of 2009 DSHS expenditures funded by the federal government, are payments made under the ARRA in 2009. For the FYs 2009-2011, FMAP percentages used to calculate the federal financial participation on Medicaid claims were enhanced due to increases in the FMAP (called enhanced FMAP). These funds have a separate fund code (369) in the DSHS budget and reflect the increase in federal financial participation on Medicaid claiming during the FY 2009 created by enhanced FMAP percentages.

Local Funds

In addition to state and federal funding, the LMHAs, NorthSTAR and substance abuse providers also rely heavily on funds collected from the local community. Local governmental agencies are expected to partially fund the services provided to their community. Many communities access city and county taxes to assist in paying for behavioral health services. In addition, some communities administer an additional tax through a Hospital District. Harris County has one of the most robust forms of local funding in the state to assist in paying for its large population's needs. In addition to its hospital provider tax, MHMR of Harris County has been able to work closely with county and city officials to develop services which better coordinate behavior health services with police and criminal justice system efforts. The success of these projects has incentivized local officials to provide funding to MHMR of Harris County because it is more efficient use of their funds to keep consumers out of the criminal system. Similar successes have been found in San Antonio as well.

As part of the LMHA allocation process, a local match percentage based on community population and income levels is calculated and is used to determine an amount that each LMHA is required to raise locally to supplement state and federal funding for mental health services. State GR is budgeted to each LMHA and assigned for specific patient populations. In the event that a patient is originally deemed indigent, but later receives Medicaid reimbursement, the State General Funds used for the now Medicaid patient must be assigned back to the indigent patient population budget for use on these clients. The LMHA can also use these funds to maintain their required cash on hand per their contract with DSHS. The biggest contributions made through local funds are Pharmaceutical Assistance Program (PAP) Contributions of free/donated medications. In addition, cities, counties, and other taxing authorities provide a combined 29.98% of all local funds generated to provide services to needy populations. Finally, claiming reimbursement from patients and third party payers add an additional $27.8M in funding to the public mental health system.

Table IV.6: 2009 DSHS Local Mental Health Funds by Funding Description

Funding Description	Funding Source	Total Funding	% of Local Funds	% of All BH Funding
PAP Contributions	Local	$ 55,659,471	27.9%	4.4%
County Government Tax Funds	Local	$ 52,210,825	26.2%	4.1%
Misc Income & Contributions	Local	$ 48,471,532	24.3%	3.8%
Patient Fees - Ins - Reimbursements	Local	$ 27,765,110	13.9%	2.2%
Transfers from Reserves	Local	$ 7,594,944	3.8%	0.6%
City Government Tax Funds	Local	$ 6,257,235	3.1%	0.5%
Other Taxing Authority Funds	Local	$ 1,264,676	0.6%	0.1%
Grand Total		***$199,223,793***	***100.0%***	***15.6%***

In contrast to the mental health local funding outlined above, detailed local substance abuse fund raising information was not available, but was estimated to be near $6M annually. In addition, Medicaid claiming activity for substance abuse services does not represent a large cash flow at this time because it is in its nascent stage of development in the provider community.

Analysis of the DSHS MH/SA Budget in Aggregate

The majority of the funds available to pay for behavioral health services in Texas are determined through the DSHS budget. The most current version of this budget is the DSHS Strategy Request and Recommendations for the 82nd Regular Session. Specifically, it documents actual expenditures for DSHS in 2009 and ongoing budgets through the recommendations for 2012 and 2013. A review of the DSHS appropriations by strategy shows that DSHS maintained an appropriated budget of expenditures of roughly $1.08 billion dollars in 2009. The estimated 2010 budget and the budgeted amount for 2011 were slightly lower at roughly $1.04 billion dollars. Recommended amounts for SFY 2012 and 2013 were similar. As these values have not dramatically changed for the SFYs 2010-SFY 2013, the last year of finalized expenditures was used for this analysis, SFY 2009. While the DSHS budget has not changed dramatically, budget cuts have occurred. Where budget cuts have been requested, the state has attempted to limit its impact on the provision of direct medical services by cutting other services like outreach and prevention, although funding for substance abuse prevention was not cut. The distribution methodology for new funding that has not been prescribed for a specific purpose is outlined in the funding allocation section of this report. The following is the gross funding to DSHS for behavioral health by DSHS strategy:

Table IV.7: 2009 DSHS Appropriation Budget by Strategy

Fund Strategy	Total Funds	% of Total
Mental Health State Hospitals	$ 386,745,864	34.7%
Mental Health Services for Adults	$ 290,140,663	26.0%
Substance Abuse Prevention, Intervention, and Treatment	$ 160,979,409	14.4%
NorthSTAR Behavioral Health Waiver	$ 105,667,843	9.5%
Mental Health Services for Children	$ 63,168,700	5.7%
Community Mental Health Crisis Services	$ 54,866,004	4.9%
Mental Health Community Hospitals	$ 23,664,248	2.1%
Reduce Use of Tobacco Products	$ 12,217,274	1.1%
Texas Center for Infectious Disease	$ 10,845,911	1.0%
South Texas Health Care System	$ 6,655,329	0.6%
Grand Total	***$ 1,114,951,245***	***100.0%***

The rest of the following section will review the budgeting for each of these strategies in isolation. Please note, the focus of this analysis is on behavioral health services provided through the DSHS. As such, services provided to DSHS behavioral health clients but provided by other HHSC agencies have not been analyzed. Within the scope of services listed on the DSHS budget, the public health focused services provided by the following strategies are not included in this analysis:

- Reduce Use of Tobacco Products;
- Texas Center for Infectious Diseases (TCID); and
- South Texas Health Care System.

The South Texas Health Care System strategy specifically funds the outpatient public health clinic maintained by the Rio Grande State Center (RGSC) in Harlingen, TX. As a result, the South Texas appropriations have not been included in this analysis. RGSC also provides intellectual and developmental disabilities services which is funded through the Department of Aging and Disability Services. The remaining mental health services provided by the Rio Grande State Center are funded through the State Hospital strategy appropriation. All other services within this appropriation document have been outlined discretely in the following section.

Overview of All DSHS Budget by Funding Strategy

The following section provides details about the funding strategies within the DSHS budget specific to the public behavioral health service systems.

Mental Health Services for Adults

This strategy provides funding for services to adult patients in need of mental health services. New Generation and all other types of adult medication costs are paid for through this strategy. Services provided include: Assessment/Service Coordination/Case Management; Medication Related Services; Outpatient Services; Inpatient Hospital Services; Psychiatric Rehabilitative Services; Crisis Resolution; Assertive Community Treatment; Supported Housing Services; and Supported Employment Services. Other costs covered by this strategy include services for patients with a dual diagnosis (partially funded through contracts with the Substance Abuse strategy), family/peer training, and the cost of statewide claim processing and associated information technology support. Each local mental health authority has an annual performance contract which documents the funding it will receive. The following table shows the funding for this strategy in 2009 and a look at funding recommendations for 2012 and 2013.

Table IV.8: DSHS MH Services for Adults by Funding Strategy

Fund Code	Funding Description	Budgeted 2009	% of Total		Recommended 2012	Recommended 2013
8001	GR For MH Block Grant	$177,310,246	61.1%		$158,810,473	$158,810,470
555	FF XIX FMAP	$39,203,186	13.5%		$32,056,342	$39,210,384
758 (8032)	GR Certified As Match For Medicaid	$23,108,394	8.0%		$20,207,481	$25,009,278
555	FF MH Block Grant	$20,976,855	7.2%		$19,505,189	$19,486,022
555	FF DMIE Grant	$7,895,104	2.7%		$4,112,223	$4,112,223
369	ARRA XIX FMAP	$5,599,473	1.9%		$0	$0
1	General Revenue Fund	$4,874,664	1.7%		$31,010,132	$30,971,646
555	PATH Grant	$3,423,921	1.2%		$3,380,688	$3,380,688
555	FF Project Reg. & Natl Significance	$3,200,944	1.1%		$0	$0
555	FF Crisis Counseling	$2,703,766	0.9%		$0	$0
555	FF Health Care Financing Res	$784,500	0.3%		$680,865	$680,865
555	FF Mental Health Disaster Assistance	$704,143	0.2%		$0	$0
555	FF Mental Hlth Data Infrastructure	$262,419	0.1%		$86,673	$86,673
555	FF Mental Health Research Gr	$93,048	0.0%		$0	$0
	Grand Totals	***$290,140,663***	***100.0%***		***$269,850,066***	***$281,748,249***

Mental health services for adults are funded with state GR, federal funds, and local dollars. The MHBG represents $197.9M in state and federal funding. State GR represented most of these

funds at $177.3M in 2009. It is important to note that these funds are expected to be cut in 2012 and 2013 to $158.8M, but this is simply a shift of service funding to the GR Fund line item. In total, the state funding to the Mental Health Services Adults strategy represents 70.7% of the total strategy funding, while federal funding represents 29% of total strategy funding. Unique federal grant funding has been provided under both the Projects for Assistance in Transition from Homelessness (PATH) and the Demonstration to Maintain Independence and Employment (DMIE) wraparound services which was funded at $7.8M in 2009, but is expected to drop to $4.1M in the new biennium. Another loss in funding will be experienced with the loss of $5.6M in ARRA Medicaid funding. Medicaid claiming represented $67.9M in funding under this strategy.

Mental Health Services for Children

This strategy provides funding for community services for children and adolescents ages 3 through 17. New Generation and all other types of children's medication costs are paid for through this strategy. Services for children include: Assessment/Service Coordination/Case Management; Medication Related Services; Outpatient Services, Inpatient Hospital Services; Respite Services; Rehabilitative Services/Skills Training; Intensive Case Management/Wraparound; Crisis Services; and Family Partner Services. Each local mental health authority has an annual performance contract which documents the funding it will receive. Other costs covered by this strategy include community center training, contracted activities, and the cost of statewide claim processing and associated information technology support. The following table shows the funding for this strategy in 2009 and a look at funding recommendations for 2012 and 2013.

Table IV.9: DSHS MH Service for Children by Funding Strategy

Fund Code	Funding Description	Budgeted 2009	% of Total		Recommended 2012	Recommended 2013
8001	GR For MH Block Grant	$38,523,294	61.0%		$35,648,051	$35,648,050
555	FF XIX FMAP	$7,529,768	11.9%		$7,127,252	$8,563,993
555	FF MH Block Grant	$7,398,308	11.7%		$7,398,308	$7,398,308
758 (8032)	GR Certified As Match For Medicaid	$4,033,880	6.4%		$3,533,156	$4,498,249
555	FF Social Services Block Grants	$1,740,299	2.8%		$2,757,087	$2,757,087
555	FF TANF to Title XX	$1,537,440	2.4%		$12,216,375	$12,216,375
369	ARRA XIX FMAP	$1,089,149	1.7%		$0	$0
1	General Revenue Fund	$733,315	1.2%		$5,085,698	$5,073,975
555	FF Project Reg. & Natl Significance	$286,444	0.5%		$391,331	$391,331
777	Interagency Contracts	$151,137	0.2%		$1,306,923	$1,306,923
555	PATH Grant	$145,666	0.2%		$73,723	$73,723
	Grand Totals	***$63,168,700***	***100.0%***		***$75,537,904***	***$77,928,014***

Just as with adult services, the Mental Health Services for Children strategy is comprised of state, federal, and local funding streams. State funds represented 68.5% of the strategy's funding, with the federal government paying the remainder except for a small budget for interagency contracts. The MHBG represents $45.9M in state and federal funding for children's services. State GR represented most of these funds at $38.5M in 2009. Overall funding to the strategy is expected to increase by $14.7M by 2013 largely due to increased State GR. Medicaid Social Service block grant funding is expected to grow by $1M while interagency contracts are expected to grow from $151k to $1.3M from 2009 to 2013. Medicaid claiming represented $12.6M in 2009, paying for roughly 20% of services provided to children under this strategy.

Community Mental Health Crisis Services

This strategy funds a major redesign initiative focused on lowering burden on local communities, law enforcement, and hospitals by ensuring statewide access to competent rapid response services, avoidance of hospitalization, and reduction in the need for transportation. The following table shows the funding for this strategy in 2009 and a look at funding recommendations for 2012 and 2013.

Table IV.10: DSHS Community MH Crisis Services by Funding Strategy

Fund Code	Funding Description	Budgeted 2009	% of Total		Recommended 2012	Recommended 2013
1	General Revenue Fund	$54,866,004	100.00%		$82,494,196	$82,49,654
	Grand Totals	***$54,866,004***	***100.00%***		***$82,494,196***	***$82,459,654***

The 80th legislature funds made available under this strategy included a ramp-up of these services in FY 2009 of $55M leading up to its current funding level of $82 million for Community Mental Health Crisis Services. Services in this strategy are funded by state GR, federal MHBG funds and local contributions. A majority of these funds are divided among the state's Local Mental Health Authorities (LMHAs) and added to their existing contracts to fund enhanced crisis services. Under this strategy, local communities combine state and community matching funds to provide crisis services locally to avoid state hospitalization for many children and adults.

NorthSTAR Behavioral Health Waiver

NorthSTAR provides managed behavioral healthcare services (i.e., mental health and chemical dependency treatment services) to persons residing in Collin, Dallas, Ellis, Hunt, Kaufman, Navarro, and Rockwell counties. It is a collaborative effort between behavioral health programs to streamline the system of care for persons with mental illness and/or chemical dependency by integrating these services into a single managed care organization that administers state and local funding for these services. DSHS NorthSTAR staff works in conjunction with independent local Behavioral Health Authority, the North Texas Behavioral Health Authority (NTBHA), to plan, oversee, and facilitate, services to users, including family and user education. Behavioral health services provided under NorthSTAR include services provided by: psychiatrists; psychologists; licensed professional counselors; licensed social workers; professionals in outpatient and chemical dependency programs; and those requiring acute care and psychiatric hospitalization. In contrast to the LMHA partial fee-for-service model, NorthSTAR became a risk based model using FFS or a case rate to reimburse mental health services. Substance abuse services historically have been reimbursed under an FFS model. NorthSTAR guarantees access to needed care and replaces the traditional Medicaid and DSHS funded behavioral health systems for eligible clients. As a result, funding reductions may necessitate a change in the level of services provided or the number of people served. The following table shows the funding for this strategy in 2009 and a look at funding recommendations for 2012 and 2013.

Table IV.11: DSHS NorthSTAR Behavioral Health Waiver Services by Funding Strategy

Fund Code	Funding Description	Budgeted 2009	% of Total		Recommended 2012	Recommended 2013
8001	GR For MH Block Grant	$31,994,741	30.3%		$24,085,285	$24,085,284
555	FF XIX FMAP	$28,360,703	26.8%		$24,677,462	$30,732,966
777	Interagency Contracts	$11,657,330	11.0%		$16,080,605	$17,566,483
555	FF SA Block Grant	$10,358,442	9.8%		$10,564,813	$10,564,813
758	GR Certified As Match For Medicaid	$6,408,183	6.1%		$2,998,278	$5,513,516
8900	81(R) Supp: General Revenue Fund	$5,000,000	4.7%		$0	$0
369	ARRA XIX FMAP	$4,168,033	3.9%		$0	$0
8033	MH Appropriated Receipts	$3,702,572	3.5%		$4,600,000	$4,600,000
555	FF MH Block Grant	$3,430,480	3.2%		$4,016,978	$4,022,694
555	FF TANF to Title XX	$262,560	0.2%		$9,441,495	$9,441,495
555	FF Social Services Block Grants	$259,701	0.2%		$2,776,489	$2,776,489
1	General Revenue Fund	$65,098	0.1%		$8,297,535	$8,382,285
	Grand Totals	***$105,667,843***	***100.0%***		***$107,538,940***	***$117,686,025***

Federal Funds actually outspends State GR in the NorthSTAR strategy, representing 44% of the total strategy budget. State GR only directly accounts for 41% of the total spending for this strategy. These interagency contracts are expected to increase by 66% by the FY 2013 as the overall budgeting for NorthSTAR increases to $117.6M in that year. As seen with other strategy budgets, the mental health block funds are being shifted to the GR Fund account. NorthSTAR is currently budgeted for $5M in TANF to Title XX funds for FY 2012 with the FY 2013 budget expected to mirror that amount. All Substance Use Disorder (SUD) claims for NorthSTAR clients are paid through NorthSTAR funding streams including SUD services for Medicaid clients. As a result, no Medicaid state match funding is on the DSHS recommended strategy budgets for SFYs 2012 and 2013. The NorthSTAR strategy has a Medicaid match line, however these funds do not historically cover the DSHS portion of the Medicaid match that NorthSTAR expends. DSHS staff noted that for FY 2012, the DSHS Medicaid match for NorthSTAR will be closer to $9M while only $2.9M is identified in the NorthSTAR funding strategy. All other NorthSTAR Medicaid funding in 2009 represented $38.9M.

Another item to consider in looking at the NorthSTAR funding strategy is the MH Appropriated Reciepts, which in 2009 amounted to $3.7M. This amount reflects county match funding and is a target figure determined by the legislature. In NorthSTAR, the counties are not required by

NorthSTAR program statutes or contracts to provide the match. This is different than the LMHAs who are required to obtain the local match from their counties.

Substance Abuse Prevention, Intervention, and Treatment

The purpose of this strategy is to establish, develop and implement coordinated and integrated prevention, intervention, treatment, and recovery substance abuse services. Substance abuse treatment programs provide residential services, outpatient services, residential or ambulatory detoxification; and continuing care. The substance abuse prevention programs include universal-direct, universal-indirect, selective, and indicated prevention services. The universal-direct, selective, and universal programs provide evidence-based curricula and other prevention strategies to prevent substance use/abuse among youth and families. These programs are provided school and community-based settings and are also known as youth prevention programs. Universal-indirect prevention strategies are provided through community coalitions and the Prevention Resource Centers (PRCs). The community coalitions create public awareness on the harmful effects of alcohol, tobacco, and other drugs (ATOD). The coalitions also implement evidence-based strategies to create social policy changes and community norms to reduce or preclude substance us/abuse among youth and adults in communities. There are eleven PRCs which are located in each of the Health and Human Services Commission (HHSC) regions. The PRCs provide ATOD prevention resource materials and information to schools, communities, and the general public. The PRCs also coordinate substance abuse prevention training within their region and educate retail merchants on the Texas tobacco laws. Other services include HIV/HEI intervention service providers that target substance abusing adults at risk for HIV or who are HIV positive. Outreach programs include motivational interviewing and referral for support services. Pregnant, Post-Partum Intervention services include case management, education and support for pregnant and post-partum women at risk for substance abuse. Funding is also provided for the Rural Border Intervention program which is designed to assist prevention, intervention, and treatment for people living in border communities. The Substance Abuse Prevention and Treatment Block Grant requires the following: at least $13.9M be expended on specialized female programs; at least 20% of the block grant must be spent on primary prevention programs; and at least 5% of the block grant must be spent on HIV early intervention programs. The following table shows the funding for this strategy in 2009 and a look at funding recommendations for 2012 and 2013.

Table IV.12: DSHS SA Prevention, Intervention and Treatment Services by Funding Strategy

Fund Code	Funding Description	Budgeted 2009	% of Total		Recommended 2012	Recommended 2013
555	FF SA Block Grant	$125,723,029	78.1%		$120,223,085	$120,223,085
8002	GR For SA Block Grant	$22,754,782	14.1%		$20,998,166	$20,998,165
555	FF Access to Recovery	$5,309,895	3.3%		$0	$0
555	FF Project Reg. & Natl Significance	$5,056,202	3.1%		$0	$0
555	FF Uniform Alcohol/Drug Abuse	$974,576	0.6%		$393,289	$393,289
555	FF Exceptional Care of Texas	$556,138	0.3%		$0	$0
555	FF MH Block Grant	$399,028	0.2%		$0	$0
555	FF DSHS Drug Courts MIS	$156,874	0.1%		$0	$0
1	General Revenue Fund	$29,085	0.0%		$0	$0
555	FF Health Care Financing Res	$19,800	0.0%		$28,310	$28,310
555	FF Social Services Block Grants	$0	0.0%		$0	$0
555	FF XIX FMAP	$0	0.0%		$0	$0
	Grand Totals	***$160,979,409***	***100.0%***		***$141,642,850***	***$141,642,849***

In sharp contrast to mental health services, the majority of substance abuse funding is federal, representing 85% of the total strategy funding. State GR is intended to meet the MOE required under the substance abuse block grant and represent the rest of the funding under this strategy. The Medicaid substance abuse benefit for adult services was not in effect in 2009, so Medicaid claiming is not reflected in this analysis. In addition, the Medicaid substance abuse benefit is still in its nascent stage and has experienced a billing lag as providers navigate the reimbursement model for the first time. As a result, Medicaid substance abuse revenues are not currently very large and do would not have made a material impact on this analysis of the funding coming into the state other than perhaps to reduce the amount of claiming made to the block grant. All SUD services including the new Medicaid benefit services are part of the NorthSTAR service array. These services are paid through NorthSTAR funding streams. As seen with NorthSTAR, the substance abuse strategy does not include the state share of Medicaid state match funding because this is paid from HHSC's budgets. Of concern is the fact that the strategy is expected to see its total funding drop by 12% from 2009 to 2012 and 2013's recommended budgets. Some of this funding could be shifting to the HHSC budget and Medicaid claiming may also help supplement this DSHS budget reduction.

Mental Health State Hospitals

This strategy funds the specialized inpatient services provided by state psychiatric facilities. Individuals receive services based on their needs including therapeutic programming, medication management, group therapy, job readiness training, and interpersonal skills training. There are eight State hospitals: Austin State Hospital, Big Spring State Hospital, El Paso Psychiatric Center, Kerrville State Hospital, North Texas State Hospital (Vernon and Wichita Falls campuses), Rusk State Hospital, San Antonio State Hospital, and Terrell State Hospital. The following table shows the funding for this strategy in 2009 and a look at funding recommendations for 2012 and 2013.

Table IV.13: DSHS MH State Hospital Services by Funding Strategy

Fund Code	Funding Description	Budgeted 2009	% of Total		Recommended 2012	Recommended 2013
1	General Revenue Fund	$329,061,832	87.1%		$307,145,179	$298,684,191
555	FF XIX FMAP	$12,408,941	3.3%		$14,316,191	$16,470,913
8031	MH Collect-Patient Support & Maintenance	$9,207,243	2.4%		$10,379,037	$10,379,037
8034	MH Medicare Receipts	$8,777,646	2.3%		$0	$0
8032	GR Certified As Match For Medicaid	$8,757,624	2.3%		$9,303,287	$10,887,598
777	Interagency Contracts	$2,229,546	0.6%		$3,329,538	$3,329,538
709	DSHS Pub Hlth Medicaid Reimbursement	$3,166,000	0.8%		$35,464,586	$35,464,586
369	ARRA XIX FMAP	$1,733,459	0.5%		$0	$0
8033	MH Appropriated Receipts	$1,629,528	0.4%		$1,896,500	$1,896,500
555	FF National School Lunch Program	$204,879	0.1%		$247,784	$247,784
555	FF Project Reg. & Natl Significance	$164,130	0.0%		$210,734	$210,734
555	FF School Breakfast Program	$133,402	0.0%		$161,204	$161,204
666	Appropriated Receipts	$105,000	0.0%		$0	$0
555	FF Child and Adult Care Food	$41,307	0.0%		$49,189	$49,189
	Grand Totals	***$377,620,537***	***100.0%***		***$382,503,229***	***$377,781,274***

In addition to the state hospitals, funding under this strategy also supports one psychiatric residential facility for emotionally disturbed youths at Waco and Rio Grande State Center (RGSC) in Harlingen, which provides inpatient mental health services; operates an ICF-MR unit for persons with intellectual & developmental disabilities; and operates a public health outpatient clinic. The RGSC public health outpatient clinic is funded through the South Texas State Hospital strategy under DSHS and has been excluded from this analysis. DADS paid $5.6M to DSHS in FY 2009 through an interagency contract to fund the intellectual and development

disabilities services provided at RGSC. These expenses are paid through the DSHS State Hospital strategy, but have been backed out of this analysis because they are not direct mental health or substance abuse services. These payments from DADS to DSHS have nearly doubled in the last few fiscal years and should be removed from any forward looking review of behavioral health service funding in Texas. Below is a table outlining DADS payments to DSHS for intellectual and developmental disability (IDD) services provided at RGSC.

Table IV.14: DADS Interagency Contract Payments to DSHS for RGSC IDD Services

Fiscal Year	Total Payments
2008	$ 6,028,026
2009	$ 5,625,327
2010	$ 10,368,498
2011	$ 11,558,240

The DSHS budget indicates that State GR represents 89.5% of state hospital strategy funding, but as noted previously, many of these state funds are a place holder for Medicaid DSH federal financial participation that is transferred from DSHS to the state. As shown previously, the state hospitals receive both federal and state funding under the $292M Medicaid DSH program each year. The state MHBG only funds outpatient services, so the state hospitals do not have a MOE requirement for state GR. Claiming revenues for the state hospitals represent a material amount of the state hospital strategy budget and are represented in the budget by the following: $22.9M from Medicaid, $8.7M from Medicare, and $9.2M in other collections. The state used to fund the University Of Texas Medical Branch (UTMB) in Galveston for a specific amount in the DSHS budget for services to indigent patients. This program funding is represented by $3.5M in 2009, but has since been discontinued. Finally, the DSHS Public Health Medicaid Reimbursement budget has increased from $3.1M in 2009 to $35.4M in 2012 and 2013. This was a shift of the budgeting for rehab and targeted case management (TCM) services from another area of the DSHS budget and did not materially represent new funds to the state hospital strategy.

The State Hospitals have seen an increase in their forensic population at the expense of civil beds. This has forced the state to reevaluate how they will provide access to inpatient psychiatric services for non-forensic patients in an increasingly smaller pool of state hospital beds available for civil patients. In response to this, the state has established the Community Mental Health Crisis Services strategy to designate funds for inpatient crisis services. In addition, the state is currently assessing how they can use an estimated $10M dollars increase to DSHS mental health funding to purchase access to non-state hospital psychiatric beds available in the community.

Preliminary assessments of how these funds will be used have been drafted, but contracts have not yet been finalized.

Mental Health Community Hospitals

This strategy provides funding for inpatient services such as assessment, crisis stabilization, and medication stabilization services provided at relatively small psychiatric hospitals contracted through funds provided to LMHAs. Also included in this funding strategy is a 16 bed crisis stabilization unit in Kerrville. These community hospitals are:

- Harris County Psychiatric Center, a 214-bed inpatient facility in Houston
- Sunrise Canyon Hospital, a 30-bed inpatient facility in Lubbock in Lubbock
- Gulf Coast Community Center, which has funded 16 regional beds in the Galveston area after UTMB-Galveston was heavily damaged during Hurricane Ike.
- Montgomery County Mental Health Treatment Facility, a 100-bed forensic psychiatric facility in Conroe that opened in 2011

In contrast to the state hospitals, except for the Montgomery County Mental Health Treatment Facility the services provided under this strategy allow clients to receive treatment in their community. The services provided by these hospitals, except for the Montgomery County Mental Health Treatment Facility, are not uniform as they reflect the needs of the community. The following table shows the funding for this strategy in 2009 and a look at funding recommendations for 2012 and 2013.

Table IV.15: DSHS MH Community Hospital Services by Funding Strategy

Fund Code	Funding Description	Budgeted 2009	% of Total		Recommended 2012	Recommended 2013
1	General Revenue Fund	$23,664,248	100.0%		$53,703,096	$53,703,096
	Grand Totals	***$23,664,248***	***100.0%***		***$53,703,096***	***$53,703,096***

Funding for the Mental Health Community Hospitals strategy is made entirely through state GR and is expected to increase dramatically by 127% from 2009 to 2012. This increased cost is largely due to the opening of the Montgomery County Mental Health Treatment Facility, a 100-bed forensic psychiatric facility.

Capital Repair and Renovation: Mental Health Facilities

Some capital and renovation contracts are paid out of a separate strategy entitled Capital Repair and Renovation: Mental Health Facilities, while others are paid using state GR under the traditional DSHS strategies outlined in this analysis through state GR. These costs have varied widely based upon the needs of the state hospital system. The project budgets are held for

several years due to the uncertainty of construction timing. Notable capital projects underway in 2009 included renovations to the Lubbock LMHA facilities and a detox center built in San Antonio to alleviate a lack of available services. The following table shows capital expenditures made under this strategy by fiscal year:

Table IV.16: Capital Repair and Renovation: Mental Health Facilities

Fiscal Year	Capital Expenditures
2009	$13,392,677
2010	$50,704,656
2011	$2,778,574

Conclusion

Behavioral health Services in Texas are provided through a variety of public and private enterprises. The largest outlay of funds is $1.2B dollars allocated by DSHS. The DSHS budget funds services through strategies of target populations, including Mental Health Adult Services, Mental Health Children's Services, Substance Abuse Services, State and Community Hospitals, and the NorthSTAR program. Funding sources fall into three main categories: State GR, Federal Funds, mental health Local Funds collected through the LMHAs and NorthSTAR, and some local funds collected for substance abuse services. The most notable sources of funds are state GR, and federal mental health and substance abuse Block grants, which require a State GR Maintenance of Effort (MOE) amount to draw down Federal Funds. Many other accounts shown on the DSHS budget represent cost-sharing programs between the State of Texas and the Federal Government. In addition, many one-time or short-term appropriations are made in order to promote specific programs.

Local funding is included the DSHS budget and local match requirements are calculated during the DSHS allocation process for each LMHA. Notable mental health services costs not discretely shown on the DSHS budget are represented by the $292M Medicaid DSH allocation, a vast majority of which funds Public Institutions for Mental Disease (IMDs). These funds are shown on the DSHS budget as State GR because the State is the final recipient of these funds, but is at risk for the full cost of many eligible facilities regardless of DSH funding.

The most notable change in state GR funding came with the Mental Health Crisis Strategy, which provides $82M per year to assist this critical patient population. That said, the DSHS budget has been relatively stable for several years, despite the fact that populations of Texas, and specifically Texans with behavioral health service needs, has been increasing over that time. This places additional pressures on the efficient use of existing funds. Those services that are not funded adequately do not simply go unpaid for, but represent a negative externality to other state agencies, private entities and citizens in Texas. This creates increased funding pressures on other agencies under the HHS Enterprise, the Texas Department of Criminal Justice, and other

government agencies to manage the needs of Texans with behavioral health needs. While these agencies provide services to behavioral health clients in Texas, the review of funding for non-DSHS agencies was outside the scope of this analysis.

Turning from the public sector, private hospitals often are faced with the burden of providing services to Texans with behavioral health services. The costs associated with stabilizing behavioral health clients in private hospital emergency rooms is of particular concern, both because of the extreme charges that can be accrued in a short amount of time in this setting and because handling patients with behavioral health difficulties in this setting increased service wait times for all other hospital customers. Ultimately, these costs are born by Texans in increased healthcare prices for all patients and limitations to all general health care access.

B. Overview of the Allocation of Funds from DSHS

As has been documented in the previous section, DSHS is, on a biennial basis, appropriated funds from the State Legislature for many funding strategies, including public and behavioral health services. These funds in the appropriation are derived from a number of sources including State GR, federal matching funds for Medicaid services, and federal block grants. Within the DSHS budget, the specific funding strategies targeted for the purchase and provision of behavioral health services, include:

- 2-2-1: Mental Health Services for Adults
- 2-2-2: Mental Health Services for Children
- 2-2-3: Community Mental Health Crisis Services
- 2-2-4: NorthSTAR Behavioral Health Waiver
- 2-2-5: Substance Abuse Prevention, Intervention, and Treatment
- 3-1-3: Mental Health State Hospitals
- 3-2-1: Mental Health Community Hospitals

DSHS is responsible for using funds from these strategies to purchase and provide behavioral health services through LMHAs, the state and community mental health hospitals, substance abuse providers, and the NorthSTAR program. In order to fulfill this responsibility, DSHS utilizes various allocation methods to align the funds with the appropriate providers. The following sections detail the DSHS allocation methods for allocating the Community Mental Health Funds, including the Adult and Child Mental Health funds, the Crisis funds, and the NorthSTAR funds. The allocations for the State Hospitals and the substance abuse providers will also be detailed.

Allocations of Community Mental Health Service Funds

The primary source of funding for publicly funded community mental health services in Texas are those identified under the *Mental Health Services for Adults (2-2-1)* and *Mental Health*

Services for Children (2-2-2) budget strategies within the DSHS budget. These funds, made up of primarily of GR with additional Federal and Other funds, including MHBG funds, are allocated by DSHS to the 37 LMHAs across the state as well as to the NorthSTAR program. The current allocation process has been in place for over 15 years with only slight modifications. While the initial allocation was driven largely by population and per capita income, the current allocations as described in the following sections are primarily based upon historical funding, with many of the amounts flowing forward from the prior year allocations.

In the following sections, the four main allocations of funds to the LMHAs will be described, and include: adult GR funds, child GR funds, adult MHBG funds, and child MHBG funds. Specific details on the calculations for each allocation can be found in Appendix VII.

GR Allocations – Adult

The first part of the allocation process is the allocation of GR funds to the LMHAs. This allocation process is largely based on historical allocations and is very similar between the allocation of the Adult Mental Health funds and the Child Mental Health funds. The Adults Mental Health funds allocation process is detailed in Appendix VII.

GR Allocations – Child

The allocation of the Child Mental Health funds follows a similar allocation process as that for the Adult Mental Health funds. The process for allocating these funds to the LMHAs is also detailed in Appendix VII with those areas in which this process varies from the allocation of the Adult Mental Health funds noted.

MHBG Allocations – Adult

In addition to GR funds, there are Federal Funds, in the form of MHBGs that are also allocated to the LMHAs. For the Adult population, these funds are Substance Abuse and Mental Health Services Administration (SAMHSA) Community Mental Health Services Block Grant (CFDA 93.958). Like the allocation of the GR funds described in the previous two sections, the allocation for the MHBG funds is based on historical funding.

MHBG Allocations - Child

The MHBG Allocations for Child services is comprised of three separate grants; the SAMHSA Community MHBG (CFDA 93.958), the Temporary Assistance to Needy Families (TANF) to Title XX Block Grant (CFDA 93.588.667), and the Social Services (Title XX) Block Grant (93.667). Of these, the SAMHSA Community MHBG has a multi-step allocation process while the other two grants are based only on the prior year allocation of the grant. The allocation of the Child Community MHBG follows a similar process as the Adult Community MHBG and is described in Appendix VII.

Total Base Allocation

The Total Base Allocations to the LMHAs is the sum of the allocations for Adult and Child GR as well as the sum of the allocations for Adult and Child Mental Health Block Grant funds. These are the primary allocations to the LMHAs from DSHS however these are not the entire scope of allocations, as the LMHAs may also receive additional allocations for items like crisis services and community mental health hospitals, as described in subsequent sections.

As has been previously discussed, the allocation outlined above has been in place for over 15 years and has undergone few changes during that time. The original allocation was based on population and per capita income statistics, however as has been illustrated in the preceding pages, the allocation is now largely driven by historical allocations with a number of the figures included are carried forward from the prior year allocation.

The following table provides an illustration of the effective per capita funding rates for the LMHAs and NorthSTAR for fiscal years 2010 through 2012 as determined through the Equity Distribution. In looking at the effective per capita funding rates for the LMHAs and NorthSTAR, it becomes apparent that the level of per capita funding is not consistent with the trends in population statistics. The Austin Travis County MHMR Center saw the population of its service area grow by 9.56% from 2010 to 2012 while its funding per capita actually decreased by $0.42 or (3.37%) over the same period. Conversely, Denton County MHMR Center saw its service area population increase by only 3.06% over the three year period but their per capita funding rate increased by 11.97%.

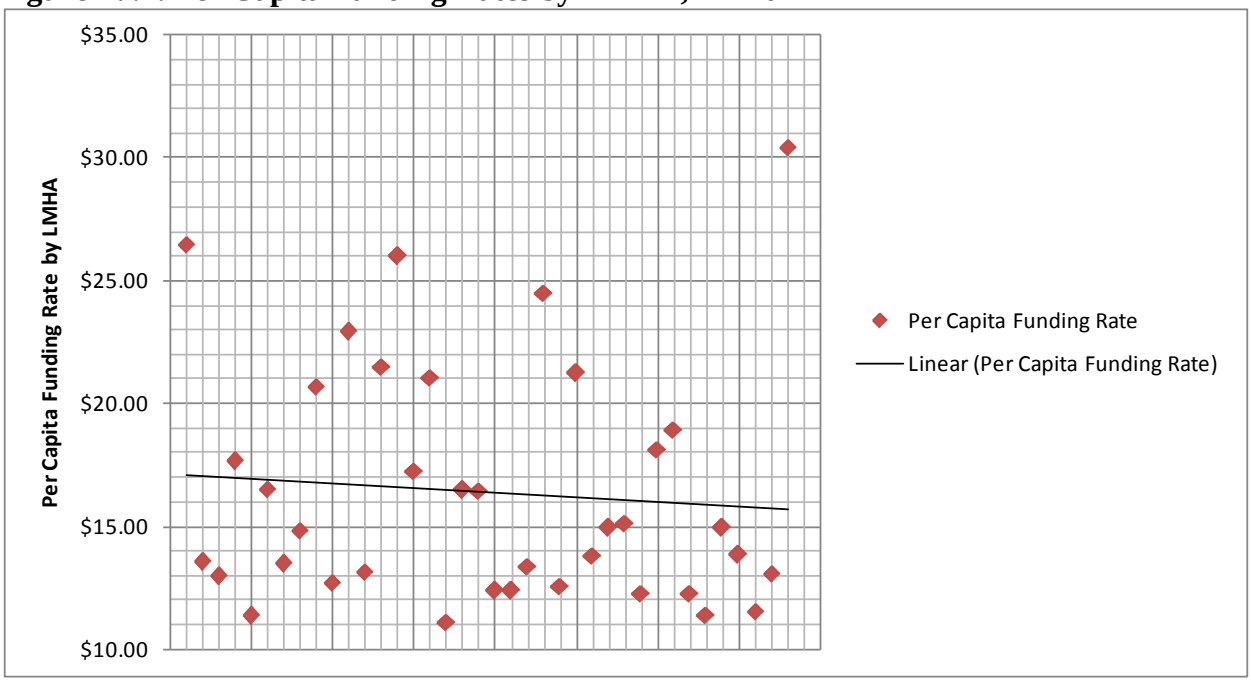
Table IV.17: Estimated Population and Per Capita Funding Rates by LMHA, 2010 - 2012

	Estimated Population			Change in Estimated Population		Per Capita Funding Rates			Change in Per Capita Funding Rates	
LMHA / NorthSTAR	FY 2010	FY 2011	FY 2012	FY 2010 - FY 2011	FY 2010 - FY 2012	FY 2010	FY 2011	FY 2012	FY 2010 - FY 2011	FY 2010 - FY 2012
ACCESS	109,066	108,440	109,009	-0.58%	-0.05%	$ 26.56	$ 26.61	$ 26.61	0.16%	0.16%
ANDREWS CENTER	396,551	404,129	410,833	1.88%	3.60%	$ 14.05	$ 13.48	$ 13.60	-4.27%	-3.35%
AUSTIN-TRAVIS COUNTY MHMR CENTER	939,561	1,011,063	1,029,415	7.07%	9.56%	$ 13.46	$ 12.50	$ 13.02	-7.68%	-3.37%
BETTY HARDWICK CENTER	181,904	180,909	181,360	-0.55%	-0.30%	$ 17.13	$ 17.20	$ 17.73	0.40%	3.35%
BLUEBONNET TRAILS MHMR CENTER	772,869	829,633	864,424	6.84%	11.85%	$ 11.33	$ 10.54	$ 11.39	-7.47%	0.54%
BORDER REGION MHMR CENTER	355,215	353,851	361,968	-0.39%	1.90%	$ 16.36	$ 16.41	$ 16.56	0.27%	1.21%
BRAZOS VALLEY MHMR AUTHORITY	297,977	306,113	309,689	2.66%	3.93%	$ 13.73	$ 13.35	$ 13.53	-2.83%	-1.44%
BURKE CENTER	386,871	390,122	393,014	0.83%	1.59%	$ 14.70	$ 14.56	$ 14.91	-0.94%	1.42%
CAMINO REAL MHMR CENTER	213,898	214,155	217,343	0.12%	1.61%	$ 20.57	$ 20.51	$ 20.77	-0.29%	1.01%
CENTER FOR HEALTH CARE SERVICES	1,603,320	1,660,689	1,684,186	3.45%	5.04%	$ 12.55	$ 12.10	$ 12.74	-3.72%	1.50%
CENTER FOR LIFE RESOURCES (CENTRAL TEXAS)	102,344	102,857	103,214	0.50%	0.85%	$ 23.05	$ 22.84	$ 23.01	-0.91%	-0.18%
CENTRAL COUNTIES MHMR CENTER	403,024	437,175	443,468	7.81%	10.04%	$ 13.92	$ 12.83	$ 13.22	-8.52%	-5.32%
CENTRAL PLAINS MHMR CENTER	100,759	94,940	94,773	-6.13%	-5.94%	$ 20.10	$ 21.31	$ 21.60	5.71%	6.96%
COASTAL PLAINS MHMR CENTER	247,538	240,607	241,384	-2.88%	-2.49%	$ 25.25	$ 25.95	$ 26.12	2.70%	3.34%
COMMUNITY HEALTHCORE (SABINE VALLEY)	445,671	454,995	457,831	2.05%	2.73%	$ 17.43	$ 17.06	$ 17.32	-2.21%	-0.65%
CONCHO VALLEY MHMR CENTER	123,598	122,417	122,300	-0.96%	-1.05%	$ 20.34	$ 20.52	$ 21.73	0.89%	6.43%
DENTON COUNTY MHMR CENTER	747,624	737,854	770,509	-1.32%	3.06%	$ 9.78	$ 9.91	$ 11.11	1.28%	11.97%
EL PASO MHMR CENTER	774,460	782,541	791,317	1.03%	2.18%	$ 16.47	$ 16.27	$ 16.55	-1.22%	0.48%
GULF BEND MHMR CENTER	182,782	183,594	184,406	0.44%	0.89%	$ 16.32	$ 16.23	$ 16.49	-0.57%	1.03%
GULF COAST MHMR CENTER	602,873	626,554	640,502	3.78%	6.24%	$ 12.28	$ 11.80	$ 12.43	-4.00%	1.26%
HARRIS COUNTY MHMR AUTHORITY	4,005,685	4,176,561	4,259,769	4.09%	6.34%	$ 11.98	$ 11.48	$ 12.42	-4.35%	3.59%
HEART OF TEXAS REGIONAL MHMR CENTER	348,434	354,507	358,076	1.71%	2.77%	$ 13.38	$ 13.14	$ 13.61	-1.85%	1.66%
HELEN FARABEE REGIONAL MHMR CENTER	307,847	311,310	312,611	1.11%	1.55%	$ 24.87	$ 24.58	$ 24.61	-1.17%	-1.07%
HILL COUNTRY MHMR CENTER	595,060	612,780	630,349	2.89%	5.93%	$ 12.73	$ 12.35	$ 12.60	-3.06%	-1.04%
LAKES REGIONAL MHMR CENTER	160,916	161,327	162,432	0.25%	0.94%	$ 21.86	$ 21.79	$ 21.33	-0.33%	-2.51%
LUBBOCK REGIONAL MHMR CENTER	303,202	309,368	310,857	1.99%	2.52%	$ 18.07	$ 17.69	$ 13.84	-2.15%	-30.55%
NORTHSTAR	3,717,944	3,856,337	3,942,883	3.59%	6.05%	$ 11.95	$ 11.67	$ 15.00	-2.44%	20.32%
NUECES COUNTY MHMR COMM CENTER	326,441	324,915	325,995	-0.47%	-0.14%	$ 14.88	$ 14.93	$ 15.19	0.37%	2.06%
PECAN VALLEY MHMR REGION	418,133	431,378	442,719	3.07%	5.88%	$ 12.08	$ 11.70	$ 12.32	-3.26%	1.93%
PERMIAN BASIN COMM CENTERS MHMR	303,762	311,120	314,308	2.37%	3.47%	$ 18.56	$ 18.10	$ 18.66	-2.58%	0.52%
SPINDLETOP MHMR CENTER	426,634	416,460	417,104	-2.44%	-2.23%	$ 18.02	$ 18.43	$ 19.02	2.21%	5.23%
TARRANT COUNTY MHMR SERVICES	1,800,336	1,872,095	1,920,714	3.83%	6.69%	$ 12.12	$ 11.63	$ 12.31	-4.17%	1.59%
TEXANA MHMR CENTER	737,079	782,544	812,636	5.81%	10.25%	$ 11.05	$ 10.40	$ 11.41	-6.25%	3.19%
TEXAS PANHANDLE MHMR CENTER	395,125	404,153	407,358	2.23%	3.10%	$ 15.10	$ 14.76	$ 15.00	-2.34%	-0.72%
TEXOMA MHMR CENTER	200,234	198,387	200,355	-0.93%	0.06%	$ 13.59	$ 13.69	$ 13.88	0.75%	2.13%
TRI-COUNTY MHMR SERVICES	617,726	646,846	670,733	4.50%	8.58%	$ 10.95	$ 10.44	$ 11.59	-4.89%	5.50%
TROPICAL TEXAS CENTER FOR MHMR	1,239,401	1,265,293	1,298,135	2.05%	4.74%	$ 12.15	$ 11.89	$ 13.11	-2.21%	7.28%
WEST TEXAS MHMR CENTER	214,232	205,980	205,764	-4.01%	-3.95%	$ 28.84	$ 29.93	$ 30.57	3.65%	5.66%
AVERAGE	**25,106,096**	**25,883,999**	**26,403,743**	**1.51%**	**3.10%**	**$ 16.25**	**$ 16.07**	**$ 16.50**	**-1.77%**	**1.34%**

Source: DSHS Mental Health Contracts Management Unit, MHSA Division

The following figure presents an additional look at the wide range of per capita funding rates across the LMHAs and NorthSTAR for Fiscal Year 2012.

Figure IV.1: Per Capita Funding Rates by LMHA, FY 2012



Source: 2012 Equity MH Funding, DSHS Mental Health Contracts Management Unit, MHSA Division

Around 2000, a push was made to move the allocations towards equitable funding for the LMHAs, with the basis for the allocations again being population and per capita income. While the concept of equitable funding was accepted, it was not realistic to implement given the implications on the system. The main justification given for not changing the methodology was that the resulting redistribution of funds would adversely impact those LMHAs that received less funding. A second justification was that consideration had to be given to "location costs" and that service costs were not level across the state with certain areas having more significant costs of providing services. As will be described in a later section, DSHS did take steps to move towards equitable funding without impacting the current allocations through the implementation of the Equity Distribution. This Equity Distribution however, is generally only applicable when new funding is made available in the system.

Allocation to the NorthSTAR Program

The NorthSTAR program receives a direct allocation of funds from DSHS through the funding strategy in the DSHS budget, *NorthSTAR Behavioral Health Waiver (2-2-4)*. These funds, comprised of GR, TANF to Title XX Block Grant, Base Title XX Block Grant, and Community Mental Health Services MHBG funds, are outside of the allocations described for the LMHAs

however DSHS still follows a similar process for allocating the funds to the NorthSTAR program. The calculations for the GR and MHBG are categorized as Adult funds while the TANF to Title XX Block Grant and the Base Title XX Block Grant are categorized as Child funds. The process for allocating the funds from each of these sources is described in Appendix VII.

The Total Base Allocations to the NorthSTAR program is comprised of the Total Base GR and the Total Federal Base.

Crisis Services Allocation

In addition to the funds appropriated for Community Mental Health Services and the NorthSTAR program, DSHS' received additional funding beginning in fiscal year 2008 specifically for crisis services. During the first year these crisis funds were made available, DSHS utilized a three tiered process for allocating the funds to the LMHAs and NorthSTAR. The first part of the process was to allocate a portion of the funds following the process described in Appendix VII with the funds becoming part of the total source funding for the LMHAs and NorthSTAR. The second part of the process was to allocate a second portion of the funds through the equity distribution (described in a subsequent section) in which those LMHAs that were below the equity rate received an increase to their funding to bring them closer to the equity rate. The third part of the process was to award funding based on a procurement process under which the LMHAs and NorthSTAR were able to submit proposals to DSHS for a specific crisis service that was needed in their area. DSHS reviewed the proposals and awarded the funds for those responses that were found most appropriate. An example of this award can be seen with one LMHA that utilized the funds to convert a building on the grounds of the state hospital to a 16 bed crisis stabilization facility. The funds furnished through the process all become part of the LMHA or NorthSTAR's annual allocation from DSHS.

Following the initial year when the new crisis funds became available, DSHS follows an allocation process that is similar to those processes described for the allocation of the adult and child mental health GR and block grant dollars.

The amounts calculated through this allocation would be added in to the Total Base Allocations from GR and Mental Health Block Grant funds to determine the Total Payment for the LMHAs. This amount is the same amount that is used in calculating the Equity Distribution, which is discussed later in this section.

While the calculations presented above are specific to the allocation of Crisis funds to the LMHAs, the NorthSTAR program also receives funding for Crisis services. These funds come from the Crisis Redesign Services, New Crisis Redesign – Transitional, and New Crisis Redesign – Ongoing categories. Each of these sources of funds for the NorthSTAR program is calculated based on the prior year amount. Like the LMHAs, the Crisis funds are combined with

the GR and Mental Health Block Grant allocations to determine the Total Payment which is subsequently used in the Equity Distribution.

Equity Distribution

In addition to the allocations described above, DSHS calculates an equity distribution that is designed to target funding toward LMHAs with the lowest per capita funding rates in proportion to each LMHA's level of need. This equity distribution, while calculated annually, is only used when new funds are made available, as was the case with the Crisis and Transitional funds added to the system over the last five years. The equity rate calculation is based on the total amount of funding provided to a LMHA per each individual in the LMHA's local service area. A LMHA's level of need is calculated based on the total amount of funding necessary to bring the LMHA up to the equity rate. Funding available for equity is then distributed among LMHAs funded below the equity rate, proportionate to each LMHA's level of need. The three steps in the calculation are defined in Appendix VII.

The Equity Distribution formula was implemented in the early 2000's to address the growing push for an equitable distribution of funding to the LMHAs. While the main allocation process that was described in the preceding sections was not changed, DSHS implemented a policy that any new funding would be distributed with an equity factor. It is important to note that the Equity Distribution is primarily used only when new funding, like the funding for Crisis and Transitional services, is made available in the system and in those cases, only 1/3 of the new funding is allocated using the Equity Distribution while the remaining 2/3 are allocated based on the historical allocation process and through competitive procurements.

DSHS also has the ability to redistribute funding using the Equity Distribution on a one time basis. When DSHS conducts their quarterly financial expenditure analysis of LMHA spending, it may be determined that a LMHA is spending below the expected expenditure margin for a specific funding stream and that they will not be able to spend all of their allocated funds by year end. If the LMHA is willing to release some of those funds, DSHS can reallocate the funds within the fiscal year to LMHAs that are below the Equity Line. These funds are however only a one time redistribution and the allocations will return to the normal method for the following fiscal year.

Determination of Local Match Requirement for LMHAs

The LMHAs are required to contribute a local match for all State GR funds allocated to the LMHAs. The local match requirement is determined using a weighted per capita income for each center's catchment area. The calculation of the local match requirement for the LMHAs and NorthSTAR, described in Appendix X, also requires the use of the per capita income for the State.

Community Hospital Allocation

In addition to funding the community services as described above, DSHS is also responsible for funding hospital services through the community mental health hospitals and the state mental health hospitals. The community hospital funds, identified in the DSHS budget as *Mental Health Community Hospitals (3-2-1),* are allocated to those three areas in which the community hospitals reside using a methodology that is similar to the allocation of GR funds for the adult and child community mental health funds.

The amount calculated through this allocation is added to the funding of the three LMHAs in which the community hospitals reside. These funds are not considered part of the base funding from which the Equity Distribution is calculated.

State Hospital Allocation

The DSHS budget also includes funding for the operation of the state mental health hospitals, identified under the *Mental Health State Hospitals (3-1-3)* funding strategy. Unlike the allocation that takes place for the community mental health hospital funds described in the previous section, the state mental health hospitals are funded directly based on their budgeted expenditures for the fiscal year. Each of the ten state facilities is responsible for operating the facility within the budget agreed upon with DSHS.

State Hospital Allocation Methodology

While the State Hospitals are funded directly through their appropriations from DSHS and through third-party reimbursement, DSHS developed a methodology in 2001 known as the State Hospital Allocation Methodology (SHAM) to address the costs for inpatient hospital services for uninsured individuals, which may include the indigent population, Medicaid clients for whom inpatient state hospitalization is not a covered service, and forensic clients. Through the SHAM, each LMHA is allocated a per capita amount into an account from which each uninsured patient day in a State Hospital or Montgomery County Hospital is debited at an assigned rate. Those patients in the maximum security North Texas State Hospital – Vernon Campus are not part of thee SHAM as the LMHAs do not have control over the admissions of these individuals. The allocation does not result in a true transferring of funds from DSHS to the LMHAs and subsequently to the State Hospitals.

Based on the Overview of State Hospital Allocation Methodology for FY 2012, an LMHA's account would be charged the following rates[74] under the State Hospital Allocation Methodology:

[74] Overview of State Hospital Allocation Methodology for FY 2012, DSHS.
http://www.dshs.state.tx.us/mhcontracts/HospitalBedDayMehod.shtm

Table IV.18: State Hospital Allocation Methodology Rates by Level of Care, 2012

Level Of Care	Rate
Each admission to the State Hospital (Exclusive of: State hospital inter-hospital transfers and Maximum security forensic patients)	$325
Adult Acute Bed Day	$ 370
Acute Child/Adolescent Bed Day	$ 421
Adult Sub-Acute bed Day	$ 334
Residential Rehabilitation	$ 242

Source: DSHS Overview of State Hospital Allocation Methodology for FY 2012

A key component of this methodology is that the impetus for managing inpatient hospitalization utilization falls on the LMHAs. As the primary gateway in to the State Hospitals, the LMHAs are responsible for conducting pre-admission screenings and for approving any admissions. The LMHAs are therefore expected to manage admissions and utilization of the State Hospitals within their allocation.

When there is overutilization of the State Hospitals by LMHAs, it may be expected that LMHAs reimburse the State Hospital Section of DSHS for the costs of the inpatient mental health services beyond their allocation. Reimbursement from the LMHAs to the State Hospital Section may be triggered if the total allocation for all LMHAs is exceeded during the fiscal year. When this occurs, a LMHA may be required to reimburse the State Hospital Section proportionally for its overuse of the State Hospitals.

In the event a LMHA has grossly over utilized the State Hospitals, measured as 110% of their allocation, the LMHA may be sanctioned through penalty and by reimbursing up to the 110% level. In any situation in which a LMHA may be sanctioned, they have the ability to negotiate with DSHS prior to a final sanctioned being determined. One example of a penalty that was noted was that in the event that a LMHA's overutilization was driven largely by forensic admissions, DSHS would require the LMHA to provide a staff member to serve as a liaison with the local court to ensure more appropriate utilization for forensic consumers. It was also noted that many of the penalties did not result in actual payments made to DSHS but rather requirements for the LMHA to implement improved policies and procedures for appropriate State Hospital utilization. A major distinction is that this applies to an LMHA regardless of the statewide utilization described previously.

Substance Abuse Contract Allocations

Substance Abuse services under DSHS are funded through the *Substance Abuse Prevention, Intervention and Treatment (2-2-5)* funding strategy of the DSHS budget. The process for allocating the funds for substance abuse services differs from the processes described in the previous sections pertaining to mental health services. The substance abuse funds are awarded to substance abuse providers through a contracting process, with contracts awarded for specific

services within each of the eleven regions across the state. The awards for substance abuse funding are made every 5 years through a competitive Request for Proposals (RFP) process. The funding awards are based on eligibility criteria, funding targets established for each of the eleven regions, program funding, scores, best value factors, and the best interest of the State.

While there are no allocations for substance abuse like that for the mental health funds, DSHS does employ an allocation process to ensure appropriate funding is available to meet the need for services within each of the eleven regions across the state.

Regional Target Formula

DSHS calculates a regional target formula, described in Appendix X, for all substance abuse services to set the percent of services that are expected to be contracted by each region out of the total amount of funds available for each category of service (prevention, intervention, and treatment). The elements for this allocation were initially approved in December 2001 by the Texas Commission on Alcohol and Drug Abuse Board of Commissioners. The regional target is a weighted average based on population, indigence, and need for services by region.

The percentage derived from the regional target formula for each region serves as the target for the amount of funding to be directed for contracts within that region. As an example, consider a region for which the regional target formula results in a target of 3.5%. Within that region, specific service types may be funded at different levels, depending on things like the availability of providers and population statistics. As a result, contracting for substance abuse will look different in the various regions of the state.

This funding mechanism, unlike that employed for community mental health services, is tied to current trends in population, indigence, and need for services within the designated regions across the state. As such, the State is better able to align funding with the actual needs of the communities.

Reimbursement Mechanisms for Mental Health and Substance Abuse Services

As has been described throughout this section, there are multiple ways in which funding for services are made available for mental health and substance abuse services in Texas. Likewise, Section III of this report described the various avenues by which a consumer can access and receive services. In addition to these variables, there are also a number of methods through which a service provider is reimbursed for the provision of services, each depending on a consumer's eligibility and the funding source for their services. This section provides a brief overview of the various methods in which a provider is reimbursed for providing mental health and substance abuse services.

DSHS reimbursement for mental health services in LMHAs

LMHAs are contracted with DSHS to provide mental health services to indigent consumers as well as for the provision of the Medicaid rehabilitation and case management services. The LMHAs are funded for the care provided to the indigent population based on the allocation process described in the previous sections. The LMHAs receive quarterly payments from DSHS, with 30% of their allocation paid during quarter 1, 30% paid during quarter 2, 20% paid during quarter 3 and the final 20% paid during quarter 4. As part of their contract, the LMHAs are expected to spend no more than 10% of their state payments on administrative costs. The LMHAs are required to submit financial reports on a quarterly basis to support their quarterly allocation and in some cases, when these reports indicate that spending does not match the amount of funds allocated, DSHS may elect to redistribute the funds to other LMHAs.

In addition to the funding for the indigent services provided by DSHS to the LMHAs, DSHS is also responsible for supplying the matching funds for the Medicaid rehabilitation and case management services. Historically, these matching funds were transferred to the LMHAs and the LMHAs were responsible for sending the funds to Texas Medicaid and Healthcare Partnership (TMHP). However, CMS clarified that they wanted DSHS to directly transfer the state share of Medicaid claims to TMHP in order for TMHP to pull down the federal funds associated with Medicaid claims. As a result, DSHS withholds the matching funds from the LMHA allocations and transfers the funds directly to TMHP for claims paid. The LMHAs are still responsible for submitting claims to TMHP for these services and are reimbursed for the state and federal share by TMHP on a fee-for-service (FFS) basis.

DSHS reimbursement for substance abuse services

Substance abuse services provided by providers contracted with DSHS are paid based on a total contracted amount, with providers required to submit claims to DSHS to support the contract amount. . Substance abuse providers submit claims to DSHS for the services rendered and are reimbursed up to their contract amount based on the submitted claims. Providers that do not submit claims for their entire contract amount will not receive their full contract amount. DSHS generally pays the claims automatically unless the provider has had a compliance issue resulting in a payment hold. One significant difference between this reimbursement model and a traditional FFS model is that, given the finite funding available in the system, DSHS will only reimburse a substance abuse provider up to their contract amount. If it is apparent that a provider is going to exceed their contract amount, DSHS has the ability to redistribute funds from another provider that will not spend the full amount of their contract.

Medicaid reimbursement for mental health and substance abuse services

Services provided to Medicaid consumers are reimbursed through one of two models; an FFS model for traditional Medicaid or a capitation payment under Medicaid Managed Care. Under the FFS model for traditional Medicaid, providers are required to submit claims to TMHP and are reimbursed based on an established fee schedule.

Medicaid Managed Care services are rendered by providers under contract with Medicaid Managed Care Organizations (MCOs). The MCOs reimburse the contracted providers on an at-risk, per member per month (PMPM) premium that is based on the number of member months by member risk group and a monthly capitation amount by member risk group. The reimbursement policies for providers under contract with MCOs may differ by MCO but the provisions are defined in the contract document between the provider and the MCO.

NorthSTAR reimbursement

Under NorthSTAR, DSHS contracts with ValueOptions to serve as the behavioral health organization (BHO) for the service area. As part of this contract, ValueOptions is expected to spend at least 88% of their state payments on direct services. ValueOptions is reimbursed on a risk-based PMPM premium, similar to other Managed Care arrangements. Providers contract with ValueOptions to provide services.

V. SUMMARY OF STAKEHOLDER MEETINGS

PCG understands that the public behavioral health system in Texas is a large, multi-layered system that includes not only the state agencies that develop policy and provide funding but also the service providers, consumers, and advocates, to name a few. In an effort to develop a comprehensive view and complete understanding of the current system, PCG engaged and elicited feedback from the public through various mediums.

PCG conducted a series of stakeholder forums, provider site visits to mental health and substance abuse providers, and multiple interviews with various individuals and groups, and maintained an email account to which the public was invited to submit feedback, questions and comments about the study. The following sections detail the feedback gained through the outreach efforts and highlights the common themes that were identified throughout.

Stakeholder Forums

PCG conducted seven stakeholder forums during the months of December, January and February throughout the state to provide interested parties with an overview of the engagement and to gather stakeholder input on the current behavioral health system. The dates and locations of these forums are provided below:

Table V.1: Public Stakeholder Forum Dates and Locations

Location	Date
Austin	December 14, 2011
Lubbock	January 11, 2012
Dallas	January 13, 2012
Harlingen	January 17, 2012
El Paso	January 19, 2012
Houston	January 25, 2012
San Antonio	February 8, 2012

The stakeholder forums were attended by over 350 individuals representing a broad array of interests and perspectives related to behavioral health. Stakeholder forum participants included advocacy groups like Mental Health America – Texas (MHAT), National Alliance on Mental Illness (NAMI), and Texas Catalyst for Empowerment (TCE), public and private service providers, local and county police departments, sheriff's offices, judges, and consumers and families.

Stakeholders were encouraged to give feedback on their views of the system including strengths and weaknesses, as well as recommendations for change and improvement. PCG worked to

focus the dialogue around three main discussion topics: Access to and Quality of Care, Integration of Care, and Funding Priorities, and provided participants with some basic questions to initiate the conversation.

In an effort towards transparency, PCG recorded detailed notes at each session and these notes, along with submitted testimonies and related materials from the sessions were then posted to the PCG website for public review and comment. In this manner, interested parties who were unable to attend the sessions were still privy to the information shared at them and attendees had the opportunity to review and clarify session content.

The depth and volume of feedback received was immense, but tended to center on a few common themes, outlined below.

- **Lack of integration between MH and SA models**. Participants felt that there was no encouragement to integrate care on the state level. Despite the fact that mental health and substance abuse issues are often intertwined, the current system generally treats them as two separate issues. Many participants indicated that dual diagnoses should be addressed together, with one treatment plan, and stressed the need for collocation of services for mental health and substance abuse. Some LMHAs provide co-occurring programs through creative funding, which has been seen as successful and cost effective. Participants expressed that substance abuse is often forgotten or ignored when addressing behavioral health, and is not treated on par with mental health.

- **Severe shortage of substance abuse services.** While funding shortages were a concern for all programs, participants frequently noted that substance abuse services are particularly underfunded, and detox services even more so. One provider cited a study noting that as little as 3 percent of those needing substance abuse services receive them. Some participants suggest that the lack of funding may be related to the stigma of substance abuse prevalent in Texas.

- **Lack of supportive services**. Participants frequently cited the lack of funding for supportive housing, transportation, and employment services as a significant barrier to long-term recovery. Individuals who have successfully completed substance abuse treatment programs often have no place to go once treatment has concluded, increasing the likelihood of a relapse. Participants stressed the need for these services in order to decrease the rate of recidivism, relapse, and hospitalization.

- **The current behavioral health model being a "crisis driven system,"** meaning that those who show up in crisis get services while others not in crisis must remain on wait lists. (Crisis funding was driven by a collaborative lobbying effort on the part of law

enforcement, hospitals, advocates, etc.) Participants felt that greater emphasis should be placed upon prevention and recovery to address client needs before they reach crisis level.

- **Lack of hospital beds.** Participants noted the shortage of available hospital beds and expressed concern over the increase in the use of hospital beds for forensic commitments, crowding out civil commitments. As noted earlier, the wait time for hospital beds can be lengthy, and some providers are forced to drive multiple hours to find a hospital with an open bed. Participants noted that some providers over-utilize state hospital bed allocations, possibly due to proximity, with no repercussions.

- **Waitlists for services**. Individuals with mental health and/or substance abuse issues seeking treatment are often confronted with long waitlists to receive services, and clients on the waitlist may never receive services. Waitlists for psychiatric services and state hospital beds were most frequently noted.

- **Workforce shortage.** Participants frequently cited as a concern the shortage of qualified behavioral healthcare providers in the public system, notably substance abuse providers, psychiatrists (especially child psychiatrists), and therapists. They noted that the funding and provider base is not keeping up with population growth. Recruitment of providers has been difficult and therapists often experience a quick burn out rate.

  Possible explanations for the provider shortages included: lack of education and training; lack of incentives to enter the field; low salary and reimbursement rates; limitations and burdens caused by Medicaid and contract requirements; and the difficulty in serving the severely medically ill. Many providers opt to work in the private sector due to higher reimbursement rates and greater flexibility in choosing one's caseload. LMHAs noted that despite these challenges, they may be subject to penalization when they are unable to contract with providers for services.

- **Lack of funding for case management services.** Participants routinely expressed the need for more case management. Case management is not recognized or funded by the state and no billing code exists for these services, leading LMHAs to perceive that they are simply expected to assume the costs.

- **Children's Services.** Aside from the lack of funding for children's services, participants expressed a lack of supportive adolescent services and family support services, as well as children's psychiatric services. Participants stated the need for more easy and early intervention, and suggested looking first to school staff therapists to provide training, education and other resources.

- **Incarcerated Population.** A significant percentage of the incarcerated population has a serious mental illness and/or substance abuse issue. Jails, where staff are not generally trained to treat this population, are frequently being used as mental health facilities. The lack of timely treatment services, transitional supports, and the prevalence of relapse all contribute to these high incarceration numbers of those with mental and substance abuse problems. Participants stated the need for better collaboration with the Department of Corrections and the Juvenile Justice System. Some LMHAs have already done this, and have seen notable success in limiting the number incarcerated. Participants also stressed the need for more diversion programs and services.

- **Administrative burdens.** Participants expressed challenges in working with Medicaid for reimbursement of services. The denial and appeals claims processes have been noted to be very timely and costly, especially since they typically must be completed by qualified staff. Medicaid will not pay for certain services including residential substance abuse treatment since these services are not covered in Texas' Medicaid State Plan. Participants suggested the state should look closely at managed care denials to determine the reasons similar to the manner in which HHSC alleviated some issues in the past by examining procedure codes.

  Administrative burdens associated with DSHS reporting requirements were also mentioned. Participants noted that compliance with the requirements often necessitates a significant amount of staff time and effort and questioned whether DSHS actually needs or utilizes these reports. This was especially a concern given that the type of information requested is often readily available in DSHS information systems.

- **Concern about a perceived lack of communication between DSHS departments.** Providers noted conflicts between rules and requirements for certain DSHS programs, making compliance difficult. They also noted that critical information is not always conveyed in a timely manner, so that providers may be "dinged" for not complying with rules that are no longer relevant but for which the updates have not yet been conveyed to the parties responsible for enforcement. Participants also noted the lack of transparency in state data.

- **The lack of meaningful or consistent performance standards for providers.** Participants noted the absence of adequate or standard performance assessment measures. Certain LMHAs have implemented their own standards/systems of accountability as far as staff performance in order to ensure that the maximum reasonable amount of time is spent with clients. Participants noted the need to look at outcome based measures in

conducting assessments rather than simply compliance with a minimum number of hours of service.

- **Providing services for the Veteran population.** Texas has a large population of veterans that receive behavioral health services through a variety of means. While many veterans utilize Veterans Administration (VA) services, gaps in service availability exist and some veterans opt to pay out-of-pocket for what they consider to be better treatment elsewhere. While some facilities have successfully collaborated with the VA in their communities, overall coordination is lacking. Participants noted the frequency of PTSD, and addiction in veterans while expressing concern that the need for services would increase as current engagements in Iraq and Afghanistan wind down. In terms of staffing, the VA pays significantly higher salaries than the state, and therefore community providers are losing staff to the Federal system.

- **Technology as a barrier to integration.** Participants expressed mixed opinions about the user-friendliness and usefulness of the Clinical Management for Behavioral Health Services (CMBHS) record keeping system. Multiple providers noted that State investment in a single record transfer system would smooth the transition of clients from one provider or category to another.

- **Concern over Health Care Reform.** Participants expressed concern and confusion over the implications of the expansion of Medicaid eligibility, and the requirement for all to be enrolled in health insurance, thus eliminating the indigent population. Participants were also concerned over possible funding reductions, and the potential loss of matching Federal funds (e.g. for grants).

- **Barriers created by HIPAA.** Providers noted that HIPAA regulations prevented them from accessing records which, if they were able to access, would assist in more efficient and comprehensive assessment, treatment, and care coordination.

Provider Meetings

In addition to the public stakeholder forums, PCG sought to better understand the role of the public providers in the behavioral health system through site visits. PCG worked with the Texas Council of Community Centers and the Association of Substance Abuse Providers (ASAP) to identify mental health and substance abuse providers, respectively, for these site visits. Based on the recommendations of the Texas Council and ASAP, PCG conducted site visits to seven mental health providers and five substance abuse providers.

The provider sites were selected to represent a broad cross-section of the providers in the state, highlighting the geographic and cultural diversity, the varied complexity of operations, and

myriad service delivery offerings across Texas. PCG met with staff at each site and facility tours were conducted as appropriate. Site visits occurred with the following providers:

Table V.2: MH and SA Provider Meetings

Mental Health Providers	
Hill Country MHMR	Kerrville
Austin Travis Integral Care	Austin
Bluebonnet Trails Community Services	Round Rock
Lubbock Regional MHMR	Lubbock
MHMRA of Harris County	Houston
Heart of Texas MHMR	Waco
Tropical Texas Behavioral Health	Edinburg

Substance Abuse Providers	
Phoenix House Academy	Austin
The Gulf Coast Center	Galveston
Fort Bend Regional Council on Substance Abuse	Houston
Resource Recovery Council	Fort Worth
MHMR of Tarrant County	Fort Worth

Several of the above LMHAs and substance abuse providers play a pivotal role in coordinating the delivery of services to clients within their local areas. Often, they receive funding from multiple sources and find creative ways to leverage these funds to maximize the number and types of services offered. It is also common for these providers to collaborate with other providers or entities to address a broader range of client needs. Several providers expressed concern about the potential impact of managed care implementation on their ability to provide services in this manner.

The feedback that was received during the provider visits varied considerably according to facility, as well as geographic and demographic needs. Despite these differences, some common themes that arose during these sessions – aside from those listed previously in the stakeholder session feedback section - include:

- **Leveraging of LMHA funds to provide enhanced or supplemental services to clients.** Several providers noted that they are leveraging their own funds in order to provide the level and type of services required by their client pool in instances where a shortage or lack of DSHS funds for such purposes exists. In some cases, this involves funding additional hours than the minimum requirement for a client service package while in others it means providing services not funded by DSHS, particularly support services such as housing, transportation and employment.

- **The inability to easily transfer funds from one program/service category to another.** Providers lamented their inability to move funds remaining from a particular service area

to supplement funding in another area, noting that the lack of flexibility limits the array of services available for individuals and the effectiveness of services provided to individuals.

- **RDM packages.** Some providers felt that the RDM service packages were too prescriptive and did not allow for flexibility in treatment. Some providers lack the resources to provide the higher service package treatments, and therefore are only able to provide the lower service packages to individuals. Providers noted that the average amounts/units allowed in each service package are often insufficient to address client needs. In other cases, clients may request a less intensive level of service and involvement because of the degree of treatment required in a higher service package.

- **The use of peer support programs as an effective and relatively low-cost option for providing treatment.** Multiple LMHAs noted that peer support has been shown to improve client outcomes, and has proven to be a cost effective method for doing so. Providers stressed the importance of expanding peer support networks and programs throughout the state.

- **Struggle to find bilingual, licensed, trained staff in the border regions.** This item was specific to those providers located in border communities but could become an issue for others as the Hispanic population of Texas continues to expand.

- **Contracting out specific services.** Several LMHAs have opted to contract out specific services recognizing that it is more cost effective than providing them in house. The Wood Group is a contractor that was frequently referenced and provides RDM services to multiple LMHAs.

Individual and Group Interviews

One-on-one or group interviews were conducted with approximately 75 individuals representing state agencies, the Governor's office, service providers, insurers, associations, advocacy groups, hospitals, courts, the criminal justice system, foundations, and other individuals and entities associated with behavioral health services in Texas.

To gain a thorough understanding of DSHS and HHSC functions and operations, interviews were conducted with multiple staff members representing the various divisions including adult mental health services, children's mental health services, substance abuse services, hospital services, contractor services, Medicaid services, budget and forecasting, finance and Affordable Care Act planning. The input gained from these entities proved highly valuable in adding greater depth to PCG's understanding of the behavioral health system in Texas.

The full list of organizations reached through the interview process include:

Table V.3: Individual Stakeholder Groups

Health and Human Services Commission	*Department of State Health Services*
Office of the Governor	*Department of State Health Services Council*
Department of Family and Protective Services	*North Texas Behavioral Health Authority*
Association of Substance Abuse Providers	*Texas Council for Community Centers*
Texas Hospital Association	*ValueOptions*
Austin State Hospital	*Clarity Child Guidance Center*
Legislative Budget Board	*Hogg Foundation*
National Alliance on Mental Illness	*Mental Health America of Texas*
National Association of Social Workers	*Behavioral Health Advocates of Texas*
Tarrant County Courts	*State Legislators and Legislative Staffs*

TX Behavioral Health Study E-Mail Account

As yet another forum for those with an interest in behavioral health services to share their input for this study, an e-mail account was established and the public was invited to submit testimonies, questions or comments. Several individuals who submitted feedback through this medium noted that they were either unable to attend a stakeholder session or attended a session but did not feel comfortable sharing their views in such a public forum.

E-mails from over forty individuals were received. Submissions ranged from formal written testimony complete with facts and figures to informal e-mails with singular recommendations and comments. Also submitted were a number of heartfelt testimonies from individuals who had firsthand experience either as a direct consumer or as a friend or family member of someone affected by behavioral health issues.

All of these e-mails were reviewed and their contents used to further bolster the information contained in this report.

VI. Analysis of the Current Public Behavioral Health System

This section of the report consists of an analysis of the current public health behavioral system. As outlined in prior sections of the report, PCG's focus is on the services that are provided under the purview of DSHS and HHSC's Medicaid and CHIP programs. PCG developed and outlined both strengths and weaknesses of the current behavioral health system. Our findings are based upon our research on national best practices on the delivery of mental health and substance abuse systems, as well as developed through our comprehensive examination of the current system and extensive feedback received through the stakeholder process.

Strengths of the Current Behavioral Health System

The LMHAs are established organizations that date back to the 1960s with substantial capabilities and program reach.

The LMHAs are a primary provider of mental health and substance abuse services in the State of Texas. DSHS contracts with the LMHAs to provide mental health services to the medically indigent, as well as Medicaid recipients. The LMHAs have well established programs that date back to the passage in 1963 of the federal Community Mental Health Act (CMHA) and the Texas Mental Health and Mental Retardation Act of 1965. Over the last decades these organizations have become sophisticated and complex and not only provide mental health services but can provide services to persons with intellectual and developmental disabilities, early intervention services to children, and substance abuse services. The LMHAs are critical providers within the safety net system of health care in Texas. Regardless of any reform considered by Texas in the future, the LMHAs will be a focal point in ensuring mental health and substance services are delivered to Texans. In addition, the local control structure allows each LMHA to address the specific needs of its community by having the flexibility to direct funds and resources as each LMHA sees appropriate.

The NorthSTAR program is well accepted in the Dallas area.

Interviews and stakeholder meetings in the Dallas area showed that the NorthSTAR program is a well-accepted service delivery system. The strong public support for the program is strength as it translates to budget advocacy to gain additional, or at a minimum, maintain existing levels of funding, legislative support, and a higher level of public involvement in program planning. DSHS contracts with NorthSTAR to provide mental health and substance abuse services to the medically indigent and Medicaid populations. The most frequent comments made about NorthSTAR were that there are no waiting lists and NorthSTAR operations are transparent. The DSHS unit supporting the NorthSTAR program publishes information on the NorthSTAR caseloads, costs, services, quality measures and periodic program reports.

The East Texas Behavioral Health Network is a good model for sharing services across geographical regions.

The East Texas Behavioral Health Network (ETBHN) is a good model for sharing services across geographical regions. ETBHN was established in 1998 as a horizontal network comprised of eleven LMHAs that cover 70 counties in East Texas. Governed by a regional oversight committee comprised of LMHA Directors, the ETBHN has a regional network and planning committee, a regional utilization committee and provides training, collective purchasing, grant writing, a pharmacy, and a formal process for studying business opportunities its LMHAs may wish to study and implement.

Through this collaborative effort the ETBHN has been able to realize economies of scale in purchasing activities and have also been successful in leveraging resources for an IT infrastructure to improve business practices. Regional organizations like ETBHN can help programs operate more efficiently and effectively.

LMHAs are participating in electronic records and health information exchanges.

Throughout our interviews and analysis, PCG observed that the LMHAs are innovating or participating in new ways to leverage electronic and health information exchanges to more efficiently manage care. Furthermore, LMHAs are taking steps to expand the use of telemedicine in order to expand access to services and more efficiently deliver care to rural areas of the State. For example, Senate Bill 839 was passed by the 80th Texas Legislature and became effective on 9/1/2007. The bill compelled DSHS and the Department of Public Safety (DPS) to develop an electronic data interchange between the Clinical Management for Behavioral Health Services and the Texas Law Enforcement Communications System. The results of this legislation are apparent in the management and jail diversion plans of the LMHAs for example, when they report participating in daily and weekly electronic record sharing with law enforcement and juvenile justice agencies in their areas.

Texas has numerous informed and articulate advocates and providers who understand what is needed to improve behavioral health care.

The breadth and passion of persons involved in providing mental health and substance abuse is apparent and their daily efforts are what make services successful, despite fundamental challenges within the system of care. The range and depth of stakeholder testimony was impressive. Persons associated with courts, law enforcement, probation departments, and guardianship agencies, non-profit and for profit providers, consumer advocate organizations, hospitals, managed care organizations, children and adult programs, employment, and housing agencies all participated in stakeholder meetings. The information provided included personal histories of mental health and substance abuse, historical comments on the services and local programs, fact-filled testimony about current situations, poignant personal comments such as the hospital doctor talking about the revolving door and lack of local outpatient services, and resigned comments about the impossibility of improvement without additional funding.

Hundreds of thousands of persons receive publically funded behavioral health services.
An analysis of data for DSHS funded contractors shows that approximately 555,000 unique persons received services in the five-year period from 2007-2011. Approximately 139,000 unique persons received services from NorthSTAR in the four year period from 2008-2011. Treatment is effective and providing some services to large numbers of persons has positive effects on employment, family situations, use of medical resources, schooling, the ability to obtain housing, and law enforcement involvement. Such effects are difficult to quantify precisely, but exist nonetheless.

There is no waiting list for NorthSTAR services.
A frequently cited strength of the NorthSTAR program is that it operates without waiting lists. As has been previously noted, NorthSTAR maintains an open network for services and does not limit services based on specific diagnoses.

The Resiliency Disease Management (RDM) system has broad service packages and encourages statewide consistency with minimum levels of service based on uniform assessment.
The RDM concept is successful in the sense it provides a standardized and consistent clinical model for the treatment of mental health and substance abuse services. High percentages of persons in all packages receive assessment and screening, and medications. However, the percentage of persons receiving the three most common mental health treatments; skills training, psychosocial rehabilitation, and psychotherapy differ by service package. The intensity of treatment also differs by service package as does the overall cost per person. A majority of the medical billing codes used to pay for services in the packages are used by small percentages of persons. This implies that the program has a broad repertory of services that can be targeted so that small groups of persons with unique needs can get services appropriate for them.

There is a growing trend to integrate behavioral and physical health services within the LMHAs.
The integration of physical and behavioral health is a recognized evidenced based national best practice. It is very common for individuals with mental illness and substance abuse disorders to also have complex physical health needs. When one disorder goes untreated, it inevitably results in these consumers accessing care through high cost, resource intense, service delivery models. This includes usage of the emergency room or inpatient hospitalizations. PCG was unable to specifically collect data on the degree to which the behavioral health services provided through DSHS were integrated with physical health services; however, interviews with providers yielded several commendable examples of integration. Some of these examples include LMHAs establishing relationships with Federally Qualified Health Centers (FQHCs) through embedding staff, referral linkages, and telemedicine. The operations of the NorthSTAR pharmaceutical 340B program also requires linkages with primary care providers and the savings from the 340B

programs have encouraged the integration of behavioral and physical care. DSHS and its contractors are interested in moving ahead with efforts to further integrate behavioral health and physical health services. This interest is manifest in DSHS documents such as the 2012 Substance Abuse Block Grant Application and the management plans of the LMHAs.

LMHAs appear to be well integrated with judicial and law enforcement agencies.
A significant strength of LMHA operations is their integration with judicial and law enforcement agencies. Persons with behavioral health issues have a significant recurring impact on courts and jails. The local cooperation among LMHA and other agencies helps mitigate this impact and provide for the effective allocation of local resources. The jail diversion plans of the LMHAs show the substantial cooperation among agencies at a local level and interviews with providers and testimony at the stakeholder meetings substantiate evidence of the cooperation. The integration occurs through building relationships with judges, embedding staff in jails, and active cooperation with policing activities such as the Harris County and City of Houston crisis intervention teams which pair police officers and mental health workers to provide street-level services.

There has been a continuous increase in the use of peer support services.
Mental health peer support services have been used since the 1970s but their use became nationally recognized in 2007 when CMS publically endorsed their use in Medicaid programs. Peer support is an "evidence-based practice", meaning there is enough evidence accumulated as to its usage to conclude that the practice is effective. Increasing the use of peer support is a positive trend in the behavioral health system, since it means that an effective treatment practice is being expanded. The NorthSTAR data is clear in showing an increase in its use of peer support and corresponding declines in more expensive counseling and psychosocial rehabilitation services. There is increasing policy interest in peer support programs at the DSHS level and individual LMHAs are working to continuously expand peer support programs.

There has been a significant strengthening of crisis services with clear improvements in patient outcomes.
After considerable groundwork in 2005 and 2006, DSHS received $82 million from the 80th Legislature for a redesign of its behavioral health crisis services. This money was appropriated over FY 2008-2009. An evaluation of the funding by Texas A&M's Public Policy Research Institute showed that the money was spent as intended. Additionally, stakeholder feedback indicated that an expansion of crisis services was needed and that the additional funding from the Legislature has allowed for this expansion, although not all of the proposed expansion occurred as additional funding is still needed.

Additional funding for transitional services has been properly directed and improved program services.

DSHS received $53 million from the 81st Legislature for additional transitional and intensive ongoing services. This was another important funding addition. Funding covered additional transition care for mentally ill persons who need other stabilizing services while receiving treatment or upon its completion. The funding also provided more intensive services, such as psychosocial rehabilitation for children and Assertive Community Treatment for adults. Obtaining these funds strengthened program services as it has allowed for the development of vital transitional services to assist individuals moving from inpatient settings back to the community and in keeping individuals from re-entering the inpatient setting.

The NorthSTAR program is successful in reducing the costs of pharmaceuticals.

The reduction of pharmaceutical costs in the NorthSTAR utilization data is striking. Despite steady increases in number of NorthSTAR persons using services, there have been substantial percentage decreases of 50% or better in the average costs of pharmaceuticals. The NorthSTAR program has successfully capitalized on the 340B Drug Pricing Program. The 340B program was authorized in the 1992 Veterans Health Care Act and limits the cost of covered outpatient drugs to fourteen types of health care providers including qualified hospitals. ValueOptions, which administers the NorthSTAR benefits, works with the University of Texas Medical Branch (UTMB) and NorthSTAR enrollees are seen at UTMB hospitals. Hospital programs of UTMB receive disproportionate share funds from the state and qualify to participate in the 340B program.

The LMHAs are successful in reducing the costs of pharmaceuticals.

The LMHAs have done substantial work to obtain savings on pharmaceuticals on drugs manufactured by Patient Assistance Programs (PAPs). Data supplied by the Texas Council shows that in 2010 the use of PAPs reduced ingredient costs by two-thirds. The substantial savings are the result of hard work by LMHA staff since each client using the drugs has to be enrolled in a manufacturer's PAP. In addition to the use of PAPs, some LMHAs have their own pharmacist or pharmacies, use the pharmaceutical resources of the East Texas Behavioral Health Network (ETBHN), or find other ways to reduce the cost of drugs used by persons receiving service at the LMHA.

Local control of LMHAs brings the possibility of obtaining local funding.

The substantive local control of the LMHAs and their de facto status as a public agency means that they can and do receive funds from local sources. For example in 2011 Tarrant County LMHA received 10% of its funding from local sources, in 2010 Tropical Texas received 7% and in 2011 the Harris County LMHA received 17% of its funding from local sources. The ability to obtain local funding is strength of the current LMHA structure, as it reduces the dependency of the LMHA upon state and federal funding and enables them to undertake initiatives not funded

by the State such as serving individuals that would not otherwise receive services with DSHS or Medicaid funds.

NorthSTAR has successfully blended funds from different sources

The NorthSTAR model has allowed DSHS to successfully blend all available funds from a variety of state, local, and federal sources to effectively meet the need for services in the Dallas service area. This funding model seems to have significant advantages, as it allows for more flexibility in how funds are directed to provide services. Evidence demonstrates that NorthSTAR has been able to provide services to all consumers seeking access and does not have a waitlist for services. This financing mechanism should be considered for service delivery models prospectively.

Weaknesses of Current System

The need for the State of Texas to spend hundreds of millions of dollars on mental health and substance abuse services within county jails and by other law enforcement agencies is viewed as the symptom of an inadequate community based system of care.

PCG received several comments from stakeholders on the hundreds of million dollars that are spent on behavioral health services within Texas county jails, juvenile justice, and probate agencies. Stakeholders suggested that the state would be much better served in directing funding toward effective treatment services instead of attempting to address mental health needs in these detention systems. PCG attempted to collect statistics on these expenditures, but information could not be collected from each of the entities. However, PCG did receive information from the Texas Department of Criminal Justice (TDCJ). The data provided by TDCJ shows that in fiscal year 2011 the Department spent in excess of $130,000,000 on mental health and substance services. Furthermore, many comments were made in the stakeholder sessions that county jails are the largest provider of mental health and substance abuse services. For example, both medical staff and law enforcement officers from Houston testified that the Harris County jail is the largest mental health facility in the state. Those same individuals noted that approximately 2,400 inmates a day receive psychotropic medications and mental health expenditures at the jail totaled $25 million in 2011. Not only does the Harris County jail have specialized mental health units, but as was noted in stakeholder meetings and a meeting with the Harris County MHMR, it also operates a Chronic Consumer Stabilization Program that case manages the top 100 persons that have the most frequent police contacts, psychiatric hospitalizations, and incarcerations. Jails serving as the primary providers of mental health and substance abuse services are not an efficient use of Texas tax dollars and these significant expenditures call into question the adequacy and effectiveness of the current community based system.

LMHAs get funded year after year without competition.

DSHS has funded the same LMHAs for years resulting in a system that is in a "steady-state". It is the observation of PCG that the absence of new funding within the system has made it nearly impossible to effectuate real change within the system. DSHS would find it very difficult to support a reduction in funding of a LMHA solely on the basis of increasing competition, due at least in part to the fact that demand for existing services is well documented and the demand is commonly believed to greatly exceed the current supply. This situation creates a barrier to change, including a barrier to increasing competition, and instead perpetuates the continuation of the same system, regardless of the outcomes of the current system. This absence of competition is contrary to the HHSC's philosophy of Texas State Government as outlined in the Health and Human Services System Strategic Plan, which states:

> *"Competition is the greatest incentive for achievement and excellence. It inspires ingenuity and requires individuals to set their sights high. Just as competition inspires excellence, a sense of personal responsibility drives individual citizens to do more for their future and the future of those they love."*[75]

Competition could potentially lead to increases in efficiency, effectiveness, and innovation, as well as greater access to services. In the absence of competition, there is no way of determining if other providers could do a better job in providing higher quality care, which could result in better patient outcomes. Furthermore, it is unknown if other providers could exercise more control over increases in the costs of providing services or could more efficiently implement the innovation of cost effective services. For example, private inpatient providers have been able to significantly reduce the length of stay and recidivism rates when compared to the state operated hospitals. The increased competition in this area has provided the state with cost savings and/or cost avoidance as evidenced by a reduction in the annual cost per patient. Because the LMHAs are the exclusive providers of rehabilitation services, there is no documented evidence within Texas to suggest how competition might impact these funds or services.

The LMHAs both authorize and provide behavioral health services and this dual role raises a potential conflict of interest.

Having the same entity authorize and provide services creates a potential for financial and clinical conflict of interest. Over the last ten years, Medicaid policy has evolved with a clear trend in moving away from this service model. In fact, Texas Medicaid has developed restrictions against such conflicts in its home and community based care (HCBS) policies. This is a difficult situation to deal with for state agencies that traditionally work with the same providers year after year and rely on them to both assess the need for services and provide the services. There has been no comparable effort for mental health program and services where the LMHAs both authorize services and provide them. In situations where the LMHA contracts for

[75] http://www.hhs.state.tx.us/StrategicPlans/SP11-15/Strategic_Plan.pdf

services and retains case management responsibilities there is less likelihood of such a conflict. While LMHAs are required to retain case management responsibility, LMHAs are able to increase the level at which they contract for services.

House Bill 2292 and subsequently House Bill 2439 "provider of last resort" provisions are neither monitored nor strictly enforced by DSHS.

House Bill 2292, passed in 2003, was the initial legislation that required the LMHAs to develop a network of providers and set forth the conditions under which they may serve as providers. Specifically this bill states, "LMHAs may serve as a provider of services only as a provider of last resort and only if the LMHA demonstrates to the Department that: 1) the LMHA has made every reasonable attempt to solicit the development of an available and appropriate provider base that is sufficient to meet the needs of consumers in its service area, and 2) there is not a willing provider of the relevant services in the LMHA's service area or in the county where the provision of service is needed."[76] This legislation was intended to change the role of the LMHAs and separate the authorization versus delivery of services. While each LMHA publishes informative periodic reports detailing its efforts to recruit providers, PCG is not aware of any trend data, administrative oversight, or published studies that measure how well the LMHAs have worked to address the provider of last resort requirements. The lack of enforcement of this directive is a program weakness since the law defines the contractual relationships that LMHAs should have with other programs and non-compliance weakens the program envisioned by the legislature.

From the standpoint of the consumer, a closed provider network for mental health services does not provide freedom of choice.

The LMHAs are the sole providers of targeted case management and comprehensive services within the Medicaid rehabilitation benefit package. Mental health advocates desired that the funding of these services should not be tied to one service provider. Instead, mental health advocates stressed the need for funding to follow the consumer and, more importantly, to allow the consumer to determine where they want to receive services. Some LMHAs have been more proactive and successful in building provider networks, and in these cases, consumers have some freedom of choice in selecting a provider to receive services from. However, many LMHAs do little to no contracting of services and therefore Medicaid recipients with persistent and severe mental illness and certain Medicaid children have little to no choice in terms of a service provider to seek services from. This runs contrary to Medicaid regulations that indicate beneficiaries should have a freedom of choice of their providers. The restriction on availability is a program weakness since it limits consumer choice. Furthermore, this was an issue that was raised across the State of Texas throughout our stakeholder sessions.

[76] http://www.legis.state.tx.us/billlookup/text.aspx?LegSess=78R&Bill=HB2292

A closed provider network has hindered the ability of other not for profit and/or private providers to play a critical role in the delivery of mental health and substance services to the priority populations.

Again, under the current system of care, the LMHAs are the only providers that are able to provide case management and rehabilitation services to Medicaid recipients that meet clinical criteria. This closed network system has prohibited private and not for profit providers from having a significant role in serving this critical patient population. However, under the NorthSTAR system of care, this is not the case and private and not for profit providers play an important role in delivering care to these patient populations. The closed provider network does not allow for checks and balances, nor does it allow for specialty providers to enter the system of care. For example, PCG met with certain private providers in the San Antonio marketplace that specialize in serving children. These providers indicated there was a significant demand for their services; however, due to the inability to provide services under the rehabilitation program, the demand goes unmet. This type of system structure limits Texas' ability to maximize existing resources or facilitate other providers from entering the market place.

Texas has proposed plans to selectively contract for certain behavioral health services.

HHSC has submitted a 1915(b) Medicaid waiver that would result in the State having the ability to implement selective contracting for the Medicaid rehabilitation with the LMHAs as the sole providers for these services. This waiver would solidify the current service delivery model as LMHAs serving as the only provider of Medicaid rehabilitation services. If the waiver is approved, it would limit the state's ability to implement reforms to the behavioral health system. Furthermore, this waiver may create challenges to the system of care if Medicaid expansion is not repealed under ACA and these services are included in the benchmark plan for the newly eligible. This is due to the fact that it is projected that 90% of the medically indigent currently served by the LMHAs may qualify for Medicaid under ACA and it is not clear that the LMHAs would have the necessary infrastructure and networking capabilities to meet the increased demand of these services. Therefore the pursuit of this waiver is considered a weakness, as it could significantly strain the system of care and hinder the State's ability to properly prepare for Medicaid expansion under ACA, if it is not repealed.

The existing service delivery model is not adequately prepared for the implications of federal health care reform, if it is not repealed.

Beginning in 2014, Texas could see an additional 1.8 million clients enrolled in the Medicaid program.[77] As a result, many individuals that do not have access to services currently will be seeking mental health and substance services from the Medicaid program or through the health plans offered through the Health Benefits Exchange. Given the current service delivery model in Texas, individuals with severe and persistent mental illness will be required to seek services

[77] http://www.hhs.state.tx.us/StrategicPlans/SP11-15/Strategic_Plan.pdf

through the LMHAs unless the current service delivery model is reformed. LMHAs have already encountered significant challenges in having the necessary resources and work force to address the needs of the patient populations they serve today. With the pending expansion to the Medicaid program, there is a strong possibility that the LMHAs will not have the infrastructure, provider networks, or staff to meet this expected increase in demand for services. NorthSTAR and LMHAs currently provide services to many of the individuals who will become Medicaid recipients.

The current geographical organization of the LMHAs lends itself to operational inefficiencies.
There are currently 37 Local Mental Health Authorities that oversee 247 counties across the State of Texas. The geographical boundaries of the LMHAs range from single large counties to combinations of counties. The boundaries of the LMHAs are a reflection of the social and political ties among judges, elected officials, and other community leaders that decided on the geographical regions that their LMHAs would be responsible for. However, in our discussions with LMHAs, DSHS state staff, and consumer advocates, PCG concluded that there was little to no sound policy or programmatic reasons in which the current geographical structure is optimal to meeting the needs of Texans. As PCG has previously acknowledged, some LMHAs have recognized where efficiencies can be achieved by consolidating resources through the formation of the East Texas Behavioral Health Network, which has proven to achieve economies of scale in the purchasing of prescription drugs and information technology infrastructure. However, given the success of this type of arrangement, it raises the question whether greater efficiencies can be achieved if there was further consolidation of functions at the LMHA level. LMHAs have expressed the need and importance to maintain local control, however, consolidation seems desirable given the proposed structure of the regional health partnerships under the recently approved 1115 demonstration waiver. These proposed 19 regions appear to have been constructed on the same premises of maintaining and ensuring local control.

Children receive fewer services.
The statistical estimates of unmet need, the utilization statistics, and comments made in stakeholder meeting seem to agree that in general children receive fewer services. Comments made in the public stakeholder meetings about children's services are complex spanning school, teacher training, medications, step-down units, Medicaid reimbursement levels, wrap-around services, family training, training in self-management, and medication funding to mention only some of them. The result of these multiple issues is that fewer children get services and available services are insufficient with consequent downstream impacts on juvenile justice, schools, courts and family lives. On the positive side, DSHS has received additional funding in recent legislative sessions to provide more children's services and is revamping the service packages it provides to children.

There is a general shortage of substance abuse providers and the number of substance abuse providers has declined over time.

PCG has studied how Texas substance abuse services compare with other states, looked at the detailed utilization of specific substance abuse services in Texas programs, met with substance abuse providers, and listened to stakeholders. Information from all of these sources is consistent with the conclusion that substance abuse treatment is a neglected program in Texas. The need and demand for substance abuse services is substantially greater than the amount of resources the state has appropriated for the provision of these services. This is a significant weakness since treatment has proven successful in reducing substance abuse and the social problems that accompany it. In addition, there appears to be insufficient network capacity. In many cases, services are rendered by a select few providers. This presents major challenges as it results in access to service issues. The table on the following page illustrates the lack of substance service providers by demonstrating the significant percentage of services provided by the largest and top five largest providers within the substance abuse system of care.

Substance Abuse Treatment Service	Number of Providers	Number of Persons	Percent of Persons served by the Largest Provider	Percent of Persons served by Five Largest Providers
HIV Residential	1	96	100.00%	100.00%
Intensive Residential (Women and Children Medicaid Wrap Around)	6	49	59.18%	97.96%
Ambulatory Detoxification (Specialized Female)	6	91	62.64%	97.80%
Supportive Residential (Women and Children)	7	205	40.98%	97.56%
Residential Detoxification (Specialized Female)	8	835	32.69%	85.15%
Opioid Substitution Therapy	9	2,081	29.41%	79.87%
Supportive Residential (Specialized Female)	14	521	29.37%	75.05%
Ambulatory Detoxification	10	586	25.43%	92.61%
Intensive Residential (Women and Children)	13	616	25.00%	72.40%
Intensive Residential (Youth Medicaid Wrap Around-Room/Board)	9	4,265	12.57%	49.24%
Residential Detoxification	14	5,763	18.06%	60.11%

Substance Abuse Treatment Service	Number of Providers	Number of Persons	Percent of Persons served by the Largest Provider	Percent of Persons served by Five Largest Providers
Outpatient (Specialized Female)	25	3,183	16.53%	46.50%
Intensive Residential (Specialized Female)	19	1,959	15.21%	48.95%
Supportive Residential	20	1,417	14.75%	57.23%
Intensive Residential	37	7,532	12.80%	36.55%
COPSD	32	4,265	12.57%	49.24%
Outpatient	67	19,205	6.62%	23.95%
Number Distinct Providers and Persons	**79**	**38,566**		

Pubic data reporting prepared by DSHS on the operation of its providers is minimal and not transparent.

While DSHS regularly publishes data books on NorthSTAR and the LMHAs, performance data on the operation of individual DSHS mental health and substance abuse providers is not published. DSHS has developed a comprehensive community mental health performance assessment (risk assessment) report that is developed on a quarterly basis. The report contains information that collects data on financial viability, adherence to quality management standards, evaluation on the management of crisis services, assessment on continuity of care, waiting list statistics, and contract performance statistics by LMHA. This information is captured on a LMHA basis and separate statistics are captured for adult versus children services. The LMHAs have access to their individual data; however, none of the information is reported publicly by DSHS showing the performance of each LMHA against their peers. This is a deviation from HHS Enterprise practices elsewhere. For example, the Department of Aging and Disability Services (DADS) has a Quality Reporting System (QRS) that provides extensive information about nursing homes, assisted living facilities, and other DADS providers. HHSC likewise, completes quality performance assessments on the Medicaid Managed Care Organizations (MCOs). Despite the precedence of other agencies within the HHS Enterprise, DSHS does not release the results on the performance of the LMHAs. This lack of transparency is a weakness of the current system.

Performance measures of LMHAs and Substance Abuse Providers Requires Refinements

DSHS gathers a significant amount of performance data on the LMHAs and substance abuse contractors. However some of the measures, particularly around quality and outcomes are less than desirable. For example, DSHS currently examines readmission rates among the LMHAs;

however the readmission rates are examined for a one year period. This period between readmissions is significantly longer and not consistent with such measures published by nationally recognized organizations, such the National Committee for Quality Assurance's Healthcare Effectiveness Data and Information Set or HEDIS measures, which instead suggests examining readmission rates over a 30 day period While DSHS does conduct several, special data analyses on hospital readmissions, these analyses are not a routine part of their measurement efforts nor are these results made available to the public.

DSHS does not appear to have integrated its mental health and substance abuse programs

An analysis of DSHS indicates that approximately 60% of persons who are treated for substance abuse are also receiving mental health services. Conversely, roughly speaking about 20% of all persons treated for mental health issues are also receiving substance abuse services. DSHS has essentially organized mental health and substance abuse as two separate programs instead of one program. Different organizational units are responsible for the programs, different data systems are leveraged to collect demographic and clinical information, different contracting approaches are used to purchase services, and, with exceptions, different agencies are hired to provide the services. There are certainly barriers that make the integration of mental health and substance abuse services difficult, including the segregated funding received through federal block grants; however, operating two different treatment systems for what is substantially the same population is a weakness. NorthSTAR should however be noted as an exception as they are required to have integrated mental health and substance abuse programs and services.

Over the last five years, flat funding has contributed to both the LMHAs and NorthSTAR having to decrease utilization, both reducing the number of individuals that receive treatment services or the amounts of treatment services that persons receive.

An examination of per capita funding levels over a four to five year period in both the DSHS contracted programs and NorthSTAR shows that per capita funding levels are basically flat over the last four to five years. Due to population growth and a concomitant increase in the numbers of persons seeking services, per person served funding is decreasing. The costs of services however, has increased and have been offset by utilization decreases in either the number of adults or children using a service or decreases in the amount of services provided. As a result there are fewer individuals receiving services, as well as a dilution in the comprehensiveness of services provided. Through PCG's review of utilization data provided by DSHS, there appears to be an accompanying increase in hospital emergency and observation room usage.

Further review of client and expenditure data provided to PCG by DSHS reveals that both the LMHAs and NorthSTAR appear to be coping with a larger influx of persons and increasing costs of services by providing fewer services or reducing the cost of services by providing fewer skilled services. For example there is a significant increase in training and support services and low cost respite hours and a decline in more expensive psychosocial rehabilitation services. This is a program weakness since it implies that persons at similar impairment levels are gradually

receiving fewer services over time and increased utilization of inpatient resources is a consequence.

The lack of funding for supportive housing, transportation, and employment services is a barrier for both families and adults

Approximately 25-30 studies of Texas mental health and substance abuse have been done in recent years. The subject of "recovery" services has been well documented, as seen in the work of the Texas Recovery Initiative Task Force. PCG also documented numerous stakeholder comments about these topics in the public hearings. There are excellent examples of such services in Texas such as the Oxford House movement in substance abuse recovery. Moreover, when PCG interviewed LMHA staff, there were descriptions provided of housing programs they were working on, but few are operational and available to consumers today. While some productive local efforts exist, the examination of the statewide utilization rates of these supportive employment and supportive housing services shows that they are seldom provided. The lack of such services is an evident program weakness.

Treatment Programs have waiting lists.

DSHS data shows that in November 2011 there were approximately 9,700 adults and 281 children that were either "underserved" or waiting for mental health services from the LMHAs. DSHS data also show that in September 2011 the number of persons waiting for substance services was 10,600. The fact that consumers that qualify for services cannot access these services is a significant weakness to the system of care. As a result of these wait lists these individuals' mental health state must exacerbate and elevate to a crisis level before care is provided. This results in unnecessary costs, as crisis services are expensive and these services could have been avoided had the community based service programs been able to adequately serve the needs of the consumer before their condition exacerbated. In addition, these waiting lists put additional strains on the emergency room departments throughout the State of Texas. PCG heard multiple attestations in our public meetings that eluded to the fact that emergency rooms were being dominated by individuals with mental health and substance abuse needs and, in some areas of the State, it was starting to interfere in the hospital's ability to provide timely treatment to individuals with medical needs. This is a significant weakness and downfall of the current system of care.

The system of care is focused on addressing crisis and not on promoting recovery.

PCG received repeated comments, testimony, and feedback that the current system of care is too focused on addressing crisis instead of focused on recovery. One indicator of this is the targeted population that Texas serves as outlined in the priority patient population parameters. There are currently an estimated 6.1 million individuals without health care insurance in the State of Texas and, as a result, only a very small percentage of these individuals have access to mental health and substance abuse services. These individuals are forced to access care through the emergency room and other high cost service options and do not receive sufficient services until they are in

crisis. Furthermore, the existence of wait lists is more evidence that the current model cannot address all of the individuals that have a need for services, instead they will not receive services until their condition deteriorates, and only then will they be eligible for treatment. This is an inefficient treatment model that leads to unnecessary costs related to inpatient hospitalizations, crisis stabilization, and emergency room usage. If more focus was spent on addressing the needs of consumers early on, these costs could be potentially avoided.

There is a growing workforce shortage of practitioners notably substance abuse providers, psychiatrists (especially child psychiatrists), and therapists.

Numerous organizations including the Hogg Foundation, the ***Statewide Health Coordinating Council, and the*** Center for Public Policy Priorities (CPPP) have systematically documented the shortage of mental health practitioners. For example, in its issue brief of March 2011, the Hogg Foundation pointed out that in 2009, 171 Texas counties lacked a psychiatrist, 102 counties lacked a psychologist, 48 counties lacked a licensed professional counselor and 40 counties lacked a social worker.

This workforce shortage is in fact creating situations where no services are provided or there are delays in service. Numerous comments from persons at the public hearing addressed the fact or effect of workforce shortages. Interviews with providers made the point that one reason for waiting lists was the shortage of psychiatrist to see mental health patients and shortages of trained mental health counselors to provide specialized treatment.

Licensure restrictions potentially limit access to care.

A common theme heard through provider meetings, stakeholder forums, and individual sessions with other stakeholders across the state was that there is a shortage of clinicians to provide services. While the lack of qualified physicians or psychiatrists were identified as one component of the shortage, restrictions on the ability of non-physician practitioners like physician assistants (PAs), Advance Practice Registered Nurses (APRNs), Nurse Practitioners (NPs), and Advanced Practice Psychiatric Nurses (APPNs) to play a more significant role in the delivery of care has unintended consequences in terms of access to services. As an example, Texas is one of 15 states nationally that follows delegated prescriptive authority laws for APRNs. As such, the State Board of Nursing approves the prescriptive authority for the NPs however it is still necessary for a physician to delegate the authority to prescribe before the NPs can perform the duties for which they are approved. In addition to requirement of delegated authority by the physician, Texas has placed additional restrictions on the APRNs and their ability to perform their duties to the full extent based on their education and training. As was pointed out in the LBB's January 2011 GEER Report on APRN Prescriptive Authority & Recommendations, "Texas' statutes regulate advanced practice registered nurses differently depending on the location of the practice site. This inconsistency limits patient access to qualified primary care providers and is especially onerous for physicians and advanced practice registered nurses in rural areas." These limitations are a weakness of the current service delivery system.

RDM has inherent flaws resulting in limited service availability.
The RDM model has inherent weaknesses due to the lack of recognition of certain conditions, most notably anxiety related disorders associated with Post Traumatic Stress Disorder (PTSD) and other trauma related effects. In not recognizing these conditions, RDM leaves out a number of veterans and their families that do not qualify for Veteran's Administration (VA) services as well as many people who have experienced domestic violence and other assaults.

The current service packages under RDM are comprehensive; however, the rigid diagnosis-driven structure under RDM results in some consumers receiving services that may not be necessary while other consumers do not receive any services due to limited resources. This again raises the issue as to whether it is better to have people on waiting lists while providing a comprehensive scope of services to some people or to have no waiting list with everyone receiving some level of service.

Forensic admissions may impact the civil use of state hospitals.
According to hospital reports, on any given day the majority of beds in the state hospitals are full and an inability to take new admissions is a common event within the current system of care. The DSHS Hospital Section does not track wait lists for civil admissions to hospitals, however, waiting lists for forensic admissions are maintained and monitored. Forensic census in state hospitals has doubled over the last decade. In the last 18 months forensic admissions have appeared relatively stable averaging about 125 a month for the period from June 2010 to November 2011 and do not appear to be in an uptrend. Interviews with state staff indicate that the new Montgomery County forensic hospital is helping to manage admissions as is an increased use of outpatient programs.

However, this recent stabilization of forensic admissions is at risk due to the recent ruling of the 419th District Court ruling on the Taylor v. Lakey case. As a result of the ruling, which cited 400 persons waiting in county jails for competency restoration services, the State will be expected to move individuals from jails to state hospitals beds within 21 days of the court order. This ruling, barring any successful appeals, will result in an increasing number of forensic admissions at the expense of civil commitments.

Numerous comments at stakeholder meetings described a lack of outpatient and residential services.
The lack of availability of outpatient services is perceived to be a weakness by mental health stakeholders. Comments about the need for more outpatient services were frequently made at the public hearings and community providers indicated that they turned persons away because of funding or program capacity issues. Comments from hospital staffs at the stakeholder meetings usually included the observation that there was too much use of the emergency room for mental health treatment and more outpatient programs were needed. Law enforcement officials

expressed the view that there needed to be more community services and that the "criminalization of the mentally ill" occurs because there is a lack of community resources and thus jail becomes the place to treat the mentally ill. While there is not unanimity as to what kinds of outpatient services are needed, these frequent comments point to a general perception that more outpatient services are needed.

Texas ranks low compared to other states on substance abuse spending

The Center on Addiction and Substance Abuse (CASA) periodically publishes national comparisons of state spending on substance abuse. According to a 2009 CASA report, Texas ranked 35th out of 47 reporting states on spending for substance abuse prevention, treatment and research. Texas ranked 41st out of 47 reporting states on spending in other state programs such as education, health and child/family assistance to deal with the consequences of substance abuse and addiction. This comparative look at the low expenditure levels in Texas are consistent with the federal data showing the relative lack of substance abuse treatment programs, the decline in substance abuse providers over time, and low numbers of persons treated compared to other states.

Low funding for DSHS behavioral health services compared to other states

The most frequently made comment about the publically funded mental health and substance abuse services in Texas is that according to 2009 Kaiser Family Foundation data, Texas ranks last; lowest in the nation in per capita funding. The low spending means substantial numbers of adults and children that would benefit from treatment do not receive it. The National Association of State Mental Health Program Directors (NASMHPD) ranking of state mental health spending, in addition to the Kaiser Family Foundation ranking, are the most often cited as the basis for these comments. While the rankings are an imperfect source due to the variability across the states in their reporting capabilities and the lack of clarity on the extent to which local funding, Medicaid fee-for-service spending, Medicaid managed care spending, and law enforcement expenditures are captured in these comparisons, these rankings still call attention to a widely cited criticism of the current system.

Useful and effective behavioral health services do not get reimbursed by Medicaid

DSHS provides a broad range of potential services and can target specific services to small groups that need just those services. Medicaid reimbursement is not as flexible. Examples of this lack of flexibility were mentioned in the public hearings:

- Hospitals are not reimbursed for case management even though they provide case management to persons with behavioral health issues that use hospital emergency rooms and observation services;
- On the one hand, Medicaid managed care programs will not pay for substance abuse detoxification in a regular medical-surgical hospital and will only pay for detoxification in a licensed facility for substance abuse treatment. On the other hand, licensed substance

abuse facilities are reluctant to take persons with too many medical problems and have waiting lists; and

- Persons in mental health clinical training programs cannot receive Medicaid funding.

Continual proposals to reduce funding, actual reductions, and low Medicaid rates might restrict utilization or minimize provider participation

The recurrent state budget shortfalls have brought proposals that mental health treatment reimbursement be reduced. The fact that proposed major reductions did not take place indicates that advocates were able to persuade legislators that such costs were not advisable. Comments made during the public hearings specifically said that psychiatrists and substance abuse providers, among others, had lower participation rates in Medicaid because of low Medicaid rates. Such comments are apparently accurate since HHSC has announced a rescinding of 2012 cuts to psychiatrists and psychologists effective May 1, 2012. Measuring the relationship between specific changes in provider reimbursements and declining provider participation is complex. What is a fact is that behavioral health services are continually under budgetary pressure and this constant pressure is a program weakness.

Medicaid Benefits Terminated for people in Jail

At stakeholder meetings, a frequently raised issue was the State's policy to terminate, not just suspend, Medicaid eligibility for prisoners created a barrier to obtaining services upon release. The issue is that when the persons are released from jail there is a gap in Medicaid coverage until the eligibility is restored. The release from jail is a problematical event for social service agencies since the agencies have to deal with the restoration of Supplemental Security Income *(SSI), Social Security Disability Insurance (SSDI), and community supports. The termination of Medicaid creates a medical* gap that is another problem for the agencies and the person released to deal with. The termination has the negative consequences of increasing the difficulty of helping persons reintegrate into a normal and productive environment whereas a suspension of eligibility could eliminate the medical gap and allow individuals released from jail to more efficiently reintegrate into the community services they need.

Federal regulations under 42 CFR 435.1009-.1010 simply prohibit Medicaid FFP for individuals who are inmates of public institutions. The regulations do not require states to terminate an inmate's Medicaid eligibility and some states have chosen to suspend Medicaid benefits while the individual is incarcerated and lift the suspension once the individual is no longer an inmate.

The allocation process for mental health funds has not kept pace with population trends

The process utilized by DSHS to allocate mental health funding to the LMHAs and NorthSTAR was originally based on a per capita allocation. However the process is now largely driven by historical allocations. As a result, the allocations have not kept pace with the trends in population and LMHAs with growing populations have not realized a representative growth in their funding. While DSHS does employ an Equity Distribution process that is based on current per capita

figures, this process is only used when new funding becomes available in the system, as was the case with the Crisis and Transitional funds.

Funding for behavioral health services is "siloed" at the state level

Behavioral health services in Texas are provided in a number of settings including the LMHAs, private providers, inpatient hospitals, and even in jails and prisons. Funding for behavioral health services is as diverse as the possible settings in which services are provided with funds spread across a number of state agencies such as DSHS, HHSC, and TDCJ. While it is difficult to determine the exact amount of funds directly tied to behavioral health services in the budget of an agency like TDCJ, the case could be made that these funds would be more efficiently used to address the behavioral health needs across the state if they were under a single agency.

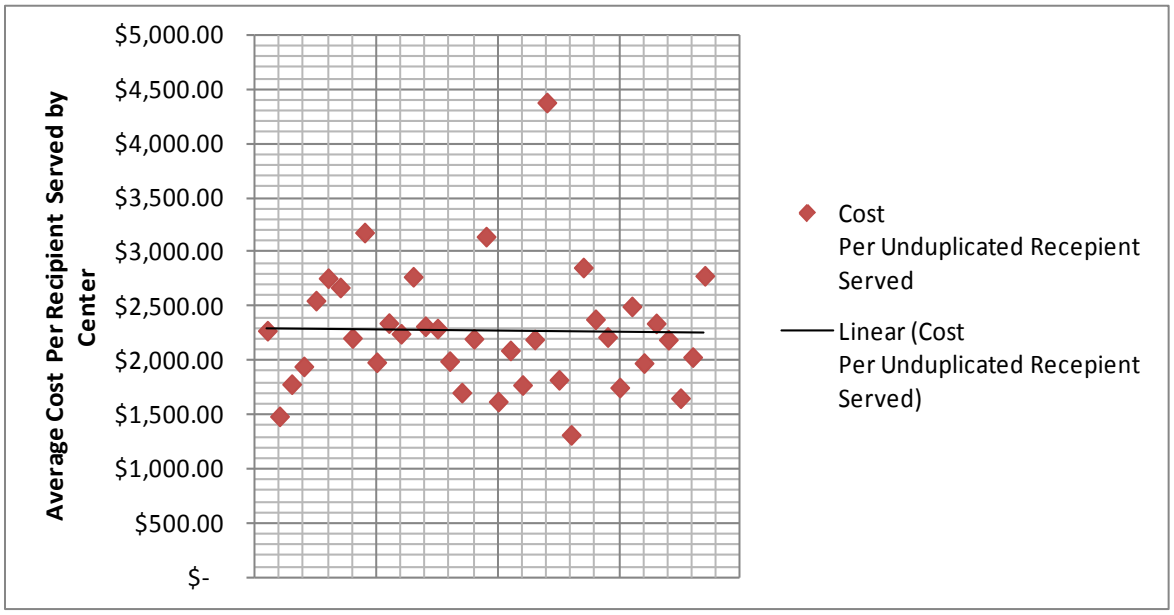
Efforts on a local level, as evidenced by the partnerships between LMHAs and their local court and law enforcement, have been successful at consolidating funding to target specific behavioral health needs in their community and in doing so have found increased cost efficiencies.

Additionally, because funding is "siloed" at the state level, there are unintended barriers to care coordination. As a person transitions from one system of care to another, and one funding stream to another, there is the potential for that person to lose access to services.

There is significant cost variability across the LMHAs

A review of the cost data reported by the LMHAs to DSHS illustrated significant variability in the cost of services across the LMHAs. This variability calls into question on how efficient certain LMHAs are in the delivery of services. Some of the variability can be explained through differences in wage costs across the State of Texas, as well as unique operating circumstances of LMHAs. For example, some LMHAs due not incur rent costs as building usage has been provided free of charge.

However, under the existing funding mechanisms to the LMHAs, there is no incentive for developing efficiencies that would result in lower costs for services. Furthermore, PCG's analysis of LMHA and NorthSTAR cost and utilization data in Section III of this report illustrated that the per unduplicated count cost for the LMHAs is in line with the cost the NorthSTAR system incurs to provide a more comprehensive set of services. The NorthSTAR cost per person served in 2011 was $2,246. However, as outlined previously, the NorthSTAR costs include emergency room, observation room, and inpatient hospital expenditures paid to private provider or non-state hospitals. The LMHA data outlined below include none of these costs and therefore the cost per recipient served is on average higher than the NorthSTAR system of care.


Average Cost Per Recipient Served by Center
$5,000.00
$4,500.00
$4,000.00
$3,500.00
$3,000.00
$2,500.00
$2,000.00
$1,500.00
$1,000.00
$500.00
$-
Cost Per Unduplicated Recepient Served
Linear (Cost Per Unduplicated Recepient Served)

VII. ANALYSIS OF NATIONAL BEST PRACTICES

This section presents descriptions of twenty-two innovative behavioral healthcare programs and strategies. These innovative programs and strategies are included as part of the Phase I report and will be called upon during the development of the recommendations for system reform in Phase II. Not all of these programs and strategies may be right for the State of Texas. PCG will identify those recommendations that should be considered for system reform in the State of Texas in Phase II of our report.

For some of these strategies outlined below, the efforts and data to support the successes and outcomes are definitive, but implementation requires a commitment of time and resources. Others represent the leading examples of changes being implemented across the country. As with most large scale changes, the outcomes data are not always available or are limited to pre-post evaluations, but the consensus opinion of national leaders is strong and positive. Many of these initiatives are characterized by clear incentives: they may break down barriers between funding and agencies or have explicit financial benefits. The innovations encompass the following six areas of concern:

A. Funding and financing strategies for behavioral health services
B. Governance and oversight of behavioral health systems of care
C. Advancing evidence-based and innovative clinical practices
D. Integrated Care – behavioral and primary/acute care services
E. Public/State hospital management
F. Cross system care coordination

These key areas have been selected because they represent the major issues that the state will need to confront as it reforms its behavioral healthcare system:

- Optimizing funding and financing strategies is of particular interest and value when federal and state budgets are under significant stress.

- At the system level, other states have innovative ideas about governance and oversight that provide regional or cross-system oversight and planning to increase local “ownership” of the system.

- At the direct care level, it is crucial to ensure that the services being provided are evidence-based and supported by data and that demonstrate their effectiveness.

- Integrating behavioral and primary health care, often within medical or health homes, is a process that is advancing rapidly, in part due to the incentives incorporated within the Patient Protection and Affordable Care Act (ACA).

- Because management of inpatient facilities generally constitutes a major component of the work of state mental health agencies, new approaches should be considered.

- Because so many individuals are served by multiple state agencies, successful initiatives for cross system care coordination are also important to consider.

Each description includes a brief summary of the innovation or strategy, covering the following topics:

- Organizational/administrative structure
- Population eligible or served (when relevant)
- Financing
- The results that have been achieved, if known, or how outcomes are being or will be measured
- A link to a website with further information and/or
- The source(s) of information used for the summary

Summary of Innovations

A. Funding and financing strategies for behavioral health services

Texas, like all states, wants and needs to maximize the value it receives for every behavioral health dollar it spends. Recent changes to Medicaid rules have increased the options available to states and new payment methods are being adopted and considered for adoption by many states. This section describes the methods that a number of states have employed to achieve important service goals and financing reforms.

- **1915(i) State Plan Amendments: Oregon, Louisiana and Wisconsin.** In 2010 the Center for Medicare and Medicaid Services (CMS) made changes to 1915(i) State Plan Amendment (SPA) regulations contained in the Deficit Reduction Act of 2005. The goal was to remove barriers to offering home and community-based services (HCBS) through the Medicaid State Plan. Oregon, Louisiana and Wisconsin have used different approaches to their SPAs.

- **Financing Medicaid/CHIP and non-Medicaid behavioral health services under an 1115 waiver.** The Arizona Health Care Cost Containment System (AHCCCS) operates the state's Medicaid program under an 1115 waiver authority from CMS with a specific

carve-out for behavioral health services. AHCCCS contracts with the Arizona Department of Health Services, Division of Behavioral Health Services (ADHS/DBHS) for the behavioral health carve-out and ADHS/DBHS contracts with the regional behavioral health authorities (RBHAs), which are managed care organizations.

- **Oklahoma Enhanced Tier Payment System**. For the past three years the Oklahoma Department of Mental Health and Substance Abuse Services (ODMHSAS) has been implementing a new payment system whose goal is to focus its provider system on improving access, engagement and outcomes. They have done this by offering providers supplemental payments for meeting specific benchmarks established by the Department. With community mental health centers being reimbursed at 75 percent of the Medicare fee schedule, ODMHSAS uses the "upper payment limit" to create an incentive corridor for rewarding providers.

- **Louisiana's Statewide Management Organization (SMO),** which began operations in March 2012, is responsible for the delivery of behavioral health services throughout Louisiana, and for improving access to and quality and efficiency of services. The SMO initiative is a key component of Louisiana's efforts to transform how the State delivers and pays for behavioral health services for people of all ages. The goal of the service system, which is known as the Louisiana Behavioral Health Partnership, is to improve coordination and quality of services, as well as outcomes for consumers, such as reducing out-of-home placements, institutionalizations, and repeated emergency room visits and hospitalizations. With funding from different sources, alternative home and community services authorized by the state's 1915(i) State Plan Amendment and local management entities to manage and customize the array of services in each area, Louisiana is poised to make profound changes in its behavioral healthcare delivery system.

- **Maryland Care Management Entities (CMEs)** are responsible for designing and implementing comprehensive plans of care for Seriously Emotionally Disturbed (SED) children and youth and their families. These plans support the organization, coordination, delivery and financing of services across multiple providers and service systems.

B. Governance and oversight of behavioral health systems of care

Each state manages its behavioral health system with different governance structures, agency involvement and legislative authority. The structures are often a legacy of history and legislation that was incremental in nature, adding oversight and new funding on top of older functions. With the changing landscape occurring in healthcare and public funding, now is an appropriate time to consider major change in governance. These examples describe alternatives that have enabled several states to manage Medicaid and non-Medicaid services through regional

authorities, requiring fewer state contracts and less direct oversight of individual providers, as well as new ways of thinking about interagency councils.

The statewide example discusses three states that have created high level coordinating agencies to reduce silos and rationalize bureaucratic structures. The two regional examples outlined below represent two different approaches states are implementing to manage their behavioral health services using Medicaid waivers and legislative authority.

- **Statewide**
  - **Interagency Councils**. This description includes several states –Maryland, Massachusetts and New Mexico -- in which high level interagency councils or cabinets coordinate governance and/or funding of behavioral health services. The principle is that by mandating planning and policy coordination at the highest levels of state government, states can break down the "silos" within which programs traditionally operate and improve the efficiency and quality of care provided to individuals served. These are low cost strategies that can move a system forward or provide a foundation for more transformative change, as in New Mexico.

- **Local Mental Health Authority**
  - The **Arizona Division of Behavioral Health Services** (DBHS) competitively bids and contracts with four Regional Behavioral Health Authorities (RBHAs) to serve six geographic service areas and four Tribal Regional Behavioral Health Authorities (TRBHAs) to provide Medicaid and non-Medicaid services to persons living in Arizona's fifteen counties, including persons living on Indian reservations. RBHAs are not permitted to provide direct care covered services to any of the populations served under the DBHS contract.

  - **North Carolina LME-MCOs**. In North Carolina, numerous Local Management Entities (LMEs) that were initially created to manage state and Block Grant funds for mental health authority behavioral health services, as well as carry out Medicaid enrollment and care monitoring functions, are now being merged into regionally based managed care organizations (MCOs) known as LME-MCOs.

C. Advancing evidence-based and innovative clinical practices

This section describes four innovative clinical approaches that offer the potential of improving care to adults with severe mental illness and children with serious emotional disturbance. While they are quite different from one another, all suggest new approaches to clinical practice. There has been a great deal of attention to advancing the use of more evidence-based practices. The Substance Abuse and Mental Health Services Administration (SAMHSA) maintains a National Registry of Effective Programs and Practices (NREPP) that includes practices with demonstrated

effectiveness. SAMHSA is currently undertaking systematic reviews of the evidence on many of the major services in public behavioral health; these will start being released in the coming months. However, there has been limited success in statewide efforts to significantly increase the use of the most effective practices. One promising practice that was identified in the course of this work, but which is still emerging, is the "Distillation and Matching Model," a process that is being used in several states including Hawaii and Minnesota. This model identifies common elements within evidence-based treatments and provides guidance to clinicians on the choices of different interventions and methods to monitor their efficiency. Because it is not yet at the point of being an evidence based practice and is extremely complex to implement, it is not discussed in detail here.

- **Learning collaboratives** have been used in New York[78] and by the National Child Traumatic Stress Initiative to increase adoption of Wellness Self-Management. New York used a variation of Illness Management and Recovery while the National Child Traumatic Stress Initiative used trauma focused treatments. This type of training and research efforts important to continue. The example here is more systemic in nature and presents significant opportunities for Texas.

- **Mental Health First Aid** (MHFA) provides training to a broad group of individuals in communities, such as public health workers and teachers, in how to provide help to someone who may be in some form of mental health crisis. Recipients of MHFA intervention include people who might be depressed, anxious, psychotic, suicidal, using substances or suffering from trauma or panic attacks, among others. The goals are to increase the front-line capacity to recognize mental health conditions, to intervene appropriately and ultimately to reduce the stigma of these conditions.

- **Peer crisis services** are programs that are operated and staffed by consumers and designed to serve people in mental health crisis. The Living Room, as implemented in Maricopa County, Arizona by Recovery Innovations, is a crisis alternative within which an individual who is having a difficult time or is in crisis can become a "guest" and receive support from a team of Peer Support Specialists.

- **Building Bridges** is a national program, developed and managed under the auspices of the Center for Mental Health Services (CMHS), through which community and

[78] New York's Office of Mental Health uses learning collaboratives to improve practices related to prevention of restraint and seclusion and wellness self-management, among others. See A. Salerno, P. Margolies, A. Cleek, M. Pollock, G. Gopalan, C. Jackson, "Best Practices: Wellness Self-Management: An Adaptation of the Illness Management and Recovery Program in New York State," *Psychiatric Services*, 62:5, May 2011. http://ps.psychiatryonline.org/article.aspx?articleid=116181.

residential treatment providers, policy makers and youth and families are working to improve communication and practice in residential and community-based treatment.

D. Integrated Care – behavioral and primary/acute care services

The finding that individuals with mental health problems die as much as 25 years prematurely due to preventable ailments is a result in part of those individuals not receiving adequate primary health care services.[79] The ACA builds on these findings and offers incentives for the development of Health Homes for specific populations including individuals with behavioral health issues. Health Homes integrate physical and behavioral health care services, thus helping to ensure that those with behavioral health problems receive needed primary care services. Also, Emergency Departments often see individuals whose illnesses or injuries are related to substance use. Screening, Brief Intervention and Referral to Treatment can lead such individuals to receive appropriate care.

- **Missouri Health Homes**. Missouri was the first state in the nation to receive CMS state plan approval for Health Homes for Individuals with Chronic Conditions. Health Homes were authorized by the Affordable Care Act, which allows states to receive increased federal funding (90% federal medical assistance percentage for eight consecutive quarters) for using specific health home services and technology to coordinate care across disciplines to Medicaid beneficiaries with one or more chronic conditions. Two other states have been approved (Rhode Island and New York) and as many as six other applications are pending.

- **Colorado's Medical Home Initiative (CMHI)** began in 2001 in response to the Title V/ Maternal and Child Health goal and measure that all children will receive coordinated care in a medical home. This was a system building initiative that gathered parents, providers and other stakeholders to identify barriers and promote solutions for building and sustaining a system of quality healthcare for children.

- **Massachusetts Screening, Brief Intervention and Referral to Treatment in Emergency Departments (ED SBIRT).** Screening, Brief Intervention and Referral to Treatment (SBIRT) is an evidence-based technique that involves systematic identification of people needing early intervention, engagement of those who screen positive in brief conversations about behavior change, and referral for comprehensive assessments and appropriate treatment when serious problems are found. It has proven to be particularly

[79] J. Parks, D. Svendsen, P. Singer and M.E. Foti, Editors, *Morbidity and Mortality in People with Serious Mental Illness*, National Association of State Mental Health Program Directors (NASMHPD) Medical Directors Council, October 2006. http://www.nasmhpd.org/general_files/publications/med_directors_pubs/Mortality%20and%20Morbidity%20Final%20Report%208.18.08.pdf

effective at motivating individuals to reduce or abstain from harmful substance use and seek treatment when they are not able to do this on their own. Emergency Departments (EDs) are significant points of contact for both substance use related injuries and illnesses. Data indicate that screening patients in emergency settings makes it possible to use their substance use-related injury or illness as motivation to change.

- **Impact Team Care.** IMPACT is a Team Care Model that emphasizes collaboration among the patient, primary care provider (PCP), a Depression Care Manager, and a consulting psychiatrist to effectively treat and improve outcomes for individuals with depression. IMPACT goes beyond co-location of services, achieving thorough integration of care.

E. Public/State hospital management

A major responsibility of state mental health agencies is to care for the most severely impaired individuals. Some of these individuals will require hospitalization for longer terms than available in acute settings or will experience forensic or other complex needs. Ensuring the efficient operation of state psychiatric facilities while at the same time controlling costs and maintaining quality is therefore of importance. This section describes the trends in hospital privatization in three states.

- **State hospital privatization and deinstitutionalization trends: Florida, Kentucky and Arizona.** As state mental health agencies struggle with declining general fund appropriations, concerns about quality of care, aging hospital facilities and U.S. Department of Justice inquiries into states' compliance with the 1999 U.S. Supreme Court decision in *Olmstead v. L.C.*, many states have turned to privatizing state hospital operations and have agreed to revamp community mental health systems in order to provide relief for individuals who are unnecessarily institutionalized. This description presents three states' approaches to the issue of state hospital management.

F. Cross-system care coordination

Individuals with serious mental illness (SMI) and addictions are often involved not only with their state mental health authorities but also with other state agencies, such as juvenile justice, corrections and/or criminal justice, child welfare, income support agencies, and educational institutions. Coordinating care across agencies therefore becomes important to the efficient care of those individuals. This section offers descriptions of several strategies that enhance recovery and support cross-system care coordination.

- **Georgia Peer Support Whole Health Coaches.** Whole health services integrate behavioral health and general health care. A health-trained peer practitioner can serve as a natural ally, someone who has walked "in the same shoes" as the individual seeking

help. Sharing experiences in the context of a strengths-based approach can motivate an individual to move towards health, wellness, and resiliency. Peer Support Whole Health was created when the National Association of State Mental Health Program Directors (NASMHPD) awarded Georgia a Transformation Transfer Initiative (TTI) Grant in 2009. The purpose of the grant was to transform the state's trained peer workforce to promote holistic recovery.

- **Montana Behavioral Health and Corrections Collaboration.** Montana used funding from SAMHSA/CMHS under the Transformation Transfer Initiative (TTI) in 2009-2010 to support a collaborative effort between behavioral health and corrections, including training for law enforcement and criminal defense attorneys and 911 data collection. The program has generated extensive involvement on the part of the law enforcement and legal communities.

- **Minnesota's Stay Well Stay Working program (SWSW)** was one of the projects in the multi-state Demonstration to Maintain Independence and Employment initiative funded between December 2006 and September 2009 by CMS. The goal of the program was to prevent or delay persons with SMI from becoming disabled and no longer able to work by coordinating a comprehensive set of self-directed health, behavioral health and employment support services. Using a randomized design, each person was assigned a Wellness and Employment Navigator whose role was to educate, support and assist participants to empower themselves to manage their own physical and mental health in tandem with their employment issues, and to learn about available community resources and how to access them.

A. Funding and Financing Strategies for Behavioral Health Services

1915(i) State Plan Amendments

Brief summary. On October 1, 2010 the Centers for Medicare and Medicaid Services (CMS) made changes to 1915(i) State Plan Amendment (SPA) regulations contained in the Deficit Reduction Act of 2005. The goal was to remove barriers to offering home and community-based services (HCBS) through the Medicaid State Plan, enabling states to: serve individuals in the most integrated setting with assurances of quality; target HCBS to specific groups of people; and make HCBS accessible to more people, in as many cases as possible before they needed institutional levels of care.

Organizational/administrative structure. Under 1915(i) SPA, states may provide any of the services listed in section 1915(c)(4)(B) of the ACA. These include "case management, homemaker/home health aide, personal care, and adult day health, habilitation, and respite care services." States can also propose "other services" (other than room and board) for CMS

approval. Finally, states may offer self-direction of HCBS under a 1915(i) SPA. This is strongly encouraged by CMS.

Population eligible/served. In the revisions to the 1915(i) rules authorized by the ACA, states must specify needs-based eligibility criteria and are no longer able to limit the number of eligible individuals or limit availability to specific geographic areas or political subdivisions of a state. However, states are able to target specific 1915(i) services to state-specified populations (i.e. "targeted benefits") without regard to comparability. If the number of enrolled individuals exceeds a state's projected SPA enrollment estimate, then non-financial needs-based eligibility criteria can be modified without prior approval from CMS.

States continue to have the option under 1915(i) to provide Medicaid State Plan HCBS to individuals with incomes up to 150% of the Federal Poverty Level (FPL) who are eligible for Medicaid, without regard for whether they need an institutional level of care (and in fact criteria are required to be less stringent). States also have the new option of providing HCBS services to individuals with incomes up to 300% of the Supplemental Security Income (SSI) Federal Benefit Rate (FBR), provided they are eligible for (but not necessarily enrolled in) HCBS under 1915(c), (d), (e) waiver or 1115 demonstration programs. For this group, states may use institutional eligibility or post-eligibility rules in the community (as under a 1915(c) waiver), with post-eligibility rules determining how much, if anything, the individual may be liable to pay for HCBS. Multiple 1915(i) service packages are also possible. For example, one 1915(i) plan could offer services to people with physical and/or developmental disabilities while another offers services to people with SMI.

State 1915(i) Strategies

In response to the fact that over 600 people have been in state psychiatric facilities for a year or more, Texas has been planning a 1915(i) SPA aimed at providing services in home and community-based settings, including apartments, individual homes, small group community-supported residential settings, adult foster homes and assisted living facilities, with a broad range of therapeutic services and supports, including peer supports. A growing number of other states are planning and/or have submitted 1915(i) SPA applications to provide services to different populations. They include *Oregon, Louisiana and Wisconsin.*

Oregon. In 2010 Oregon submitted a 1915(i) SPA aimed at providing individuals with significant physical or behavioral or mental health needs with in-home or residential care, respite and adult day services so that institutional care could be avoided. Goals were to realign the long-term care system to absorb an increase in clients due to demographic shifts, support transition from nursing home facilities, and serve Aged, Blind or Disabled individuals who were ineligible but in need of timely and cost-efficient access to community services. In addition to therapies, case management and consultation, the 1915(i) SPA focused on personal care assistance,

socialization, community survival skills and recreation. In the initial phase of this budget neutral plan, service to relatively small numbers (up to approximately 3000) was planned.

Louisiana. The State of Louisiana also drafted a 1915(i) SPA in 2010. This was an Adult Psychosocial Rehabilitation and Clinic option for adults with Severe and Persistent Mental Illness to be implemented through existing Developmental Disabilities and Aging and Physical Disabilities systems. It was to operate in concert with 1915(b) and 1915(c) waivers for a comprehensive system of care for behavioral health services for adults and children. This included a Coordinated System of Care (CSoC) for children and adolescents in need of mental health and substance abuse services and/or with significant behavioral health challenges or co-occurring disorders that put them at risk for out-of-home placement. The overall system of care is now managed by a State Management Organization, Magellan Health Services, Inc., through a capitated payment system. According to the state's website[80], they are still awaiting approval of the SPA application (see separate discussion, below, of this State Management Organization.)

Wisconsin. Wisconsin's 1915(i) plan was to provide psychosocial rehabilitation, which covered Community Supportive Living Services, Supported Employment and Peer Support Services. Counties and tribes could elect to provide these services, which they were required to do as a package. Eligibility criteria include eligibility for Medical Assistance under the Medicaid State Plan, residing in the community, and meeting the needs-based criterion of "functional impairment that interferes with or limits one or more major life activities and results in needs for services that are described as ongoing, comprehensive and either high intensity or low intensity." Income limits were set at 150% FPL. Like most states, Wisconsin has struggled with budget deficits since their application. In 2011, 58% of the Wisconsin Medicaid budget was expended on 5% of the Medicaid population. As of September, 2011, the state was considering conversion of their SPA to a 1937 Benchmark Alternative Benefits Plan, which would allow them to amend their Medicaid State Plan to provide alternative benefit packages to beneficiaries, without regard to comparability, statewideness, freedom of choice, or certain other traditional Medicaid requirements.

Link to website with further information:
http://www.cms.gov/smdl/downloads/SMD10015.pdf

Source(s) of information for this summary:
http://www.oregon.gov/DHS/aboutdhs/budget/09-11budget/pops/3_11.pdf?ga=t
http://new.dhh.louisiana.gov/assets/docs/BehavioralHealth/publications/CSOC/Doucments/1915bwaiverapp03092011.pdf
http://www.dhs.wisconsin.gov/dsl_info/infomemos/DMHSAS/CY2009/200903imemo.htm

[80]See http://new.dhh.louisiana.gov/index.cfm/page/455/n/214

Blending Funds: Risk Based Financing for Medicaid/CHIP and non-Medicaid Behavioral Health Services - Arizona

Brief summary. Since 1994, the Arizona Department of Health Services, Division of Behavioral Health Services (ADHS/DBHS) has contracted exclusively[81] with RBHAs to deliver Medicaid and non-Medicaid services to members enrolled in Arizona's public mental health system[82]. The Arizona Health Care Cost Containment System (AHCCCS) operates the Medicaid program under an 1115 waiver authority from CMS with a specific carve-out for behavioral health services. AHCCCS contracts with ADHS/DBHS for the behavioral health carve-out and ADHS/BHS contracts with the RBHAs. RBHAs are MCOs (Prepaid Inpatient Health Plans) that enter into risk-based capitated contracts with ADHS/DBHS for all behavioral health Medicaid and children's health insurance program (CHIP) services provided to adults and children. State general fund and block grant funds are allocated to the RBHAs on a monthly basis. All funds are subject to encounter thresholds and adherence to monthly, quarterly and annual financial reporting requirements.

CMS regulations effective August 2002 require that capitation rates be actuarially sound. ADHS has contracted with an actuarial firm to develop statewide and RBHA specific capitation rates using utilization and cost experience from RBHA-submitted encounter data and financial reports and converting that experience into appropriate baseline data for the next contract period. Adjustments are made to the base data including any unusual service utilization changes, program changes, and provisions for administration and profit, risk and contingency underwriting. Capitation rates are annually adjusted and calculated for all Medicaid and CHIP populations. RBHAs are paid a per member per month (PMPM) rate for each person enrolled in the Medicaid and CHIP programs. For the Medicaid population, RBHAs receive a PMPM for the following rate groups: foster-care children, non-foster care children, seriously mentally ill adults, and a combined adult rate for general mental health and substance abuse. For the CHIP population, the RBHAs receive PMPM rates for children and seriously mentally ill adults.

For the Medicaid program, ADHS/DBHS requires service expenditures to be≥ 89.5% of RBHA revenue. RBHAs are allowed 7.5% for administration and up to 3.0% profit/earnings. ADHS/DBHS has in place a risk corridor arrangement that provides motivation to the RHBAs to appropriately manage expenses, yet provides financial protection against unmanageable losses. The risk corridor provides incentive for the RBHAs to operate efficiently and generate net income, but also provides for the return of any excessive profit or earnings to the state. To ensure compliance with performance thresholds such as increasing consumer-operated services and

[81] Tribal regional behavioral health authorities provide services to tribal members on reservation through an intergovernmental agreement.

[82] Note that while there are some similarities between the Arizona system described here and the Dallas Texas NorthSTAR program, they are outweighed by the differences between the two systems. NorthSTAR is described in other sections of the larger report.

increasing services to Latino, African American, and American Indian youth, ADHS/DBHS withholds one percent of the capitation rate as an incentive and administers the incentive once the performance thresholds are met. For the non-Medicaid crisis, medications, and supported housing services, ADHS/DBHS prohibits the RBHAs from earning a profit.

ADHS/DBHS receives 1.41% or $12.4 million of Medicaid revenue (FY 2012) to administer the Medicaid behavioral health carve-out. Through a cost allocation process and allowable administrative costs specific to grant programs, other fund sources contribute to the ADHS/DBHS administrative budget.

Population eligible/served – numbers and demographics. More than 205,000 adults and children are enrolled in the behavioral health system in Arizona, of whom 87.7% are enrolled in the Medicaid program. Medicaid enrollees are offered a flexible and comprehensive array of mental health and substance abuse services including support and rehabilitation services, housing, counseling, medication, case management, inpatient, residential, and crisis services. Services to adults with SMI who are not eligible for Medicaid are limited to crisis, medications, and supported housing services.

Table VII.1: Behavioral Health Population

Client Group	FY 2011 Clients Enrolled	FY 2011 % Enrolled
Child / Adolescent	64,277	31.3%
Adult – SMI	41,767	20.3%
Adult - General Mental Health	67,816	33.0%
Adult - Substance Use	31,449	15.3%
Total enrollment*	**205,309**	**100.0%**
*Total enrollment numbers in this table are different from client financial eligibility found in Table 2 due to changes in status.		

Table VII.2: Behavioral Health Population by Fund Source

Client Group	FY 2011 Clients Enrolled	FY 2011 % Enrolled
Title XIX – Medicaid	180,609	87.7%
Title XXI – CHIP	1,853	0.9%
Non-Title XIX/XXI	23,477	11.4%
Total enrollment	**205,939**	**100.0%**

Financing. In FY 2011, ADHS/DBHS was authorized a total of $1.46 billion for the delivery of behavioral health services. Funding sources include state and federal Medicaid contributions (88.2%), CHIP (0.5%), Federal Grants (3.3%), State General Fund (4.3%), County Funds (3.2%), Tobacco Tax (0.4%) and other funds (0.1%).

The average cost per person served (all funds) varies widely by population. At the high end, Arizona spends $9,755 per adult with SMI; at the low end, Arizona spends $2,798 for adults with general mental health disorders. An annual average cost for all enrolled children and adolescents (foster care and non-foster care) is $4,832.

Results achieved. ADHS/DBHS uses a variety of mechanisms to measure whether treatment is positively impacting the lives of clients. When comparing Arizona to other states through nationally recognized outcome measures, Arizona ranks in the top third to half on many of the indicators.

Link to website with further information:
http://www.azdhs.gov/bhs/index.htm

Source(s) of information for this summary:
ARS § 36-3410, 36-3412 http://www.azdhs.gov/bhs/fin_rep_gde.pdf
http://www.azahcccs.gov/commercial/Downloads/CapitationRates/BehavioralHealth/BHS_SFY12_Rate_Cert_TXIX_041511.pdf

Oklahoma Enhanced Tier Payment System (ETPS)
Brief summary. For the past three years, the Oklahoma Department of Mental Health and Substance Abuse Services (ODMHSAS) has been implementing a new payment system, the goal of which is improve access, engagement and outcomes within the provider system. They have done this by offering providers supplemental payments for meeting specific benchmarks established by the Department. Providers received an additional $6 million in payments in FY 2009, $19.7 million in FY 2010 and an estimated $28.6 million for FY 2011. With community mental health centers (CMHCs) being reimbursed at 75 percent of the Medicare fee schedule, ODMHSAS uses the "upper payment limit"[83] to create an incentive corridor for rewarding providers. This program is improving access, engagement and outcomes by incentivizing providers and simultaneously minimizing the burden on them.

Organizational/administrative structure. Oklahoma's public mental health system is centralized rather than county based. It uses state general funds to support its operating budget and Medicaid dollars to support services. Fifteen CMHCs, five of which are state operated and ten of which are contracted non-profits, serve the state's seventy-seven counties. ODMHSAS's existing Integrated Client Information System (ICIS) was important to the implementation of the new program because through it, providers can see both how other agencies are performing on an aggregate level and how their own clients are doing individually. ODMHSAS implemented six measures at the outset of the program and an additional six measures after the first six months. ODMHSAS also invested considerable effort in engaging providers in the process and in ensuring that the effort required imposed a minimal burden on them. Ultimately, the provider community has been competitively motivated to succeed.

Providers receive some payment for partially meeting benchmarks. However, a provider that performs more than one standard deviation below the benchmark does not receive payment for that measure. Providers that receive only a partial payment or none of their available funds for a measure leave money "on the table" to be distributed as a bonus to providers exceeding the benchmarks by at least one standard deviation. The first set of six measures included a measure of access to treatment for adults, while the next six included the same measure for children. Under the ETPS providers are rewarded for serving a larger number of clients.

[83] The Upper Payment Limit is an estimate of the maximum amount that could be paid for Medicaid services under the rules in the state plan – for OK this was driven by the Medicare fee schedule and Medicaid payment principles.

Population eligible/served – numbers and demographics. In FY 2010, ODMHSAS provided mental health services to 41,579 adults aged 18 and over and 3,854 children, and substance abuse services to 20,981 individuals. Because the measures are at a high administrative level, they apply to the entire population served.

How the innovation/strategy is financed. ODMHSAS worked closely with the state Medicaid agency and CMS in amending its State Medicaid Plan to change the CMHC payment methodology. Because CMHCs in Oklahoma are reimbursed at 75 percent of the Medicare fee schedule, the state had room to create an incentive corridor by using the additional 25 percent "upper payment limit"[1] to reward providers. No funds are ever withheld from a provider. Oklahoma providers, like those in most states confronting budget gaps, recognized the ETPS as their only immediate opportunity for improving their situation.

Results achieved. ODMHSAS is achieving its goals. Providers have made improvements in access to care, client engagement and clinical outcomes. The six Group One measures focused on processes of care and included the following:

- The percent of outpatient crisis service events that were followed up by an outpatient non-crisis service within eight days;
- The percent of inpatient/crisis service events that were followed up within seven days of discharge;
- The percent of individuals who have self-reported a reduction in drug use over a seven month period;
- The percent of clients receiving at least four services within 45 days of the start date of an outpatient episode;
- The percent of clients with a medication visit within 14 days of admission; and
- The interval between initial contact and receipt of treatment services for adults, measured by using a "secret shopper" approach. That is, ODMHSAS personnel develop scenarios representing person(s) seeking treatment and use them as the basis for anonymous telephone conversations with the agencies to assess if providers meet the established access criteria. The calls are scored based on the length of time between initial contact and the time that a face-to-face clinical meeting is provided.

Within the first eighteen months the system showed improvement in every one of these measures, with an increasing number of CMHCs receiving bonuses over time.

The Group Two measures focused more on clinical improvement, especially improvement in scores on the Client Assessment Record, a standardized assessment tool measuring client functioning that centers were already required to use. Additional Group Two measures included the percent of individuals who have not been readmitted to inpatient/facility-based crisis stabilization after an inpatient/facility-based crisis stabilization discharge six months prior; the percent of clients who received one or more peer support services; and the interval between initial contact and receipt of treatment services for children. This last measure also used the "secret shopper" approach described above. Results have been similarly positive for these measures.

Overall, the state is rewarding providers for serving more people: between January 2009 and June 2010, the number of people served increased by 22 percent.

Link to website with further information, if available: Details on the methodology for determining payments to CMHCs, including a summary for calendar year 2009, are available at http://www.odmhsas.org/eda/etps/CMHC450F.pdf. A one-month report is shown at http://www.odmhsas.org/eda/etps/CMHC550A.pdf. Call Mark A. Reynolds or Debra Tower at (405) 522-3813 for further information.

Source(s) of information for this summary:
The Oklahoma Enhanced Tier Payment System: Leveraging Medicaid to Improve Mental Health Provider Performance and Outcomes, National Association of State Mental Health Program Directors. December 2011.
http://www.nasmhpd.org/general_files/publications/The%20Oklahoma%20Enhanced%20Tier%20Payment%20System%20Final.pdf

Louisiana Statewide Management Organization (SMO)
Brief summary. In September, 2011, Magellan Health Services was recommended to become the Statewide Management Organization (SMO) responsible for the delivery of behavioral health services throughout Louisiana. The SMO initiative is a key component of Louisiana's efforts to transform how the state delivers and pays for behavioral health services for people of all ages. The goal of the service system, which is known as the Louisiana Behavioral Health Partnership (LBHP), is to improve coordination and quality of services, as well as outcomes for consumers, such as reducing out-of-home placements, institutionalizations, and repeated emergency room visits and hospitalizations. The SMO will be responsible for improving access, quality and efficiency of services. Anticipated rollout of the program is March 2012.

Organizational/administrative structure. The Office of Behavioral Health (OBH) in the state's Department of Health and Hospitals has been tasked with overseeing all components of the SMO contract. This oversight is accomplished through the LBHP, which is overseen by OBH and operated by Magellan. LBHP is responsible for providing a full range of behavioral health services. It is also responsible for developing and sustaining services for Permanent and Supported Housing and for Louisiana's Coordinated System of Care (CSoC) for children and youth who are at imminent risk of out-of-home placement. The CSoC has an Interagency Council that sets policy. In addition to reducing the number of children in residential and detention settings and improving outcomes for them and their families, the CSoC is charged with reducing the cost of services by leveraging Medicaid and other funding sources. In July 2011, five Louisiana regions were selected in a competitive process to implement the formation of regional Community Teams and the development of regional Wraparound Agencies and Family Support Organizations, with the goal of ultimately bringing the CSoC statewide.

Population eligible/served – numbers and demographics. LBHP covers four populations: children with significant behavioral health needs who are in or at risk of out-of-home placement; people who are Medicaid-eligible, have medically necessary behavioral health conditions and need coordinated care; Medicaid-eligible adults with SMI or addictions; and non-Medicaid children and adults who have SMI or addictive disorders.

How the innovation is financed. Louisiana's Medicaid program is one of the largest in the nation, with $6.6 billion in expenditures during State Fiscal Year 2009-2010. There is currently $23 million in unmatched state funds from the four state agencies that participate in the Partnership that will generate an additional $53 million in federal funds for a full year of SMO implementation.

Louisiana has put in place a series of State Plan Amendments and Medicaid waivers, including two 1115 waivers (one for family planning and one for New Orleans Community Health Connection) and five 1915(c) waivers. The Louisiana 1915(c) waivers include: Adult Day Health Care (for transition aged persons ages 65 and older, and people ages 22-64 who are physically disabled); Supports (day habilitation, prevocational, supported employment and coordination services for people ages 18 and older with autism, mental retardation or developmental disabilities); Residential Options (providing community living supports, day habilitation, out-of-hone respite, supported employment, assistive technologies, companion care, dental services, and transportation to people of any age with MR, DD or autism); Community Choices (adult day health care, caregiver support, coordination, assistive devices and medical supplies, nursing, personal assistance, assistive devices and medical supplies, skilled maintenance therapy and transition services for those who are 65 and older and those ages 21-64 who are physically disabled); and Children's Choice (center based respite, support coordination, family training and supports and environmental accessibility adaptations for children ages 0-18 with MR, DD, or autism).

The state has also applied for a 1915(i) waiver. Under Section 1915(i) states can define beneficiaries' needs; do not have to require that beneficiaries meet institutional levels of care to qualify for services; and do not have to demonstrate budget neutrality as they do under 1915(c) waivers. Persons served under 1915(i) must meet home and community based services (HCBS) waiver guidelines, and can have incomes of up to 300% of the SSI Federal Benefit Rate.

SMO management of eligible children and youth is on a non-risk basis and funded by Medicaid, various state human service agencies, the State General Fund and federal Block Grant financing. Managed behavioral health services for Medicaid eligible adults with addictive disorders, SMI, acute stabilization needs, or adults who have met the above criteria and require medically necessary services for stabilization and maintenance, will be managed on a risk basis. Services funded by the Mental Health and Substance Abuse Prevention and Treatment Block Grants will also be managed by the SMO under contract.

Results achieved. Louisiana has demonstrated that the state has put the systems in place for SMO management of a statewide system. It is expected that the state will document consumer and system level outcomes following implementation in the spring of 2012.

Links to websites with further information:
http://new.dhh.louisiana.gov/assets/docs/BehavioralHealth/publications/CSOC/Doucments/LBHPFAQsJune2011.pdf
http://new.dhh.louisiana.gov/index.cfm/page/455/n/214

Source(s) of information for this summary:
Department of Health and Hospitals, State of Louisiana. About the statewide management organization (SMO). http://new.dhh.louisiana.gov/index.cfm/page/455/n/214
Department of Health and Hospitals, State of Louisiana. About the coordinated system of care (CSoC). http://new.dhh.louisiana.gov/index.cfm/printer
http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers.Waivers.html.

Maryland Care Management Entities
Brief summary. Maryland Care Management Entities (CMEs) are responsible for designing and implementing comprehensive plans of care for Seriously Emotionally Disturbed (SED) children and youth and their families. These plans support the organization, coordination, delivery and financing of services across multiple providers and service systems. The youth and family are assigned a dedicated care coordinator with a small caseload who helps to facilitate a family driven, youth guided care planning process that ideally involves all service providers as well as others who are working with the child and family, such as school personnel or members of the

family's community. The care planning team meets periodically to review progress towards goals and adjust the plan based on the changing status and needs of the child and family.

Maryland's CME system is statewide. It ensures accountability to the child and family through individualized care planning and coordination of a comprehensive array of professional and natural services and supports that address every key domain of the child's functioning at home, in school and in the community. The CME is embedded in the community, aims to reflect the diversity of the families it serves and collaborates with family and youth advocacy organizations to support youth and family voice, choice and ownership in their plans of care.

Organizational/administrative structure. The CME model is supported by the Maryland Children's Cabinet in the Governor's Office for Children (see description of the Children's Cabinet within the section on Interagency Councils, immediately below). This level of governmental support is critical. The Maryland Department of Mental Hygiene provides administrative oversight through its Office of Child and Adolescent Services (OCAS). Although in some cases CMEs provide formal utilization management for a fee, this oversight is done in Maryland by an Administrative Services Organization (ASO), ValueOptions, with which OCAS has contracted using blended state and Medicaid dollars. The ASO ensures that youth meet eligibility criteria and receive the appropriate type and level of care. CMEs are supported by a web-based information system that links service utilization and costs for each family. The Maryland Coalition of Families for Children's Mental Health is contracted by the Department to provide advocacy and support, which has been instrumental in moving the initiative forward through changes in state administrations. CMEs also contract with local family organizations to provide Peer Support Partners, who collaborate with care coordinators to provide support for youth and their families. A Blueprint Committee for Children's Mental Health, sponsored by OCAS, serves in an advisory capacity for CMEs and other children's mental health services.

Population eligible/served – numbers and demographics. CMEs serve children and youth ages 0-21 with SED, assessed through the use of validated screening and care planning tools. Many of these youth are at risk for hospitalization or residential placement and are involved in or at risk of becoming involved in multiple service systems, including juvenile justice and child welfare. Different funding streams support different age groups and require that youth meet specific criteria. Maryland's SAMHSA grant initiatives require that they be age 0-21 years and have SED; the 1915(c) Medicaid waiver requires that youth ages 6-20 years be eligible for Medicaid and meet medical necessity criteria for Residential Treatment Center (RTC) level of care. Services must also meet cost neutrality guidelines. Some youth also meet criteria for one of two diversionary programs, Child Welfare's Place Matters Group Home Diversion and Juvenile Services Out-of-Home Diversion.

How the innovation is financed. Maryland was one of the first SAMHSA Children's Mental Health Initiative (CMHI) grantees (in 1993) and these grants have been critical in establishing a

funding base for the CME model and the wraparound services it coordinates. Two of these six-year grants, totaling nearly $9 million each, are operating currently: “MD CARES” (begun in 2008), for children and youth at risk of or in the process of involvement in the state’s foster care system; and ”Rural CARES,” a county based rural initiative begun in 2009. As of 2009, many participants have been served under a 1915(c) Medicaid waiver, designed to provide expanded services for youth at risk of entering RTC level of care. Psychiatric Residential Treatment Funding (PRTF) demonstration waiver dollars are also blended with state dollars to provide diversionary services that cut across mental health, child welfare and juvenile justice systems. The state’s Mental Health Transformation State Incentive Grant has been used by the Children’s Cabinet to conduct fiscal and policy analyses to develop the statewide RFP for regional CMEs. Maryland is now planning a 1915(i) State Plan Amendment (SPA) for Home and Community Based Services that may consolidate some of these other waivers. Under Section 1915(i) SPA states can define beneficiaries’ needs, do not have to require that beneficiaries meet institutional levels of care to qualify for services, and do not have to demonstrate budget neutrality as they do under 1915(c) waivers. Maryland is now also working with the Center for Health Care Strategies to make the best use of Children’s Health Insurance Program Reauthorization Act (CHIPRA) funds. CHIPRA was enacted in 2009 to make $33 billion available over 4 ½ years to provide health insurance for 4.1 million children in Medicaid and the original Children’s Health Insurance Program who otherwise would have been uninsured in 2013.

Results Achieved. Maryland has partnered with the Maryland Coalition of Families for Children’s Mental Health, Johns Hopkins University and the University of Maryland to develop three “center of excellence” institutes (the Maryland Child and Adolescent Innovations Institute, the Children’s Mental Health Institute, and the Juvenile Justice Institute), which provide training, technical assistance and evaluation services. Annual reports to the Legislature document wraparound fidelity, increases in child and family functioning, and reductions in levels of restrictive services. Leaders report that maintaining long-term relationships, both among state agencies and with the Legislature, are essential for securing sustainable funding.

Links to websites with further information:
http://medschool.umaryland.edu/Departments/Department-of-Psychiatry/Division-of-Child-and-Adolescent-Psychiatry/Innovations-Institute/Care-Management-Entities-(CME).asp

http://medschool.umaryland.edu/Departments/Department-of-Psychiatry/Division-of-Child-and-Adolescent-Psychiatry/Innovations-Institute/MD-CARES.asp

http://medschool.umaryland.edu/Departments/Department-of-Psychiatry/Division-of-Child-and-Adolescent-Psychiatry/Innovations-Institute/Rural-CARES.asp

Source(s) of information for this summary:

Maryland Child and Adolescent Innovations Institute and Mental Health Institute (2008). *The Maryland care management model: care coordination using high fidelity Wraparound to support the strengths and needs of youth with complex needs and their families*. Division of Child and Adolescent Psychiatry, Department of Psychiatry, School of Medicine, University of Maryland , September 2008.

B. Governance and Oversight of Behavioral Health Systems of Care

Interagency Councils

In several states, high level interagency councils (under a variety of names) coordinate governance and/or funding of behavioral health services. While the definition that agencies provide and the implementation strategies and level of funding vary, the common principle is accepted that mandating coordination at the highest levels of state government will break down the "silos" within which professionals traditionally operate and improve the efficiency and quality of care provided to individuals served.

Children's Cabinet and Governor's Office for Children - Maryland

Brief summary. For well over 20 years Maryland has had a cabinet level body with responsibility for coordinating its child serving agencies at the state and local levels. It is, at this point, well institutionalized.

Organizational/administrative structure. Maryland has had a Children's Cabinet (or Subcabinet) authorized by either the Governor or the Legislature since 1987. The current Children's Cabinet was authorized in 2005 and continues in the current administration. The Executive Director of the Governor's Office for Children (GOC) chairs the Cabinet, and the GOC has staff to support this and other functions of the GOC. The Cabinet has seven ex officio members, including (in addition to the chair) the Secretaries of the Departments of Juvenile Services, Human Resources, Budget and Management, Disabilities, Health and Mental Hygiene, and Education. The Children's Cabinet has an Advisory Council, established by statute in 2006, and also chaired by the Executive Director of the GOC. The Advisory Council:

- Recommends to the Children's Cabinet ways for the state to meet the goals of its own programs for children and families, and how those programs can be coordinated with programs operated by local governments, local management boards (LMBs), and private agencies; and

- Is mandated to recommend ways of creating more capacity to serve youths in their communities, reducing reliance on institutions as a primary intervention for at-risk youth offenders, promoting positive outcomes for youth, funding best practices to deter juvenile crime and delinquency, and reducing the disproportionate confinement of minorities.

While the Cabinet sets overall policies, the GOC is responsible for implementing them. The work of the GOC includes:

- Managing the Children's Cabinet Interagency Fund, which has, since 1990, used state funds allocated for out-of-home placement prevention services. It amounted to $49,571,618 in FY 07, and supports administration and local programming by LMBs.
    - The LMB is the core entity in each of Maryland's 24 jurisdictions. The goals of the LMB are to develop and strengthen local services to children and families and stimulate collaboration among public and private child serving agencies.
    - They have existed since 1990, and their memberships are required to consist of 51 percent public and 49 percent private sector representatives.

- Convening state agencies, local partners, and community stakeholders to develop policies and initiatives that reflect the priorities of the Governor and the Children's Cabinet, including an emphasis on prevention, early intervention and community-based services; and

- Partnering with the LMBs to plan, coordinate, and develop comprehensive systems of care, to fund and monitor the delivery of integrated services to children and families; and to inform the collective and specific work of the Children's Cabinet by developing and supporting an interagency data management system, collecting and analyzing additional data, and reporting to the Children's Cabinet, the General Assembly, and other stakeholders on the progress of Maryland's children.

Populations eligible/served – numbers and demographics: As of January 2012, 1,355,230 children lived in Maryland (Children's Defense Fund, http://www.childrensdefense.org/child-research-data-publications/data/state-data-repository/cits/2012/2012-maryland-children-in-the-states.pdf. All of those children are the potential concern of the GOC.

How the innovation/strategy is financed. The GOC and the Children's Cabinet are financed under Executive Order 01.01.2005.34. The Executive Order establishes the Children's Cabinet Interagency Fund, which consists of "(a) Moneys appropriated, transferred, credited, or paid into the Fund from any source; and (b) Federal grants and allocations accepted for the benefit of the Fund." (http://goc.maryland.gov/PDF/ex_order.pdf) The Department of Education is the fiscal agent for the fund.

Results achieved. The Children's Cabinet has set eight areas for describing child well-being and has specified statewide goals and indicators for seven of them; the eighth is left to the LMBs to define. The GOC website provides detailed information on the statewide indicators and in 2011 the GOC published a 130-page report describing progress toward meeting the goals.

Links to websites with further information:
Websites of the Governor's Office for Children, http://goc.maryland.gov/index.html, and the Children's Cabinet, http://www.msa.md.gov/msa/mdmanual/08conoff/cabinet/html/child.html.

Source(s) of information for this summary:
Website above and *Maryland's Results for Child Well-Being, 2010*. Maryland Children's Cabinet and Governor's Office for Children, August 2011. http://goc.maryland.gov/PDF/2010%20Marylands%20Results%20for%20Child%20Well-being.pdf.

Governor's Interagency Council on Substance Abuse and Prevention - Massachusetts
Brief summary. In 2005 the Commonwealth of Massachusetts implemented a strategic planning process to develop a statewide response to the problem of substance abuse. Dozens of agencies, individuals and organizations, public and private, participated in a series of meetings to discuss the issue and the options for dealing with it. The process was led by the Department of Public Health (DPH), including the Commissioner and the Director of the Bureau of Substance Abuse Services. The first goal of the Strategic Plan that resulted from this process was the creation of a Governor's Interagency Council that could bring together the key stakeholders on a continuing and regular basis to assure that the Commonwealth's efforts to prevent and treat substance abuse were well coordinated. The Council was created during the administration of Governor Mitt Romney and chaired by then Lieutenant Governor Jane Swift; it was re-established in Governor Deval Patrick's Democratic administration by Executive Order in January 2008. The current Lt. Governor, Timothy Murray, has chaired the council since that time. According to the Executive Order creating it, the Council's goals include: supporting the efforts of the Massachusetts DPH to supervise, coordinate and establish standards for the operation of substance use prevention and treatment services; overseeing implementation of initiatives and programs that direct existing resources and minimize the impact of substance abuse; and developing and recommending formal policies and procedures for the coordination and efficient utilization of programs and resources across state agencies and secretariats.

Organizational/administrative structure. The Interagency Council is staffed by an Executive Director appointed by the Lieutenant Governor. It consists of the following members or their designees: the Secretaries of Health and Human Services, Public Safety, Elder Affairs, and Veterans Affairs; the Commissioners of Education, Correction, Probation, Public Health, Youth Services, Mental Health, Mental Retardation, the Massachusetts Rehabilitation Commission, Transitional Assistance, Children and Families, Health Care Finance and Policy, Deaf and Hard of Hearing, and Early Education and Care; the Assistant Commissioner of Public Health for Substance Abuse Services; the Medicaid Director; the Chair of the Parole Board; a representative of the Juvenile Court; a representative of the Superior Court; a representative of the District Court; a representative of the Governor's Office; one private citizen who is recovering from substance abuse problems; and four members appointed by legislative leadership. All members

serve without compensation. The membership thus encompasses a broad group of individuals whose work is affected by individuals with substance abuse problems. The Interagency Council meets four times each year. A smaller Executive Committee meets on a bi-monthly basis to provide guidance on the recommendations of the Council.

How the Council is financed. The only financing for the Council is support for the Executive Director's salary, in-state travel money and conference attendance. Half of this funding comes from the Department of Corrections (because the original incumbent of the position was a Department of Corrections employee) and half from the Department of Public Health. There is also an interagency service agreement between the two agencies.

Results achieved. The Council has met quarterly since its creation in 2005. Despite relatively infrequent meetings and a simple staff, by bringing together a broad group of stakeholders and increasing their awareness of the issues surrounding substance abuse, the Council helps to reduce administrative silos. In FY 2011 the Council released an Updated Strategic Plan, including eight focus areas that are guiding the Commonwealth's efforts through 2016. The policy initiatives the Council has discussed and implemented include expansion of recovery high schools, increasing awareness on underage drinking, reforming the prescription monitoring program, and developing education and training tools for physicians.

Link to website with further information. Further information about the Governor's Council is available at: http://www.mass.gov/governor/administration/ltgov/lgcommittee/subabuseprevent/.

Source(s) of information for this summary. Personal communication with the Executive Director of the Interagency Council, William Luzier, and the above website.

Behavioral Health Purchasing Collaborative and Planning Council – New Mexico

Brief summary of innovation. New Mexico's Behavioral Health Purchasing Collaborative is a cabinet-level group representing fifteen state agencies and the Governor's office. Legislation creating the Collaborative was signed into law on March 3, 2004 as House Bill 271. An initiative of former Democratic Governor Bill Richardson, it continues under his Republican successor, Susana Martinez. The Collaborative includes the secretaries and directors from nearly all agencies involved in the delivery, funding, or oversight of behavioral healthcare services, as well as fifteen local collaboratives, consumers and family members, providers and advocates working together to create a single statewide behavioral health service delivery system. The Collaborative, which was instituted on May 19, 2004, is mandated to:

- Inventory all expenditures for mental health and substance abuse services;
- Create and oversee funding for a single behavioral health care and services delivery system that promotes mental health; emphasizes prevention, early intervention,

resiliency, recovery, and rehabilitation; manages funds efficiently; and ensures availability of services throughout the state;

- Pay special attention to regional, cultural, and other local issues, and seek and consider suggestions of Native Americans;
- Contract with a single, statewide services purchasing entity;
- Monitor service capacities and utilization in order to achieve desired performance measures and outcomes;
- Make decisions regarding funds, interdepartmental staff, grant writing, and grant management;
- Plan comprehensively and meet state and federal requirements; and
- Oversee systems of care and the administration of those systems.

To achieve these goals, a Steering Committee meets weekly and coordinates the work of teams that are responsible for Contract Oversight, Administrative Services, Quality and Evaluation, Capacity/Service Development (which itself has eight Work Groups), Training and Research, and Local Collaboratives. An eight person Cross Agency Team supports the 18 Local Collaboratives (a single local collaborative for each of the state's 13 judicial districts and five Local Collaboratives that represent the state's sovereign Tribes, Nations, Pueblos and off-reservation populations) through six offices throughout the state. Each Local Collaborative is made up of consumers, family members, advocates and providers.

Organizational/administrative structure. The Secretaries of the Human Services and Health Departments co-chair the Collaborative. There is also a full-time CEO and a Deputy CEO. In 2005 the Collaborative contracted with ValueOptions New Mexico as the state's first Statewide Entity to manage combined behavioral health funding. By FY08 Value Options NM managed over $388 million of behavioral health funds whose sources included Medicaid and Federal Block Grant funds, as well as General Fund behavioral health monies from the Departments of Health; Children, Youth and Families; Aging and Long Term Services; Human Services; and Corrections. OptumHealth New Mexico took over the contract on July 1, 2009. Currently, the Collaborative is responsible for developing a strategy to integrate behavioral health services with managed care organizations and will eliminate the Statewide Entity.

A Behavioral Health Planning Council (BHPC), formerly known as the Governors' Mental Health Council, was also established in 2004 as part of House Bill 271. The BHPC advocates for

adults, children and adolescents with SMI or severe emotional, neurobiological and behavioral disorders, including substance abuse and co-occurring disorders; reports to the Governor and Legislature on the adequacy and allocation of mental health services throughout the state; encourages and supports the development of a comprehensive, integrated, community-based behavioral health system of care; advises state agencies responsible for behavioral health services for children and adults; and reviews and makes recommendations on various plans and applications for the Mental Health and Substance Abuse Block Grant applications, the Medicaid State Plan, and any other plan or application for federal or foundation funding for behavioral health services.

The BHPC membership includes three representatives (one consumer, one family member, and one provider or advocate) from each Local Collaborative, in addition to at-large and state agency secretaries or their proxies, appointed by the Governor. A diverse and representative Executive Committee directs the work of the BHPC.

Population eligible/served – numbers and demographics. More than 25% of New Mexicans (approximately 512,000) are enrolled in Medicaid and may seek services through the Statewide Entity under the oversight of the Collaborative. In addition, the Collaborative ensures that the Statewide Entity provides behavioral health services to the following populations:

- Individuals on parole or probation under New Mexico's Correction Department community supervision program;
- Individuals who are homeless and need shelter services;
- Individuals not eligible for Medicaid who need substance abuse or mental health services funded by the state's general fund;
- Individuals who are not Medicaid eligible but who meet certain clinical and financial criteria for SAMHSA's SAPT or CMHS Block Grant;
- Individuals served by other Federal grant programs;
- Child welfare and non-child welfare involved youth under the age of 21 who receive children's behavioral health services through a combination of general and federal funds; and
- Individuals living in certain parts of the state who may receive services from special legislative appropriations.

How the innovation/strategy is financed. The Collaborative has never received a direct appropriation from the NM Legislature. For many of the early years of the Collaborative, the Mental Health Transformation State Infrastructure Grant (MHT-SIG) from CMHS provided funding for Collaborative staff, staff training, and statewide development of consumer networks. In addition, staff from the Collaborative's agencies participated regularly in cross-agency teams to oversee implementation of the Statewide Entity's contract. Once the MHT-SIG funding ended, the Collaborative member agencies continued to fund six full-time staff and indirect support through staff interagency collaboration on cross agency teams.

Results achieved. This innovation is exemplary because it has transcended changes in political leadership in both the Governor's Office and the Legislature and continues to make very important decisions about NM's behavioral health service delivery system. For example, the state recently announced its intention to collapse several of its Medicaid waivers into one comprehensive 1115 waiver and integrate behavioral health, primary care, and long term care services into "carve-in" managed care arrangements. The Collaborative will continue much of its work in this new system. This bold step is one of many as NM prepares for the possibility of Medicaid expansion in 2014.

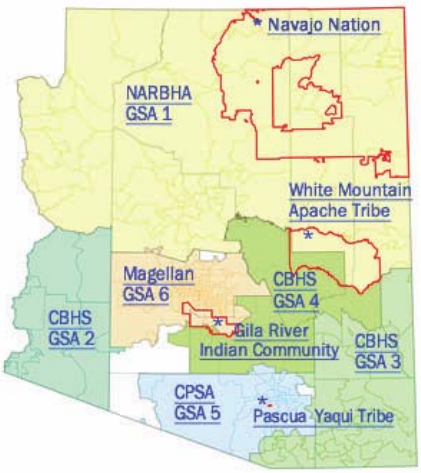
From a service delivery perspective, the Collaborative's cross-agency team for quality improvement has trained more than 175 staff and members of local collaboratives to measure the status and performance of local systems of care. With one of its main requirements to assess needs, gaps and service priorities, the Collaborative established local collaboratives and Core Service Agencies (CSAs) to be the key drivers behind local evaluation. Local collaboratives and CSAs are able to participate in and utilize system level information to improve local practice and mobilize local action.

Link to website with further information:
http://www.bhc.state.nm.us/index.htm

Additional Source of information for this summary:
Personal Communication with Betty Downes, Collaborative Quality and Evaluation Team.

Regional Behavioral Health Authorities - Arizona

Note: The previous Arizona example, in the Funding and Financing Strategies section, discussed those topics. In this example, the focus is on system structure.



Brief summary. The Arizona Division of Behavioral Health Services (DBHS) competitively bids and contracts with four Regional Behavioral Health Authorities (RBHAs) to serve six geographic service

areas and four Tribal Regional Behavioral Health Authorities (TRBHAs) to provide Medicaid and non-Medicaid services to more than 205,000 persons living in Arizona's fifteen counties, including persons living on Indian reservations. RBHAs act as managed care organizations (Prepaid Inpatient Health Plans) providing mental health and substance use services to adults with SMI, adults with general mental health and/or substance use conditions, and children and adolescents with mental health and substance use conditions.[84] RBHAs are not permitted to provide direct care covered services to any of the populations served under the DBHS contract.

Organizational/administrative structure. Two of the four RBHAs are private for-profit companies, and two are private not-for-profit corporations. RBHAs are required to meet numerous contracting requirements including staff requirements for medical oversight, clinical management, network management, quality improvement and management, claims processing, financial management and special population management. RBHAs are also responsible for determining if an adult meets the functional and symptomatic criteria for SMI.

Population eligible/served – numbers and demographics. During FY 2011, the RBHAs/TRBHAs served more than 64,000 children and 141,000 adults. The number of RBHA contracted providers and the number of adults and children served by each RBHA/TRBHA is illustrated in the following table:

[84] Tribal Regional Behavioral Health Authority (TRBHA) contracts/IGAs are not competitively bid.

Table VII.3: Number of RBHA Contracted Providers and Number of Adults and Children Served

RBHA/TRBHA	FY 2011 Number of Clients Enrolled	FY 2011 % Clients Enrolled by T/RBHA	FY 2010 Contracted Network Providers*
Northern Arizona RBHA - 5 northern rural counties	27,819	13.5%	347
Cenpatico Behavioral Health System - 8 rural counties	22,980	11.2%	260
Community Partnership of Southern AZ - Pima County	44,223	21.5%	266
Magellan of Arizona - Maricopa County	106,008	51.5%	557
Navajo Nation	1,937	0.9%	n/a
Gila River Indian Community	1,519	0.7%	n/a
Pascua Yaqui	1,158	0.6%	n/a
White Mountain Apache	295	0.1%	n/a
Total Enrollment	**205,939**	**100.0%**	**1430**
*Number may be duplicated as one provider may treat multiple populations in multiple regions of the state.			

How the innovation/strategy is financed. All funding for Medicaid services and state appropriations is managed by the RBHA. RBHA annual administrative cost cannot exceed 7.5% of annual revenue (less interpretative services).

Results achieved. Adequate capacity to ensure timely member access to providers and services is a priority of the DBHS/RBHA contract. These contracts include several provisions and measures to ensure timely access to service for both adults and children. For many years, appointment availability has been measured by i) routine appointment for initial assessment within seven (7) days of referral; ii) members that received mental health service within 23 days of assessment; and iii) availability of urgent/emergent services within 24 hours of referral. Access to care based on appointment availability has continued to improve for both children and adult populations. Most measures indicate a compliance rate >90%.

Links to websites with further information, if available:
http://www.azdhs.gov/bhs/contracts/mar/pdf/magellan_amend19.pdf
http://www.azdhs.gov/bhs/documents/Intro-AZ-Public-BHS.pdf

http://www.azdhs.gov/bhs/ntwrk_plan.pdf

Source(s) of information for this summary:
A.R.S §36-3410 – see http://law.onecle.com/arizona/public-health-and-safety/36-3410.html

Local Management Entities – North Carolina
Brief summary. System transformation being implemented by the North Carolina Department of Health and Human Services (DHHS) and Division of Medical Assistance (DMA) is converting fee for services, county-based care management system for rehabilitation funding into a system of integrated, regionally based MCOs that carry risk in capitated Medicaid funding arrangements for both acute and rehabilitation funds. Numerous LMEs that were initially created to manage state and block grant funds for mental health authority behavioral health services, as well as carry out Medicaid enrollment and care monitoring functions, are now being merged into regionally based MCOs known in North Carolina as LME-MCOs. Historically the North Carolina Divisions of Mental Health (MH), Developmental Disabilities (DD) and Substance Abuse Services (SAS) have overseen MH/DD/SA services through a network of twenty-three contracted area authorities and county programs that provided and managed services to the state's one hundred counties. As a result of 2001 system reform, the roles of these authorities were changed from service providers and managers to LMEs, whose exclusive responsibility was to manage care. The LMEs managed state funded and federal mental health and substance abuse block grant services and endorsed and monitored private sector providers of Medicaid funded MH/DD/SA services, performed utilization review functions for non-Medicaid services, and also developed partnerships with community organizations and engaged family members in planning and policy implementation for both state- and Medicaid-funded services. A 2011 competitive process is now changing this system.

Current system transformation efforts driven by DMA seek to achieve greater access, efficiency and accountability. These efforts, to be completed in 2012 and 2013, aim to consolidate the 23 LMEs into 12 LME-MCOs that manage all state, block grant and Medicaid services under a mix of contracted and capitated payment arrangements. This brings three service sectors (MH/DD/SA), as well as state, federal block grant and Medicaid funding streams operating under two waivers (1915(b) and 1915(c)) together under the risk-based care management of entities that have local roots. LME-MCOs, once they have developed the necessary infrastructure, will develop and manage a network of the most qualified local providers and authorize and pay for and coordinate care for individuals with the highest needs. This arrangement seeks to build on local funding and the knowledge of and connections with local communities and service providers.

Organizational/administrative structure. The State Divisions of MH/DD/SAS and DMA concluded that in the new system LMEs need to cover sufficient numbers of lives to be financially stable. As a result, North Carolina passed a state law that required an increase in the

population base needed to become an LME-MCO, then released an April 1, 2011 solicitation for proposals from LMEs to become LME-MCOs under Medicaid waivers, which forced merger and consolidation. This is a dramatic change for local authorities and yet the state will work with LME-MCOs on implementing the new requirements, including legislative and statutory restrictions on types of providers utilized and set percentages of funding that must be utilized for specific populations. The state is reorganizing its infrastructure accordingly to support LME-MCO implementation of managed care principles and technologies needed to manage the transformed system.

One of the priorities in North Carolina's approach is statewide implementation of Medicaid 1915(b) and (c) waivers and preparation for ACA expansion though designated LMEs operating as MCOs. The Divisions within DHHS are responsible for ensuring appropriate use of federal block grant and Medicaid funds, while by state law LME-MCOs will be responsible for the management of "all public resources that may become available for mental health, intellectual and developmental disabilities, and substance abuse services, including federal block grant funds, federal funding for Medicaid and Health Choice and all other public funding sources." Thus LME-MCOs will be managing a comprehensive service system supported by multiple federal and state funding streams.

The LME-MCOs must manage and pay for emergency department services and may eventually be responsible for the cost of state hospital beds. This creates strong incentives for the LME-MCO to reduce the cost of emergency room and inpatient care by creating and paying for timely and effective diversionary, crisis intervention and aftercare services. Through new billing codes, LME-MCOs will also become responsible for managing the provision of behavior health services in primary care settings, and the number of covered individuals who have a primary care visit will be a performance measure.

Population eligible/served. The population includes both those who are Medicaid eligible and meet criteria for 1915(a), (b) and (c) waiver services and those covered under MH and SA block grants, as well and those served through other state funding streams. LME-MCOs are charged with prioritizing MH/DD/SAS service funds for "severely disabled and economically disadvantaged individuals in the catchment area in accordance with DHHS Target Population categories."

How the innovation is financed. Each LME/MCO will receive a capitation rate from Medicaid that will be established based on its own historical utilization patterns for identified MH/DD/SA populations. Block grant and other state funds will be allocated according to a need-based formula.

Link to website for further information:
http://www.ncdhhs.gov/mhddsas/providers/1915bcWaiver/waiver1915b-cplan-final10-19-11.pdf

Source(s) of information for this summary:
North Carolina Department of Health and Human Services (2011) Partnering for Success: The 1915 (b)/(c) Medicaid Waiver Initial DHHS Strategic Implementation Plan.
July 1, 2011 – June 30, 2013. October 19, 2011.
http://www.ncdhhs.gov/mhddsas/providers/1915bcWaiver/waiver1915b-cplan-final10-19-11.pdf

C. Advancing Evidence Based and Innovative Clinical Practices

Learning Collaboratives: National Child Traumatic Stress Network and Others
Brief summary. Experience in the field suggests that traditional didactic training focused on developing clinical skills does not successfully establish evidence-based practices in service delivery systems. In response to this finding, the National Center for Child Traumatic Stress (NCCTS), the technical assistance center for the SAMHSA-funded National Child Traumatic Stress Initiative (NCTSI), has published a detailed articulation of a learning collaborative (LC) model for clinical practice. On its website, NCCTS provides a detailed description of its LC model and a comprehensive toolkit, and also summarizes past and planned LCs provided to NCTSI grantees. In 2009 the Houston Department of Health and Human Services, Baylor College of Medicine and DePelchin Children's Services participated in a NCCTS LC on Psychological First Aid, designed to foster short- and long-term adaptive functioning in people who have experienced disasters or acts of terrorism. In 2007, DePelchin also participated with two other Texas agencies as well as agencies from other states in an LC on Trauma-Focused Cognitive Behavioral Therapy. A range of other NCCTS LCs involving grantees in numerous states include several in Gulf Coast states aimed at cognitive behavioral approaches to address the aftermath of Hurricane Katrina.

The goal of each LC is to close the gap between usual care and best practice in a specific service area. An agency such as NCCTS implements the collaborative through interactive training methods using skill focused learning based on adult learning principles. The LC leadership team includes intervention experts, people with experience implementing the practice in comparable settings, and experts in implementation science or with experience in implementing LCs. Participating agency teams commit to a nine to twelve month process that includes three two-day training sessions with monthly conference calls and "action period" activities by participants in between. Between five and twelve teams with a minimum of twenty-five participants in all are grouped together to share in learning and mold the process to their needs as they proceed. These teams meet within their agencies at least monthly and must complete assessments of organizational readiness and capacity as well as assignments developed by the group in monthly pre-work conference calls. "Small Tests of Change" (STOC) are used by each collaborative group in a Plan-Do-Study-Act model designed to accelerate progress. Teams are coached in the use of metrics that inform the STOCs. The three in-person sessions are organized in a stepwise fashion to: 1) develop relationships and a foundation for the collaborative, 2) provide training

aimed at clinical and implementation competence, and 3) develop systems for adapting, sustaining and disseminating the intervention with fidelity. Participants are urged to "share relentlessly" in organizational give and take about their collective experiences and challenges related to adapting and adopting practices. A collaborative intranet is used to support teaching, share resources and promote collaboration. NCCTS collaboratives ultimately use the NCCTS website to publish fact sheets on the practice and cross-cultural considerations as well as audio/PowerPoint presentations on related topics.

*Organizational/administrative structure***.** Since the year 2000 NCCTS has carried out numerous LCs which grantees apply to become participants. High level leaders from participating agencies are strongly urged to attend along with clinicians and their supervisors. NCCTS operates under contract with SAMHSA to implement the LCs, coordinate the network, maintain a vast resource library and carry out numerous other training and technical assistance activities. States have also sponsored LCs: New York has implemented several, including one on Wellness Self-Management, a variation on Illness Management and Recovery (and evidence-based practice), and another on reducing seclusion and restraint. Massachusetts implemented one seeking to reduce readmission rates. The California Institute for Mental Health implemented an eight county collaborative in 2008-2009. LCs have been used extensively by the Network for Improvement of Addiction Treatment (NIATx), the Institute for Healthcare Improvement and the Center for Healthcare Strategies.

Population eligible/served – numbers and demographics. Learning collaboratives can be applied to the full range of clinical practices serving various populations across the age span. Examples include:

- A National Governor's Association learning collaborative aimed at integrating chronic disease prevention services for people of all ages in health care delivery systems;
- The National College Health Improvement Project learning collaborative targeting high risk drinkers;
- A National Learning Collaborative to prevent infant mortality in high-risk newborns, in which the University of North Texas Healthy Moms-Healthy Baby-Healthy Community program is a participant; and
- A Minnesota Health Care Homes (medical home) learning collaborative, developed under legislative state mandate in response to health care reform.

In the case of NCCTS, the population of focus is children of all ages and their families who have experienced trauma, which can include family violence, traumatic loss, military trauma, disasters, terrorism and various other forms of trauma.

Financing. NCCTS has had ongoing SAMHSA funding since 2000 to serve as the national technical assistance center for NCTSI. Participating grantees are expected to use their grant funds or other agency resources to support agency participation. In other cases, such as those described above, state funds or other sources of funding are used to support specific LCs.

Results Achieved. NCCTS has been remarkably effective in working with grantees to develop, adapt, test and disseminate largely cognitive-behavioral trauma interventions. LCs have been one component of a comprehensive systems-level approach to implementation of new practices. A number of these are now listed in the SAMHSA National Registry of Evidence-based Programs and Practices (NREPP). Numerous positive outcomes for children and families have been documented in the NCTSI national evaluation.

Link website with further information:
http://www.nctsn.org

Source(s) of information for this summary:
Markiewicz, J., Ebert, L., Ling, D., Amaya-Jackson, L., & Kisiel, C. (2006). *Learning Collaborative Toolkit*. Los Angeles, CA, and Durham, NC: National Center for Child Traumatic Stress. http://www.nctsn.org/nctsn_assets/pdfs/lc/Module_all.pdf

Institute for Health Care Improvement (2003). *The Breakthrough Series: IHI's collaborative model for achieving breakthrough improvement*. IHI Innovation Series white paper. Boston: Author.

Mental Health First Aid
Brief summary. Mental Health First Aid (MHFA) was created in 2001 at the ORYGEN Research Center, University of Melbourne, Australia by Anthony Jorm, a mental health literacy professor and Betty Kitchener, a health education nurse. The goal was to provide training to individuals, such as public health workers, in how to provide help to someone who may be in some form of mental health crisis. The rationale for providing training in Mental Health First Aid is that there is "widespread ignorance of mental health," stigma that prevents individuals from seeking help provided by mental health professionals, and a lack of knowledge about mental health among public health professionals as well as others who might be able to provide aid to colleagues or family members.

Course formats vary, but participants generally receive twelve hours of training spread over three sessions of four hours each, delivered by instructors who themselves have received one week of

training as well as ongoing support. According to the Mental Health First Aid USA website, the training teaches a five step action plan, known as ALGEE, which stands for:

- **A**ssess for risk of suicide or harm
- **L**isten nonjudgmentally
- **G**ive reassurance and information
- **E**ncourage appropriate professional help
- **E**ncourage self-help and other support strategies

An ongoing theme in the training is listening with respect for each individual's dignity and avoidance of blame for his or her symptom. MHFA now has a manual, a link to which is provided below. Current MHFA webinars can be found at http://www.mentalhealthfirstaid.org/cs/what_you_learn/webinars.

MHFA developers contrast its training approach with broad scale community education programs aimed at mental health literacy, such as the Defeat Depression Campaign in the UK, the Depression Awareness Recognition and Treatment (DART) program in the US, and the Norwegian TIPS project. MHFA provides more intensive training to a smaller number of people who have expressed interest, rather than less intensive education of whole communities. Jorm and Kitchener caution that an unintended consequence of MHFA training could be that those trained might choose not to refer people for professional services where they are really indicated.

Organizational/administrative structure. In 2008, the Maryland Department of Health and Mental Hygiene, the University of Maryland, the Missouri Department of Mental Health and the National Council for Community Behavioral Health Care (National Council) partnered with the developers of the practice to bring it to the US, where it is now known as Mental Health First Aid USA (MHFA USA). MHFA has been replicated in 14 countries, including England, Scotland, Ireland, Wales, Finland, Cambodia, Hong Kong, and Singapore.

Maryland is implementing MHFA statewide as part of the state's Mental Health Transformation project. The Department of Health and Mental Hygiene has been working in partnership with the University of Maryland, local Core Service Agencies, and mental health advocacy organizations since the initial four-day training held in January 2008. Since that time, a train-the-trainers approach has been used and the individuals trained have provided similar trainings to educate the general community, including colleges and universities. (http://dhmh.maryland.gov/mha/Documents/mental%20health%20first%20aid%20final%20dec%2031%202007.pdf; http://dhmh.maryland.gov/mha/SitePages/newinitiatives.aspx)

In Missouri, implementation is also ongoing. The Department of Mental Health has a link on its home page to its Mental Health First Aid program, which, as in Maryland, is an element of its

Transformation effort. The MHFA page includes a PowerPoint presentation explaining MHFA and the reasoning behind it (http://dmh.mo.gov//docs/transformation/MENTALHEALTHFIRSTAIDINTRO.pdf).

The project reported that as of March 2011 approximately 100 instructors had been trained in MHFA through five-day programs and 1000 individuals had attended 12-hour training sessions. Agencies included in the effort were institutions of higher education, Corrections, Public Safety and Children's Services. Faith-based communities were also involved. Missouri's plans for sustaining the program included use of receipts from the sale of MHFA manuals and materials nationally; sale of the training programs; and potential private foundation and federal funding sources. (http://dmh.mo.gov/docs/diroffice/commission/MentalHealthFirstAidDiscussionCommissionApril2010.pdf)

Population eligible/served – numbers and demographics. Recipients of MHFA intervention include people who might be depressed, anxious, psychotic, suicidal, using substances or suffering from trauma or panic attacks, among others.

Training has been provided to a wide range of people in various public service sectors. One clear area of need is clergy and others who work in faith-based organizations. "Pastors know how to work with couples to save a marriage or deal with issues of faith, but they usually get very little training about mental health problems," noted a certified trainer and mental health promotions coordinator at the Missouri Department of Mental Health. Presumably training such as this could be offered to police, school staff, public transit personnel and other public service workers, as well other concerned community or family members. The first evaluation study conducted found that training recipients were typically middle aged and predominantly female and well educated (44% had college degrees).

How the innovation is financed. MHFA development was initially funded by a grant from the Australian Capital Territory government. Training and evaluation research has been funded through grants (see below). The National Council provides training for trainers at annual meetings and local training can be funded by community agencies or on a fee basis.

Results achieved. According to a March 2, 2012 announcement from the National Council, more than 45,000 people in the U.S. have been trained by more than 1,800 certified MHFA instructors. The University of Maryland has obtained a grant from SAMHSA to conduct a study of MHFA USA fidelity to the Australian model. The Western Interstate Commission for Higher Education has also secured a challenge grant from the National Institute of Mental Health to conduct a study over multiple years to determine whether MHFA can help overcome barriers that prevent college students from seeking mental health services they need.

To date, a meta-analysis of four controlled and quasi-experimental research studies, plus a subsequent study on reaching consensus among experts regarding MHFA guidelines have yielded promising results. One randomized trial found that training participants showed statistically significant greater confidence in providing help to others, better recognition of specific disorders from case descriptions, improved agreement with professionals about appropriate treatment, less stigmatizing attitudes, and greater likelihood of advising people in distress to seek professional help than people from the same population who did not receive the training. This last finding, however, was not consistent across studies. Participants were also more likely than control group members to actually provide help. One notable finding in a number of studies was that training participants also reported improvements in their own mental health.

Link to websites with further information.
http://www.mentalhealthfirstaid.org/cs/background
http://www.burdekinmentalhealthfoundation.org/Mental%20Health%20First%20Aid%20Manual.pdf
http://www.mentalhealthfirstaid.org/cs/first_aid_strategies
http://www.mentalhealthfirstaid.org/cs/evidence_outcomes

Source(s) of information for this summary.
http://www.mhfa.com.au/documents/ANZJPMHFAtrialreviewJan2006_000.pdf
http://www.biomedcentral.com/content/pdf/1471-244X-8-62.pdf
http://www.biomedcentral.com/1471-244X/8/6
http://dhmh.maryland.gov/mha/Documents/mental%20health%20first%20aid%20final%20dec%2031%202007.pdf
http://dhmh.maryland.gov/mha/SitePages/newinitiatives.aspx
http://dmh.mo.gov//docs/transformation/MENTALHEALTHFIRSTAIDINTRO.pdf
http://dmh.mo.gov/docs/diroffice/commission/MentalHealthFirstAidDiscussionCommissionApril2010.pdf

Alternatives to Hospitalization – Peer Services in a Crisis Setting: The Living Room
Brief summary. Peer crisis services are programs that are operated and staffed by consumers, and designed to serve people in mental health crisis. They offer calming environments with medical support in community settings, serving as alternatives to inpatient or emergency room services. Services generally last for no more than 24 hours but may extend up to several days if needed.

There are a small, but growing, number of peer crisis programs around the country. One of these, a Peer Crisis Program in Tomkins County, NY has been studied in a randomized trial and

showed very positive outcomes.[85] Another comparison group study in San Diego, CA[86] also showed positive outcomes. This description will focus on one example that has had widespread replication and reports positive results. It is known as The Living Room and was first implemented in Maricopa County, Arizona by Recovery Innovations, a non-profit organization with programs in four states. Recovery Innovations of Arizona (RIA), formerly known as META Services, was founded in 1990. Beginning in 1999 the organization transformed itself with the goals of focusing on recovery and empowerment in all its services, and integrating peers into all service teams. Today, 70% percent of RIA's 275 person workforce are Peer Support Specialists working in dedicated peer positions.

RIA operates two Psychiatric Recovery Centers (PRC) in Maricopa County and crisis programs in Pierce County, Washington; Oakland, California; and two North Carolina counties. Each of these has a Living Room attached to it. The PRCs screen individuals for emergency involuntary hospitalization in the county, but their goal is to divert people from inpatient hospitalization and offer them the potential for recovery. One-third of the people seen at the PRCs are brought by law enforcement and approximately 40% are involuntary. Staffing includes a full multi-disciplinary team, with Peer Support Specialists being integral to the team. Three years ago RIA adopted the goal of eliminating seclusion and restraint, aiming to serve all people without resorting to violent interventions. The goal of zero restraint and seclusion has now been achieved.

The Living Room is a crisis alternative where an individual who is having a difficult time can become a "guest" and receive support from a team of Peer Support Specialists. The environment of the Living Room is more natural and comfortable than that of a clinic. It has couches and a television set, a refrigerator with snacks and small rooms around the perimeter that provide rest areas (rather than the offices they had been previously). The rest areas have futons so that guests can sleep if they wish. There are a few small offices available where peers can meet privately with people and where they can do paperwork. The first RIA Living Room was opened in Central Phoenix; about 18 months later, that facility was replicated in their Peoria site, in suburban Phoenix. Whereas the Phoenix location was locked and allowed for stays of no more than 24 hours, the Peoria location was unlocked and allowed stays of up to five days.

Organizational/administrative structure. In Maricopa County, each Living Room is attached to a Psychiatric Recovery Center. Both programs are elements of the continuum of care offered by RIA; different sites may have implemented different programs. Recovery Innovations strives to model recovery as an organization. This intention of "organizational recovery" is demonstrated

[85] Dumont, J., & Jones, K. "Findings from a consumer/survivor defined alternative to psychiatric hospitalization," *Outlook*, Spring 2002, 4-6;
[86] Greenfield et al. "Randomized Trial of a Mental Health Consumer-Managed Alternative to Civil Commitment for Acute Psychiatric Crisis," *American Journal of Community Psychology*, 2008, 42 (1/2):135-144.

by such principles and practices as a non-hierarchical style; staff empowerment; cultural competence; and integration of individuals in recovery into all aspects of the organization, from planning and service delivery to evaluation and monitoring.

Population eligible/served – numbers and demographics[87]. Services of the PRCs are available to any resident of Maricopa County, which has a population of about 3.8 million. The two sites currently have over 15,000 admissions annually. During the past year, there were over 5,000 admissions to the Living Room programs in Maricopa.

How the innovation/strategy is financed. RIA serves over 10,000 adults with serious behavioral health problems. Its annual revenues of $12 million come from the State of Arizona Department of Health Services through a contract with ValueOptions, the Regional Behavioral Health Authority for Maricopa County; the Arizona Rehabilitation Services Administration; and the U.S. Department of Housing and Urban Development. The two PRCs have annual revenues of over $6,000,000.

Results achieved. RIA has fully integrated Peer Support Specialists into all parts of the organization. Before the Peoria, AZ Living Room opened, the center had been sending an average of sixteen people each month to inpatient facilities; in the first month of the Living Room's operation that number fell to six, and it has since fallen to five. Upon investigation of the reasons behind those numbers, managers came to understand that whereas regular crisis staff focused almost entirely on the person's problems, which was prone to overwhelm people and render them less able to identify solutions to their problems, peers took an entirely different approach. Peers listened to people's stories and engaged them in conversations about recovery rather than illness. Instead of pathologizing, they worked on problem solving and began with the assumption that people can move on from their current state. Each guest is invited to complete a "Telling My Own Story" document as an alternative to a traditional Psycho-social History and to develop their own "Recovery Plan."

Links to websites with further information:
http://www.recoveryinnovations.org/pdf/RIA%20Programs%20and%20Outcomes.pdf
http://recoveryinnovations.org/index.html

Source(s) of information for this summary:
Recovery Innovations of Arizona Programs. RI Recovery Innovations Inc.
http://www.recoveryinnovations.org/pdf/RIA%20Programs%20and%20Outcomes.pdf

[87] Note that these next sections focus on Maricopa County, because that is the initial site and the one with the most information available.

Building Bridges Initiative

Brief summary. Building Bridges is an effort sponsored by the Center for Mental Health Services (CMHS) that seeks to expand system of care principles before, during, and after the use of residential treatment services. The mission is to "identify and promote practice and policy initiatives that will create strong and closely coordinated partnerships and collaborations between families, youth, communities and residentially-based treatment and service providers, advocates and policy makers to ensure that comprehensive services and supports are family-driven, youth-guided, strength-based, culturally and linguistically competent, individualized evidence and practice informed and consistent with the research on sustained positive outcomes."

Building Bridges began in 2005 when, under the auspices of CMHS, a group of community and residential treatment providers, policy makers and youth and families began to discuss ways to improve communication and practice in residential and community-based treatment. Residential providers voiced concern that community-based providers did not collaborate sufficiently to support discharge planning and/or provide an adequate array of intensive services after discharge. Community-based providers noted that residential centers had not proven the effectiveness of services and had longer lengths of stay than needed. Youth and families asked that together these providers become more family-driven and youth guided within a more integrated array of services, and noted that they themselves did not always feel listened to. Together they drafted and signed a Joint Resolution centered around System of Care Principles (comprehensive, individualized, flexible, strength-based, culturally and linguistically competent, and family-driven and youth guided). The Resolution articulates shared commitment and responsibility, regardless of service setting.

Building Bridges has held national summits in 2006, 2007 and 2010. Workgroup participants have also developed a number of products, including "Best Practices in Residential Programs," a "Matrix of Benchmark Indicators" (a framework for achieving and measuring positive outcomes), a provider self-assessment tool to gauge adherence to Building Bridges principles, and several tip sheets on residential programs for youth and families. Documents under development include "Guides for Engaging Youth and Families in Residential Programs," a "Guide on Hiring and Supporting Youth Advocates in Residential Programs", and a "Tip Sheet on Tracking Outcomes." As of 2009 leading examples of state initiatives included New York, where a statewide cross-systems Building Bridges strategic plan was signed by the nine commissioners of the state's child and family serving agencies, and Pennsylvania, where the state developed core expectations of residential providers for family-driven care.

Organizational/administrative structure. Building Bridges is directed by a Steering Committee of key stakeholders with support from an independent consultant. CMHS has been a primary driving force behind Building Bridges, in collaboration with many partners. They include the Child Welfare League of America, the Alliance for Children and Families, the American Association of Children's Residential Centers, the National Association for Children's

Behavioral Health, the National Federation of Families for Children's Mental Health, The Partnership for Child and Family Mental Health / American Institutes for Research, the Georgetown Center for Child and Human Development, state agencies, consulting firms, and many youth, families and service providers across the nation. A steering committee initially oversaw the activities of five work groups that were formed to address: 1) cultural and linguistic competence, 2) fiscal/policy, 3) outcomes, 4) social marketing, and 5) youth/family partnerships. Subsequently ad hoc work groups were formed to develop various products, including those noted above.

Population eligible/served. The population of focus has been a broad spectrum of children and youth needing or at risk of residential placement in participating states across the country. Many of these youth are part of the child welfare system and have goals of safety, stability and permanency. The needs of cross-cultural populations have also been carefully considered. The best practices promoted by Building Bridges have a strong emphasis on youth and family involvement. These practices include: hiring youth and families to serve on agency committees and workgroups; engaging youth and families being served in programs; providing families training and support to lead treatment teams; and providing them with training and support to serve as co-trainers of new staff and to participate in staff evaluations and/or as members of staff hiring teams.

Financing. CMHS has provided seed funding as well as support for dialogue, summits, and work group activities. Many providers, consulting experts and youth and families across the states have volunteered significant amounts of time. Some private funds have been contributed and donations from the for-profit managed care company, Magellan Health Services, Inc., have supported webinars. The funding has been relatively modest and yet a national movement is emerging.

Various states have developed individual strategies for funding services guided by Building Bridges. These funding strategies, particularly the Medicaid options, are part of broader system reforms. Building Bridges is relevant to the planning and development of strategies to address residential treatment while broader system of care approaches may also be used to build community capacity and strong team support services. A key strategy has been the expanded use of Medicaid, including 1115 Research and Demonstration Waivers, 1915(c) Home and Community Based Waivers, 1915(b) Managed Care / Freedom of Choice Waivers, or some combination of these latter two. Some states are now planning to fund community services using the 1915(i) State Plan Amendment process. Some states have also expanded eligibility for populations and/or services, thus increasing federal Medicaid funding. Another strategy (commonly used in managed care and increasingly employed by child welfare agencies) has been performance based incentive contracting, in which outcomes rather than services are purchased. Illinois and Tennessee are examples of this approach. Blended/pooled, braided and case rate funding are strategies to reallocate existing funds to wraparound work informed by

Building Bridges, of which Arizona, Indiana, Virginia and Wraparound Milwaukee are examples. Tennessee and Wraparound Milwaukee also employ spending-neutral reinvestment strategies designed to avoid the high costs of residential services by investing in flexible, individualized community-based services.

Results Achieved. Selected youth and family outcome measures include the following domains: stable living environment; attendance and achievement in school; employment/training/post-secondary education; level of functioning; community tenure; suicidal and criminal behavior; substance use; teen pregnancy; and readmission rates. Provider performance indicators are measures of adherence to Building Bridges principles across three phases of care: the referral/entry "bridge," the "bridge" during residential care, and the transition "bridge" after residential. Although a small group of System of Care research studies as well as the National Evaluation of SAMHSA's Children's Mental Health Initiative are building a growing evidence base in support of System of Care services, a literature search found no reported child and family outcomes specific to Building Bridges *per se*. However, the wide acceptance of these values and practices by children's mental health professionals underscores their importance.

Link to website with further information:
http://www.buildingbridges4youth.org/

Source(s) of information for this summary:
Blau, G, Caldwell, B, Fisher, S, Kuppinger, A, Levison-Johnson, J, Lieberman, R (2010). "The Building Bridges Initiative: Residential and community-based providers, families and youth coming together to improve outcomes," *Child Welfare*, Vol. 89, No. 2.

D. Integrated Care – Behavioral and Primary/Acute Care Services

Missouri Community Mental Health Center Health Homes

Brief summary. Missouri was the first state in the nation to receive Center for Medicare and Medicaid Services (CMS) approval for Health Homes for Individuals with Chronic Conditions under its Medicaid State Plan. Health Home development and implementation were authorized by the ACA, which allows states to receive increased federal funding (90% federal medical assistance percentage for eight consecutive quarters) for using technology to coordinate services across disciplines and providing the following services to Medicaid beneficiaries with one or more chronic conditions: care coordination; health promotion; comprehensive transitional care between inpatient and other settings; individual and family support services; and referrals to community support services.

Missouri implemented two types of health home programs: Community Mental Health Center Homes (fee-for- service) and Primary Care Chronic Conditions Healthcare Homes (managed care or fee- for- service). Missouri's implementation began January 1, 2012. This description

will focus on the Community Mental Health Center (CMHC) program, which relates to persons with SMI.

Organizational/administrative structure. Missouri's CMHCs are statutorily designated as the primary mental health treatment providers for both adults and children. The 14 centers serve as entry/exit points in each of the state's 27 geographic areas, into and from the state mental health delivery system, offering a continuum of mental health services.

The CMHCs also serve as the state's designated providers for health home services for persons with mental health conditions. All participating CMHC providers are required to meet state qualifications as certified by the Missouri Department of Mental Health (DMH). Provider qualifications are comprehensive and include: having a substantial percentage of its patients enrolled in Medicaid; strong, engaged leadership; implementing processes to ensure all consumers are assigned a physician; actively using Missouri HealthNet's comprehensive electronic health record (EHR) to conduct care coordination and prescription monitoring for Medicaid participants; and using an interoperable patient registry to record annual metabolic screening results, track and measure care of individuals, automate care reminders and produce exception reports for care planning, among other requirements.

CMHC Health Homes are physician-led with health teams comprised of a Health Home Director, a Health Home Primary Care Physician Consultant, a Nurse Care Manager, and a Health Home Administrative Support Staff person. Optional health team members may include numerous other medical and behavioral health staff such as a PCP, psychiatrist, dietician, case manager, or grade school personnel (in the case of a child who has an Individualized Education Plan and is receiving school-based medical services).

Population eligible/served. Missouri Medicaid enrollees of any age living throughout the state are identified by DMH and are auto-assigned to a CMHC Health Home. In order to be eligible for a health home, Medicaid beneficiaries must have one of the following conditions or sets of conditions:

- A serious and persistent mental illness (includes children with Serious Emotional Disturbance);
- A mental health condition and one other chronic condition (asthma, cardiovascular disease, diabetes, substance use disorder, development disability, overweight with a Body Mass Index (BMI)>25);
- A substance use disorder and one other chronic condition (asthma, cardiovascular disease, diabetes, mental illness, development disability, overweight with a BMI>25); or

- A mental health condition or a substance use disorder and tobacco use.

Once identified by the state as being eligible for health homes, Medicaid beneficiaries (and those dually enrolled in Medicare) can choose to opt out of the health home. Other potentially eligible individuals who receive services in emergency rooms are notified and referred to a CMHC health home to receive health home services.

How the innovation/strategy is financed. DMH provides CMHCs with a monthly per member per month (PMPM) payment for health home services. For FY 2012, the PMPM payment is $78.74, of which 90% ($70.87) is paid with Medicaid federal funds and 10% ($7.87) with state funds. The criteria required for receiving a monthly PMPM payment are:

- The person is identified as meeting CMHC health home eligibility criteria on the state-run health home patient registry;

- The person is enrolled as a health home member at the billing health home provider;

- The minimum health home service required to merit PMPM payment is that the person has received Care Management for treatment gaps, or another health home service was provided that was documented by a health home director and/or nurse care manager; and

- The health home reports that the minimal service required for the PMPM payment occurred on a monthly health home activity report.

For FY 2012 the DMH budget was reduced by $7.8 million, anticipating savings as a result of health home implementation.

Results achieved. Implementation is monitored by a health homes work group consisting of state personnel and provider representatives. The health homes work group tracks implementation against a work plan and against performance indicators to assess implementation status.

Missouri will be required to monitor and track avoidable hospital readmissions and calculate cost savings that result from improved chronic care coordination and management achieved through the CMHC health homes. To this end, Missouri has identified nine (9) goal-based quality measures targeting improved clinical outcomes, improved care experience, and improved quality of care.

Link to website with further information:
http://www.integratedcareresourcecenter.com/; http://www.mocmhc.org/

Massachusetts Screening, Brief Intervention and Referral to Treatment in Emergency Departments

Brief summary. One key priority for the Massachusetts Department of Public Health (DPH) Bureau of Substance Abuse Services (BSAS) is the expansion of screening, assessment and referral of those at risk for or needing treatment for alcohol and drug problems in community, agency and health care settings. Screening, Brief Intervention and Referral to Treatment (SBIRT) is an evidence-based technique that involves systematic identification of people needing early intervention; engagement of those who screen positive in brief conversations about behavior change; and referral for comprehensive assessments and appropriate treatment when serious problems are found. Nationally, SBIRT has proven to be particularly effective at motivating individuals to change harmful substance use. Using SBIRT as an early intervention can reduce risky alcohol and drug use before it leads to more severe consequences or dependence.

Emergency Departments (EDs) have been a major focus of the Massachusetts SBIRT grant because they are key points of contact for both substance use related injuries and illnesses. Data indicate that screening patients in emergency settings makes it possible to use their substance use-related injury or illness as motivation to change. ED encounters offer opportunities to identify problem use early, engage people in discussing their use as part of their overall health care, intervene and provide referrals to services that will assist patients upon discharge from the ED. If individuals who need treatment for substance use disorders (SUDs) receive it, their ED costs can be significantly reduced. The Research & Data Analysis Division of the State of Washington's Department of Social and Health Services found, in a lengthy series of studies, that SSI clients who received needed SUD treatment showed a 35 percent reduction in average monthly ER-related medical costs compared to clients who needed but did not receive such treatment.

To ensure that effective interventions and referrals are part of the ED protocols, ED staff must be trained to understand the SBIRT process. They also need staff trained to provide brief interventions and ways to access appropriate community based services. The seven MA ED SBIRT hospitals employ specially trained Health Promotion Advocates (HPAs) who are mostly both English- and Spanish-speaking, to screen. Through a brief negotiated interview technique (see below), HPAs establish rapport, raise the subject of drugs and alcohol, and assess patients' readiness to change. A survey of patients' health and safety needs provides the basis for detection of substance abuse and other health needs.

The Massachusetts SBIRT program uses enrichments to the basic SBIRT model that have been developed by the BNI ART Institute at the Boston University School of Public Health. These include the Brief Negotiated Interview (BNI), an intervention that uses techniques similar to those found in motivational interviewing, adapted for the medical setting. Multiple peer reviewed studies have shown the BNI to be effective at facilitating a variety of positive health behavior

changes. The BNI helps providers explore health behavior change with patients in a respectful, non-judgmental way within a limited period of time. The format is intentionally designed to elicit reasons for change and action steps from the patient rather than telling the patient what changes s/he should make, making any potential behavior changes more empowering for the patient. The BNI is in the form of an algorithm or script that guides providers with carefully phrased key questions and responses.

Finally, if patients decide to seek further help, Active Referral to Treatment (ART) involves taking the measures to help them find appropriate resources and navigate health care systems. Rather than merely providing a phone number or educational pamphlet, it might entail identifying an available bed or service, making a phone call with the patient to assist in the intake process, reviewing health information to ensure that the patient understands it, or continuing to support the patient until s/he is placed in a treatment facility.

Many advocate for SBIRT as a universal intervention for screening individuals who come into the ED. In reality, many of those screened have presented as having recently used alcohol and/or drugs and many somatic complaints are caused by undiagnosed excessive alcohol or drug consumption.

Organizational/administrative structure. In 2007, with a SAMHSA grant, BSAS began funding SBIRT projects to build capacity in hospital EDs across the state. The project identified physician, nurse and other health care champions in each ED, trained them in the SBIRT model, and assisted them in hiring and supervising up to two local HPAs to work in each ED. BSAS engaged the BNI ART Institute to train the HPAs.

Population eligible/served – numbers and demographics. To date, the various Massachusetts SBIRT programs have screened more than forty thousand individuals in Emergency Departments.

How the Innovation is financed. Massachusetts's SBIRT-ED program has been financed by a SAMHSA grant for the last five years since its inception. That funding is due to end this fiscal year. Plans for sustainability include working with Medicaid to allow for SBIRT billing as a part of managed care strategies for expansion populations.

Results achieved. Of the 40,300 patients who have been screened, 32 percent, or more than thirteen thousand individuals, have screened positive and 85 percent of those (more than eleven thousand individuals) had brief negotiated interviews. More than eight thousand were referred for substance use treatment.

Link to website with further information:

http://www.mass.gov/eohhs/consumer/wellness/alcohol-tobacco-drugs/alcohol-drugs/screening-brief-intervention-and-referral-to.html

Source(s) of information for this summary:
http://www.bu.edu/bniart/sbirt-in-health-care/what-is-sbirt/
http://www.dshs.wa.gov/pdf/ms/rda/research/11/120.pdf

Colorado Medical Home
Brief summary. Colorado's Medical Home Initiative (CMHI) began in 2001 in response to the Title V/Maternal and Child Health outcome measure that all children will receive coordinated care in a medical home. Certified providers receive enhanced Medicaid payments for specific preventive services and the Colorado Children's Healthcare Access Program (CCHAP) provides essential support services for the Medicaid home providers. Seven Regional Care Collaborative Organizations (RCCOs) were developed by the Department of Health Care Policy and Financing to implement Accountable Care in Colorado. CMHI operates according to seven principles: accessible; family-centered; continuous; comprehensive; coordinated; compassionate; and culturally responsive.

CCHAP is a non-profit organization designed to engage, train and offer technical assistance to private pediatric practitioners in providing coordinated, family focused, culturally competent Medicaid medical home services, while CCHAP provides a resource hotline, staff training in care coordination, technical assistance for Medicaid enrollment and billing, and the assistance of two care coordinators who interact directly with families. Specific services for families and practices include: support with psychosocial and socioeconomic issues; development of service delivery models with increased access to mental health services; assistance to practices in obtaining transportation for families; cross-cultural communication training; automated reminders to parents for well child visits or immunizations that are due; support for developmental screening; and assistance for practices in assessing their ability to provide medical home components and conduct continuous medical home quality improvement activities.

Organizational/administrative structure. The Title V Children with Special Health Care Needs unit of the Colorado Department of Public Health and Environment was responsible for launching CMHI with goals that included the establishment of a strategic plan for state level infrastructure support, medical home practice standards, website development and tools for technical assistance. CCHAP began as a 2006 pilot project initiated by a group of pediatricians led by a visionary doctor who is now its executive director. One study that year had found that only 20% of private and family practitioners accepted Medicaid or Children's Health Plan recipients, while another had found that uninsured or publicly insured children in Colorado had higher rates of severity of illness, hospitalizations, emergency room admissions, mortality and costs than children who had private insurance. Only about one third of children in public

programs received their care through Colorado's system of Federally Qualified Health Centers, which indicated a need to turn to private practitioners to fill service gaps. In the 2006 CCHAP pilot, enhanced reimbursement was negotiated with a Medicaid MCO and the project demonstrated better outcomes and cost savings. A demonstration project the next year was followed by the establishment of an ongoing program in 2008.

Support from the Governor's Office and the Legislature has been critical. In 2007 the State Legislature mandated increased access to medical homes for children enrolled in Medicaid and the Children's Health Insurance Program. The Colorado Department of Health Care Financing and Policy (HCFP), the state's Medicaid authority, is charged with implementing the statewide medical home infrastructure.

Population eligible/served – numbers and demographics. Children of all ages enrolled in Medicaid or in Child Health Plan Plus (CHP+, Colorado's Children's Health Insurance Plan) are eligible for medical home services. The state is now also expanding health home services for adults covered by Medicaid through the recently established Accountable Care Collaborative (ACC) program. Under the ACC program, HCPF has contracted with seven Regional Care Coordination Collaborative Organizations to join with CCHAP in assisting practices with care coordination and in meeting Colorado's expectations for medical homes.

Financing. The CCHAP budget is funded by multiple foundations. Medicaid administrative funds have been used to support training and technical assistance for medical home providers. The University of Colorado Denver School of Medicine and the Children's Hospital provide in-kind information technology services, computers and office space. Enhanced reimbursement for medical home services is provided through the state's Medicaid EPSDT program. Practitioners receive enhanced payments of $10 above ordinary fees per well-child visit for children under three years of age and $40 per visit for children ages three years and older, raising Medicaid rates to 120% or more of Medicare preventive visit rates. Reimbursement is performance-based – providers must complete a medical home self-assessment index as well as carry out a related quality improvement project. HCFP administrators note that a key achievement has been enhancement of provider capacity to bill Medicaid.

Results achieved. CCHAP assists over 230 private practices (over 750 providers) in implementing medical home services. A great majority of Medicaid children receiving private practice medical home services do so with a practice that is affiliated with CCHAP. As of 2009, medical home providers accounted for more than 95% of total pediatric practices in Colorado, which served about 105,000 Medicaid and CHP+ children, an increase of 70,000 since CCHAP began. Children served by practices supported by CCHAP receive preventive services more often, visit emergency departments less often, and incur lower Medicaid costs than those served by practices not affiliated with CCHAP. HCFP is an enthusiastic supporter of CCHAP, having

been convinced by demonstrations of improved outcomes, reduced cost, and increased service capacity.

Links to websites with further information:
http://www.coloradomedicalhome.com
http://www.cchap.org

Source(s) of information for this summary:
Silow-Carroll, S, Bitterman, J (2010). Colorado Children's Healthcare Access Program: Helping pediatric practices become medical homes for low income children. Commonwealth Fund Publication 1415, vol 47, June, 2010. http://www.commonwealthfund.org/Publications/Case-Studies/2010/Jun/Colorado-Childrens-Healthcare-Access.aspx

IMPACT Team Care
Brief Summary: The IMPACT Team Care Model emphasizes collaboration among the patient, the primary care provider (PCP), a Depression Care Manager, and a consulting psychiatrist to effectively treat and improve outcomes for individuals with depression. More than co-location of services, IMPACT involves thorough integration of care. The core components of the model include two key processes, systematic diagnosis and outcome tracking; and two new team members, a care coordinator and a consulting psychiatrist. Patient education about depression and empowerment to self-manage their condition are also essential elements of the IMPACT model.

Organizational/Administrative Structure: The IMPACT model uses a disease management approach, emphasizing a team effort. The key elements of the model include Collaborative Care, the Depression Care Manager, the Consulting Psychiatrist, Outcome Measurement and Stepped Care. Each is described below.

Collaborative care: A foundation of the IMPACT model is collaboration among the PCP, the patient, the Depression Care Manager and a consulting psychiatrist. The Care Manager works with the patient's PCP to develop a stepped care treatment plan, consulting with a psychiatrist as described below. Care Managers also educate the patient and encourage shared decision making.

*Depression Care Manager***:** Primary responsibilities of the Depression Care Manager include patient education and empowerment, brief counseling and/or coaching, monitoring of symptoms and of adherence to medication regimens, and facilitation of treatment change when necessary. The Depression Care Manager also consults with the psychiatrist regarding patients who are unresponsive to treatment. The Depression Care Manager may be a nurse, social worker, licensed counselor or psychologist, who may be supported by a paraprofessional. The scope of accreditation and licensure for Care Managers working in some of the Existing IMPACT programs varies greatly. There has been debate as to whether or not Care Managers should have

advanced degrees or master's level training such as psychiatric nurse or licensed clinical social worker. In a study of coordinated care management (but not specifically the IMPACT TEAM CARE model[88]), multiple disease management programs employed the use of bachelor's level nurses or mental health professionals in successful delivery of services. The typical caseload for a care manager is 100-150 patients, including some who are in the acute phase of care and some who have improved and are being monitored less frequently.

Consulting Psychiatrist: The consulting psychiatrist meets weekly with the Care Manager to discuss new patients and any who are not showing sufficient improvement after ten to twelve weeks of care. In rare instances, the psychiatrist may see an individual patient who has not improved after several revisions to the treatment plan to determine whether referral to specialty mental health care is needed. The psychiatrist is also available for *ad hoc* consultations with the care manager and PCP.

Outcome Measurement: Care Managers measure patients' depressive symptoms at the initiation of treatment and regularly during the course of their involvement in the IMPACT program. Use of the PHQ-9 (a well-researched instrument that asks nine questions about depressive symptoms) is recommended, but other evidence-based instruments may be used.

*Stepped Care***:** In the stepped care model, treatment is adjusted as necessary based on clinical outcomes and in accord with an evidence-based algorithm. The goal is a 50 percent reduction in symptoms within ten to 12 weeks. Absent such improvement, the treatment plan is changed. Patients may receive more intensive services or medication as needed.

Population eligible/served: The IMPACT model was originally tested among older adults with depression in a variety of settings, including HMO, fee-for-service, inner-city county hospital and Veterans Administration clinics, and was more effective than usual care in all systems. It proved equally effective for African American, Latino and White patients. Additional research has suggested that the model is also effective with other depressed patients, including adolescents and younger adults, cancer patients and those with diabetes.

Financing: The IMPACT program cost per participant is estimated to be about $450 per year, including Care Manager and Consulting Psychiatrist time, PCP consultation and program materials, as well as overhead. Billing and reimbursement for the program can be complex, but reimbursement for some aspects of IMPACT care is generally possible. The way in which an organization is able to bill for these services will depend, among other things, on the eligibility of the consumer, the type of Care Management services provided and the type of staff providing the Care Management.

[88] Chen et al, "Best Practices in Coordinated Care," Princeton (NJ): Mathematica Policy Research, Inc., 2000.

Existing sites currently using the model have structured their reimbursement systems in a number of ways. For example, in practice-based models, Depression Care Managers, who provide services as on-site employees in a primary care office, can bill Medicaid or Medicare for medically necessary services that are "incident to" the physician's care or through separate codes if same day billing is allowable. Reimbursement rates depend on the qualifications of the Care Manager. Practices may cover services through a fixed salary with fee-for-service payments for added services.

In place of practice-based models, some sites have used third party Care Management services, where the patient may receive treatment off-site at an organization (such as a CHC or CMHC) that is subcontracted to the health plan. This subcontractor would then receive capitated PMPM payments or other prospective payments based on average cost or history. Another off-site option includes having Care Managers bill directly as an in-network provider to a physician. Other organizations may choose to structure their IMPACT Model as a health plan based service, where Care Management contact is made primarily via telephone and then included in a patient's regular payment as part of their existing plan.

Results achieved: Dr. Jürgen Unützer and his team conducted a five-year randomized control study of more than 1,800 participants aged 60 and over across 18 primary care clinics in eight diverse health care organizations in five states (mean age of 71, 450 primary care providers). Unützer and his team found that care delivered through the IMPACT model was twice as effective as usual care (primary care or referral to specialty mental health care as available) in treating adult depression. Results showed better functioning and quality of life, increased patient as well as provider satisfaction, and a decrease in patients' physical pain. The model also demonstrated cost effectiveness: While the average cost of the IMPACT program approximated $580 per participant, annual health care costs of $8,588 were reduced by $639 among these depressed older adults. Annual healthcare costs for IMPACT patients following their involvement in the program were yet lower: $7,471. When health care costs were examined over a four year period, IMPACT patients had lower average costs for all their medical care – about $3,300 less – than patients receiving usual care, even when the cost of IMPACT care was included. The cost of providing IMPACT care as a benefit to an insured population of older adults is less than $1.00 per member per month (PMPM).

Links to websites with further information:
"Funding mechanisms for depression care management: opportunities and challenges" (Bachman J, Pincus H, Houtsinger JK, Unützer J. *General Hospital Psychiatry*. 2006; 28: 278-288).

IMPACT website: www.impact-uw.org.

E. Public State Hospital Management

State Hospital Privatization and Deinstitutionalization Trends

Brief summary. As state mental health agencies struggle with declining general fund appropriations, concerns about quality of care, aging hospital facilities and U.S .Department of Justice inquiries into states' compliance with the 1999 U.S. Supreme Court decision in *Olmstead v. L.C.*, many states have turned to privatizing state hospital operations and "revamping" community-mental health systems in order to provide relief for individuals unnecessarily institutionalized in state hospitals. DSHS issued a draft RFP on March 8, 2012 and plans to issue a full RFP in the near future for the management of one of its state hospital sites. The draft RFP provides an opportunity for stakeholders to review and comment on the draft RFP before formal release of the final RFP.

DSHS intends for this procurement process to result in a contract to operate only one state mental health hospital (SMHH). Hospitals eligible for privatization include Austin State Hospital, Big Springs State Hospital, El Paso Psychiatric Center, Kerrville State Hospital, Rusk State Hospital and Terrell State Hospital. Proposals will be considered from vendors for the other state mental health hospitals.

Nationally, spending for state hospitals is on a decline. From 2001 to 2009, state spending on state hospitals publicly or privately managed has decreased 2.1% in constant dollars while spending for community mental health services has increased 29%. As a percentage of total state mental health budgets, state hospital spending has decreased significantly in the past 30 years: in 1981, state hospital expenditures consumed 63% of the budget. In 2009, average state spending on these treatment facilities was 26% of the state mental health budget. In Texas, 40% of the state mental health expenditures are spent on state hospitals and 59% of expenditures are spent for community mental health services.

The issue of privatizing state hospitals is complex and politically challenging. A recent PCG report in Utah concluded that while there were savings available in staff compensation, the risk of higher staff turnover and reduced quality were significant. Georgia (in 2009) and Pennsylvania (in 2007) have both backed down on their efforts to privatize operations.

This section provides information about a continuum of available options for contracting for a state hospital level of care. These options range from contracting for discrete, non-medical services such as food service and maintenance (an option used by many if not most states) to complete privatization of one or more hospitals, with the state maintaining ownership of the property or not. As discussed below, Kentucky offers several examples along this continuum. Note that because these facilities are Institutions for Mental Diseases (IMD), they do not receive Medicaid reimbursement. In all cases, financing is through the state appropriations; in some instances bonds may be issued or sale/leaseback arrangements included.

Privatization Efforts in Florida

One of the country's earliest competitive bids for state hospital services is South Florida State Hospital. Since 1998, the South Florida State Hospital in Pembroke Pines has been operated by a private provider, GeoCare, delivering civil treatment services to more than 625 patients per year. A new facility built in 2001 has since been accredited by The Joint Commission for the operation of 285 civil beds. An additional fifty forensic step-down beds are in use based on system-wide need. GeoCare now operates three state hospital facilities and one other is private. The Florida Governor's Transition Committee and his 2011-2012 state budget proposed privatizing the three remaining state hospitals.

Organization/administrative structure. There are a total of seven civil and/or forensic state hospitals in Florida. The Florida Department of Children and Families operates three of these treatment facilities in Chattahoochee, Macclenny and Gainesville. GeoCare, Inc. operates three facilities in Florida City, Indiantown, and Pembroke Pines. Lakeview Center Inc. operates the West Florida Community Care Center in Milton. As of 2008, there were a total 1,205 forensic beds and 1,518 civil beds serving more than 4,650 people per year in these seven facilities.

How the innovation is financed. For FY 2009, South Florida State Hospital received appropriations from the GR Fund, the Operations and Maintenance Trust Fund and the Federal Grants Trust Fund in the amount of $38,833,900 for the operations and maintenance of the 335 bed facility managed by a private provider.

Results achieved. The Florida Department of Children and Families uses four performance measures to assess and monitor each hospital's ability to reach the goals of reducing psychiatric symptoms and returning the consumer to the community or other appropriate setting: average length of stay; percent of patients readmitted to a state hospital within 180 days; rate of harmful events per 100 patients; and percent of adult civil patients showing an improvement in function. According to data prepared by the Florida Legislative staff, each of the three hospitals scored the highest on at least one of the performance measures, with Florida State Hospital earning the top spot for both lower readmission rates and harmful event rate per 100 patients. Northeast Florida State Hospital received the highest marks for improvements in patient functioning and South Florida State Hospital had the lowest median length of stay for the three-year period studied.

According to a 2010 Legislative Report containing information on the operations of Florida's three civil hospitals, South Florida State Hospital costs were 4.5% – 15.3% less per patient day of care provided than Florida State Hospital or Northeast Florida State Hospital.[89]

[89] South Florida State Hospital rate included a capital appropriation of $3.2 million for bond payments that financed the 1998 construction of the 1998 facility. The Florida State Hospital and Northeast Florida State Hospital does

Privatization Efforts in Kentucky

Privatization efforts in Kentucky for the operation of 984 psychiatric beds include several different management scenarios including a privately managed and owned facility (Appalachian Regional Healthcare Psychiatric Center in Hazard, or AHR - Hazard); a community-mental health provider operating a state-owned facility (Eastern State Hospital in Lexington); and a combination of state employees and contracted employees working side-by-side under a state hospital administrator (Central State Hospital in Louisville and Western State Hospital in Hopkinsville).

Organization/administrative structure. The Cabinet for Health and Family Services is the parent organization to the Department for Behavioral Health, Developmental and Intellectual Disabilities (DBHDID). DBHDID has the responsibility of overseeing the psychiatric, intermediate care, and nursing care facilities.

Results achieved. DBHDID requires hospitals to report regularly on a number of hospital performance measures. The FY 2011 30-, 90-, and 180-day readmission rates can be found in Table 1. ARH – Hazard has much lower readmission rates, but it is unclear whether the state hospitals have differing patient demographics that might contribute to varying readmission rates.

Table VII.4: FY 2011 Kentucky Psychiatric Hospital Readmission Rates

Kentucky Hospital	Management Structure	Bed capacity	30-day readmit	90-day readmit	180-day readmit
ARH – Hazard	Private Regional HC System	100	0.6%	0.7%	1.0%
Central	State/with contracts	192	11.5%	18.5%	25.1%
Eastern	State/with contracts	197	11.6%	20.0%	26.3%
Western	Private CMHC	495	13.5%	21.9%	28.9%

Average length of stay information for the same four hospitals can be found in Table 2. These comparisons are similar to those in the previous table: ARH – Hazard has much lower average length of stay but these tables do not take into account patient characteristics such as demographic, mental health or medical conditions or other factors that might contribute to differences in extended or shortened length of stays.

not including funding or expenditures for capital improvement projects. (The Florida Legislature, *Information of Florida's Civil Mental Health Hospitals*).

Table VII.5: FY 2011 Kentucky Psychiatric Hospital Average Length of Stay

Kentucky Hospital	Management Structure	Average length of stay in days	Admission Count for LOS > 90 days	Number of Admissions
ARH – Hazard	Private Regional HC System	10.77	12	2801
Central	State/with contracts	20.72	24	1124
Eastern	State/with contracts	18.2	100	2644
Western	Private CMHC	16.71	65	1951

Privatization Efforts at Arizona State Hospital

The Arizona Department of Health Services operates one state hospital located in downtown Phoenix, Arizona. With one of the lowest rates of hospitalization (3.9 per 100,000), the hospital has 143 forensic beds, 116 civil beds, and one medical bed for a total of 260 state-operated psychiatric beds. Although the state hospital is authorized for 726.8 FTEs, an additional $9.7 million is spent on private contracted personnel and services in the following areas: food service, maintenance and housekeeping, pharmacy, medical services, and landscaping. Specific outcomes for these contracted personnel are not available.

Organization/administrative structure. The Arizona Department of Health Services, Division of Behavioral Health Services oversees the Arizona State Hospital to ensure that admissions, discharge planning and discharges are managed in conjunction with community providers and families.

Deinstitutionalization Trends

In keeping with the Americans with Disabilities Act (ADA) of 1990, which mandated integration for persons with physical and mental disabilities, the 1999 Supreme Court decision *Olmstead v. L.C.* reaffirmed the ADA mandate by requiring all states to have a comprehensive working plan to ensure that people receive services in the least restrictive setting. Initially, the case did not require states to incur new costs. It does, however, require states to move at a reasonable pace to provide community-based alternatives. Of particular concern to the Court were lengthy wait lists and continued institutionalization of people who were not offered community-based services in the least restrictive setting.

In 2009, on the tenth anniversary of the Supreme Court decision, President Obama announced increased efforts by the Department of Justice (DOJ), Civil Rights Division to enforce the *Olmstead v. L.C.* decision and Title II of the ADA. Many state mental health agencies have been impacted by subsequent investigations into alleged unnecessary institutionalization of individuals treated in state psychiatric hospitals.

Of particular interest is a July 2011 DOJ settlement agreement concerning Delaware's state-operated psychiatric hospitals and private psychiatric facilities that has expanded the *Olmstead v. L.C.* decision from individuals in psychiatric hospitals needing community-based services to those individuals at risk of institutionalization. The settlement agreement was a result of both a DOJ Olmstead investigation into whether persons with mental illness in Delaware are being served in integrated settings and a Civil Rights of Institutional Persons Act (CRIPA) investigation into conditions of confinement at Delaware Psychiatric Center. The State of Delaware entered into a settlement agreement to ensure that:

- individuals who are unnecessarily institutionalized can receive treatment in the community,
- individuals who go into mental health crisis receive sufficient resources in the community to avoid unnecessary stays in psychiatric hospitals or jail facilities, and
- individuals with mental illness who are living in the community are not forced to enter institutions due to the lack of housing and community treatment options.

Other state mental health agencies with findings from DOJ investigations into state psychiatric hospitals include: Mississippi, North Carolina, Virginia, New Hampshire, and Nebraska. Active oversight by the DOJ due to court action (including appeals) is ongoing in New York and Georgia.

Link to website with further information.
http://www.dcf.state.fl.us/programs/samh/mentalhealth/amhfacilities.shtml
http://dbhdid.ky.gov/Facilities/default.asp?sub25

Sources of information for this summary.
The Florida Legislature, Office of Program Policy Analysis and Government Accountability, *Information on Florida's Civil Mental Health Hospitals*, February 18, 2010.

Utah State Legislature, Executive Appropriations Committee, *Feasibility Study on the Privatization of Portions of the Utah State Hospital and the Utah State Developmental Center*, Public Consulting Group, August 6, 2010.
http://www.ada.gov/olmstead/olmstead_enforcement.htm
http://www.nri-inc.org/projects/profiles/Prior_RE.cfm
http://www.accessiblesociety.org/topics/persasst/Olmstead_shalala.htm
Personal communication with Lou Kurtz, Acting Director, Kentucky Division of Behavioral Health

F. Cross System Care Coordination

Georgia Peer Support Whole Health

*Brief Summary***.** Peer supported whole health services integrate behavioral health and general health care through a trained peer support worker. A whole health-trained peer practitioner can serve as a natural ally, someone who has walked "in the same shoes" as the individual seeking help. Sharing lived experiences in the context of a strengths-based approach can motivate an individual to move towards health, wellness, and resiliency.

Peer Support Whole Health expanded from the foundation created by the Georgia Certified Peer Specialist Project. The first group of certified peers was approved at the end of 2001. The Peer Support Whole Health project was created when The Center for Mental Health Services awarded Georgia a Transformation Transfer Initiative (TTI) Grant in FY 2008-2009. The purpose of the grant was to expand and transform the state's trained peer workforce to promote more holistic recovery. This was a goal inspired by the research findings of increased morbidity and mortality associated with mental illness, and the recognition that much of this was due to modifiable risk factors such as obesity and tobacco use. The objectives of the TTI grant were to: demonstrate that Medicaid would pay for the utilization of peer support services to achieve whole-health goals; to demonstrate at two peer centers the impact of peer support services on the achievement of whole-health goals; to introduce Georgia providers and management to the concept of Peer Support Whole Health and to show them how to bill Medicaid for the services; to train more than ten percent of Georgia's peer specialist workforce in Peer Support Whole Health; and to train mental health consumers statewide on Peer Support Whole Health. To achieve these objectives, the state worked with Appalachian Consulting Group and the Georgia Mental Health Consumer Network to offer pilot project training.

Organizational/administrative structure. An eight week training program took place at two peer center pilot sites. The training included consumer participants setting whole health goals, incorporation of these goals into their Individual Service/Recovery Plans and initial work toward attainment of the goals. In order to ensure that the Peer Support Whole Health services would be billable to Medicaid, the Medicaid Coordinator of the Georgia Department of Behavioral Health and Developmental Disabilities worked with key staff of APS Healthcare (the Department's External Review Organization) to conduct an audit of progress notes charted on participants in the eight week pilot study. The audit findings determined that whole health must be integrated into the entire behavioral health system; assessment forms must include information related to whole health; clinicians must be trained to integrate whole health goals into treatment service planning; and the pursuit of whole health and wellness should be incorporated into behavioral healthcare in a manner similar to the incorporation of employment, housing and meaningful community life.

Population eligible/served. Under its newest grant (see below), the Georgia Department of Behavioral Health and Developmental Disabilities (GDBHDD) will train 600 Certified Peer Specialists (CPS) to support individuals with behavioral health issues in meeting their health goals.

How the program is financed. The development phase of the program was originally financed by a Transformation Transfer Initiative (TTI) Grant. The services are funded on an ongoing basis by Medicaid and other payers as a part of the Georgia Certified Peer Support initiative. Most recently, in January 2012, GDBHDD received another $210,000 grant from SAMHSA to offer Peer Supported Whole Health and Wellness Certification through a partnership with the Georgia Mental Health Consumer Network. The grant will support development of a standard curriculum for CPSs to provide health and wellness supports, and will guide providers on how to utilize trained CPSs to achieve health goals.

Results achieved. Initially, 63 CPSs, representing over ten percent of Georgia's total number of CPSs, participated in a two-day training of trainers. By the end of 2009, the Georgia Mental Health Consumer Network was funded by the state to open the first peer support and wellness center in a suburb of Atlanta. Using peer support and focusing consumers on staying well, the center cut hospitalizations by one-third. The initial program was so successful that Georgia planned to expand the peer-operated wellness centers statewide.

Link to website with further information:
http://www.nxtbook.com/ygsreprints/ygs/g8805_nationalcouncil_sample/index.php#/22
http://www.pillarsofpeersupport.org/POPS2011.pdf

Source(s) of information for this summary:
Fricks, L (2009). Consumers take charge of wellness. National Council Magazine, 2009.
http://www.nxtbook.com/ygsreprints/ygs/g8805_nationalcouncil_sample/index.php#/22

Daniels, A, Tunner, T, Ashenden, P, Bergeson, S, Fricks, L, Powell, I. (2012). Pillars of peer support – III: Whole health peer support services", pillarsofpeersupport.org; January 2012.
http://www.pillarsofpeersupport.org/POPS2011.pdf

Montana Behavioral Health and Corrections Collaboration

Brief summary. Montana used funding from SAMHSA/CMHS under the Transformation Transfer Initiative (TTI) in 2009-2010 to support a collaborative effort between behavioral health and corrections, including Mental Health Intervention training for law enforcement and criminal defense attorneys and 911 data collection. While there are many examples of programs that have been training law enforcement officials in identifying, intervening and diverting individuals from arrest, few have had a statewide focus, like Montana. The program has generated extensive involvement on the part of the law enforcement and legal communities. Over 200 law

enforcement officers and criminal justice professionals have received training and the Mental Illness Intervention curriculum has been incorporated into Montana Law Enforcement Basic Training. In every state, law enforcement personnel are first responders in many mental health related crisis situations. In rural states, these law enforcement personnel often have to intervene more intensively and for longer periods of time. This underscores the need for and importance of system-wide training and support.

Organizational/administrative structure. A Behavioral Health Program Facilitator, working in both the Department of Public Health and Human Services and the Department of Corrections, is responsible for coordinating the program.

Population eligible/served. The program has provided training to over 200 law enforcement officers and criminal justice professionals. In addition, more than 60 county attorneys and public defenders participated. The training covered civil and forensic commitment, evaluations, effective communication with clients, moral and ethical responsibilities of representation and the NAMI In Our Own Voice program. (In Our Own Voice is a public education program developed by NAMI, in which two trained consumer speakers share compelling personal stories about living with mental illness and achieving recovery.) Presenters included a Supreme Court justice, deputy attorney general, parole officer, forensic psychiatrist, state prison warden, registered psychiatric nurse, law enforcement, advocates, providers and educators.

How the innovation is financed. The State of Montana received a $221,000 grant from SAMHSA/CMHS under the TTI, which provided, on a competitive basis, modest funding awards to states that were not participating in the Mental Health Transformation State Incentive Grant (T-SIG) program. These flexible funds were used to identify, adopt, and strengthen transformation initiatives and activities that can be implemented in the state, either through a new initiative or expansion of one already underway. The initiative will continue with funding from the Flex Rural Veterans Health Access Program grant (through the Department of Health and Human Services, Office of Rural Health, Health Resources and Services Administration) awarded to Montana in August 2010.

Results achieved. Legislation passed in 2009, and implemented during the TTI grant period, created three new programs for jail diversion and crisis intervention, including training for law enforcement and first responders. Also among the programs are matching grants between state and county governments aimed at reducing emergency and court ordered detentions to the Montana State Hospital, and funding for community based, short term crisis stabilization beds. Early outcomes of all the programs have shown measurable success.

Link to websites with further information.
http://www.nasmhpd.org/general_files/2011OnePagerSet.pdf;
http://www.hhs.gov/news/press/2010pres/08/20100823a.html

Minnesota Stay Well Stay Working Demonstration Project

Brief summary. Minnesota's Stay Well Stay Working program (SWSW) was one of the projects in the multi-state Demonstration to Maintain Independence and Employment initiative funded between December 2006 and September 2009 by the CMS. The goal of the program was to prevent or delay persons with SMI from becoming disabled and no longer able to work by coordinating a comprehensive set of self-directed health, behavioral health and employment support services. Each person was assigned a Wellness and Employment Navigator whose role was to educate, support and assist participants to empower themselves to manage their own physical and mental health in tandem with their employment issues, and to learn about available community resources and how to access them. Navigators were trained to stay neutral while assessing participants' needs in these domains and matching them to available resources. Participants were encouraged to contact their navigator regularly, on a voluntary basis.

Navigators supported participants in developing person-centered Wellness and Employment Success Plans. They also made referrals, coordinated care and monitored progress on a monthly basis. In contrast to traditional case managers, navigators operated in at least three systems (health plans, employment and mental health). Their holistic approach included a focus on life skills and overall quality of life, including exercise, stress management, nutrition, smoking cessation, financial planning and budget management. Also, unlike traditional case managers, navigators were not direct providers of medical or behavioral healthcare, and performed no managed care gatekeeping functions. Thirteen navigators carried caseloads of 110-140 consumers, and 40% of consumers averaged ten or more encounters with their navigator in the first year of the program. Over half of the encounters were for supportive consultation and about a third of them resulted in a referral, the most common of which were for employment support services (39%), mental health services (25%) and medical care (17%).

Organizational/administrative structure. SWSW was led by the state's Department of Human Services (DHS) Disability Services Division (DSD) and implemented in partnership with a provider network administered by Medica Health Plans, a non-profit managed care organization. The Medicaid and Adult Mental Health Divisions in DHS and Vocational Rehabilitation Services in the Department of Employment and Economic Development were also part of the collaboration. Medica was responsible for delivering medical services and subcontracting for the rest of the services in the program. Medica held two contracts: one was through Medica's existing Medicaid contract and covered medical, dental and behavioral health services. A second, through DHS, covered management functions as well as services outside of the Medicaid benefit (navigators, Employment Assistance and Support Equity services, Employee Assistance Program, and peer-supported Wellness Recovery Action Plan services) that Medica subcontracted out to community-based organizations. Medica also provided significant training and liaison work.

Population eligible/served – numbers and demographics. Participants were 1,494 adults with SMI, most of whom were employed 35 hours a week but were also considered at risk for needing to apply for Social Security Disability Income (SSDI). More than half (52%) suffered from depression, and the diagnoses of smaller numbers included anxiety disorders, Bipolar Disorder, and substance abuse disorders. Only 2% presented with schizophrenia or other psychotic disorders. Their average monthly income was $1,547. Most worked in the service or retail sectors and over 90% expressed dissatisfaction with their financial status. Three quarters expressed dissatisfaction with their health status. Over 40% were high school graduates, nearly a third had some college, and 17% were college graduates.

How the innovation is financed. The multi-year cost of the program for a total of 25,121 member months was $26.2 million, the greatest proportion of which was $20.7 million ($823 per member per month) for health and behavioral health care coverage provided under the Medicaid benefit. Navigation and other employment related benefits totaled $5.3 million ($211 PMPM), much of which was covered by the demonstration grant from the CMS. Participants' health care costs were 92% of PMPM estimates and also lower than those of the control group, even though they used more medical, dental and pharmacy services than they did the year before. This was because more regular preventive visits avoided the costs of more intensive services, including emergency room visits and hospitalizations.

An independent report indicated that in four years of operation, SWSW could yield a significant return on public investment, most of which would be realized by the Social Security System because of the reduced need to apply for SSI. They concluded that choosing a cost-reimbursement payment for navigation during start-up (which was slow due to enrollment barriers) was a wise decision, but that this could be replaced later with pay for performance methods. Capitation payments for health, behavioral health and dental services were also considered feasible, at least for groups with limited risk.

Results achieved. Independent researchers utilized a randomized control design to evaluate participant outcomes. Significant outcomes included higher earnings, greater job stability, and lower rates of medical debt, which resulted in fewer applications for SSDI. By contrast, the income of lower functioning individuals in the control group showed to decline. Significant improvements were also found in participants' functioning, mental health status, and Activities of Daily Living/Independent Activities of Daily Living. Participants were also significantly more likely to be connected with a regular medical provider for routine and preventive care, less likely to skip or delay needed care because of cost, and more likely to report better quality of life than control group members.

Link to website(s) with further information:
www.staywellstayworking.com

Sources of information for this summary:
Linkins. K, Brya, J, Holt, W, Dougherty, R (2010). *Contracting to manage work and wellness: New roles for managed care organizations.*

Minnesota Department of Human Services (2010). Research brief: Understanding the role of navigation in the Stay Well, Stay Working Program; and SWSW business case for public sector investment. October, 2010.

Appendix I: Detailed Mental Health and Substance Abuse Service Descriptions

Resiliency and Disease Management

The Resiliency and Disease Management model under DSHS was described in Section III.B of the report. The following detailed descriptions are provided for the RDM services packages for the Adult and the Child and Adolescent services identified in that section of the report.

Adult Service Package 1: Basic RDM Services

"Services in this package are generally intended for individuals with major depressive disorder (MDD) (identified with a Global Assessment of Functioning (GAF) of≤ 50), bipolar disorder, or schizophrenia and related disorders who present with very little risk of harm and who have supports and a level of functioning that does not require higher levels of care.

The general focus of this array of services is to reduce or stabilize symptoms, improve the level of functioning, and/or prevent deterioration of the person's condition. Natural and/or alternative supports are developed to help the person move out of the public mental health system. Services are most often provided in outpatient, office-based settings, and are primarily limited to medication, rehabilitative services, and education."[90]

When interviewed, providers and state staff typically described this as medication management of adults who can function in their environment but need medications and some supports to do so. Depending on the provider, there are waiting lists for service package 1 because of the unavailability of physicians to prescribe medications for adults eligible for this service package.

Adult Service Package 2: Basic RDM Services with Counseling Services

"Services in this package are intended for individuals with residual symptoms of MDD (GAF≤ 50 at intake) who present very little risk of harm, who have supports, and a level of functioning that does not require more intensive levels of care, and who can benefit from psychotherapy.

The general focus of services in this package is to improve level of functioning and/or prevent deterioration of the person's condition. Natural and/or alternative supports are developed to help the person move out of the public mental health system. Services are most often provided in outpatient, office-based settings and include psychotherapy services in addition to those offered in SP1."[91]

[90] Texas Department of State Health Services, (2010, July), Resiliency and Disease Management (RDM) Utilization Management Guidelines Adult Service, Austin, TX.
[91] Texas Department of State Health Services, (2010, July), Resiliency and Disease Management (RDM) Utilization Management Guidelines Adult Service, Austin, TX.

When interviewed, providers and state staff typically described this as cognitive behavioral therapy (CBT) for adults who are depressed but do not have psychosis. Providers indicated that there are additional training requirements for professionals in order to provide CBT and obtaining trained staff is a bottleneck in providing the service.[92]

Adult Service Package 3: Intensive RDM Services with Team Approach

"The general focus of services in this package is, through a team approach, to stabilize symptoms, improve functioning, develop skills in self-advocacy, and increase natural supports in the community and sustain improvements made in more intensive SPs.

Services in this package are generally intended for individuals who enter the system of care with moderate to severe levels of need (or for those whose LOC-R has increased) who require intensive rehabilitation to increase community tenure, establish support networks, increase community awareness, and develop coping strategies in order to function effectively in their social environment (family, peers, school)."[93]

Adult Service Package 4: Assertive Community Treatment (ACT)

"The purpose of ACT is to provide a self-contained program that serves as the fixed point of responsibility for providing treatment, rehabilitation and support services to identified consumers with severe and persistent mental illnesses. A typical ACT consumer has a diagnosis of schizophrenia or another serious mental illness such as bipolar disorder and has experienced multiple psychiatric hospital admissions either at the state or community level. Using an integrated services approach, the ACT team merges clinical and rehabilitation staff expertise, e.g., psychiatric, substance abuse, employment, and housing within one mobile service delivery system."[94]

Adults served in ACT programs tend to have multiple problems such as co-occurring substance abuse, lack of shelter and employment, and significant use of inpatient resources such as hospital emergency rooms. This package is intended to provide significant levels of service to small numbers of adults that have substantial behavioral health impairments.

Children's Service Package 1.1: Externalizing Disorders

"This service package is targeted to children/adolescents with externalizing disorders (e.g., ADD/ADHD, Conduct or Oppositional Defiant Disorder) and a moderate level of functional impairment. The focus of intervention is on psychosocial skills development in the

[92] CBT requires a licensed therapist and 32 hours of competency training on the CBT model; a therapist must first have 3,000 hours of practical training to become licensed.
[93] Texas Department of State Health Services, (2010, July), Resiliency and Disease Management (RDM) Utilization Management Guidelines Adult Service, Austin, TX.
[94] Texas Department of State Health Services, (2010, July), Resiliency and Disease Management (RDM) Utilization Management Guidelines Adult Service, Austin, TX.

child/adolescent and the enhancement of parenting skills, especially in child behavior management.

This service package is generally considered short-term and time-limited. The general goal of services at this level of care is to reduce or stabilize symptoms, decrease functional impairment and build resiliency in the child/adolescent and family."[95]

Children's service package 1.1 deals with externalizing behavior at moderate levels of severity.

Children's Service Package 1.2: Internalizing Disorders
"This service package is targeted to children/adolescents with internalizing disorders (depressive or anxiety disorders) and a moderate level of functional impairment. The focus of intervention is on child/adolescent and family counseling using Cognitive Behavioral Therapy (CBT) for ages 9 & above and CBT or other therapy approaches for children ages 3 through 8.

The general goal of services at this LOC is to reduce or stabilize symptoms, decrease functional impairment and build resiliency in the child/adolescent and family."[96]

Children's service package 1.2 deals with internalizing behavior at moderate levels of impairment.

Children's Service Package 2.1: Multi-Systemic Therapy
This service package is not currently provided.

Children's Service Package 2.2: Externalizing Disorders
"This service package is targeted to children/adolescents with externalizing disorders and moderate to high functional impairment at home, school or in the community. The need for intensive case management and significant parent support is indicated.

The general goal of services at this level of care is to reduce or stabilize symptoms, decrease functional impairment and build resiliency in the child/adolescent and family."[97]

Children's service package 2.2 deals with externalizing behavior at higher levels of impairment.

[95] When interviewed in the Fall of 2011, DSHS staffs indicated that changes in composition of children's service packages were being introduced. For example, providing more "wrap-around" services. The descriptions of the children's service packages used in this utilization review are based on the January 2010 Guidelines currently found on the DSHS website.
[96] Texas Department of State Health Services, (2010, January), Resiliency and Disease Management (RDM) Utilization Management Guidelines Child and Adolescent Services, Austin, TX.
[97] Texas Department of State Health Services, (2010, January), Resiliency and Disease Management (RDM) Utilization Management Guidelines Child and Adolescent Services, Austin, TX.

Children's Service Package 2.3: Internalizing Disorders
This service package is targeted to children/adolescents with depressive or anxiety disorders and a moderate to high level of problem severity or functional impairment. The focus of intervention is on child/adolescent and family counseling using Cognitive Behavioral Therapy (CBT) for ages 9 & above and CBT or other therapy approaches for children ages 3 through 8.

The general goal of services at this level of care is to reduce or stabilize symptoms, decrease functional impairment and build resiliency in the child/adolescent and family.[98]

DSHS staff interviewed said children's 2.3 package was for more severe internalizing disorders.

Children's Service Package 2.4: Major Disorders
"This level of care is targeted to children/adolescents who are diagnosed with Bipolar Disorder, Schizophrenia, Major Depression with Psychosis, or other psychotic disorders and are not yet stable on medication. The general goal of services at this level of care is stabilizing the child/adolescent and providing information and support to the family."[99]

Children's Service Package 4: Aftercare Services
"This service package is targeted to children/adolescents who have stabilized in terms of problem severity and functioning and require only medication and medication management to maintain their stability. The general goal of this level of service is maintain treatment gains made by the child/adolescent and family and to provide them with medication monitoring services until the family can be adequately linked to natural and community resources."[100]

DSHS staff interviewed noted that Children' Service Package 4 was most commonly used when a family declines a higher level of services. A number of potential reasons for this were cited by the staff interviewed with the most common being that the higher level of services requires more counseling sessions thus more home visits or more visits to the provider site. In some cases, the additional sessions and visits were simply not wanted by the family and thus declined while in other cases, the logistics of frequently traveling to a provider site was not feasible. This service package, with its emphasis on medication and case management, is similar to the Adult Service Package 1 and provides the lowest level of care to meet the needs of children and adolescents who have completed a course of treatment in a higher service package and have been stabilized.

[98] Texas Department of State Health Services, (2010, January), Resiliency and Disease Management (RDM) Utilization Management Guidelines Child and Adolescent Services, Austin, TX.
[99] Texas Department of State Health Services, (2010, January), Resiliency and Disease Management (RDM) Utilization Management Guidelines Child and Adolescent Services, Austin, TX.
[100] Texas Department of State Health Services, (2010, January), Resiliency and Disease Management (RDM) Utilization Management Guidelines Child and Adolescent Services, Austin, TX.

Additional Medicaid Covered Services

The following descriptions are provided for the mental health services covered as part of the Medicaid benefit outside of the Medicaid Rehabilitation and Targeted Case Management services. These services are available to any Medicaid eligible consumer under the Medicaid FFS or Medicaid Managed Care programs.

Physicians Services

Behavioral health services, including diagnostic interviews, psychotherapy/counseling (including individual, group, or family counseling), psychological and neuropsychological testing, pharmacological regimen oversight, pharmacological management, and chemical dependency treatment in chemical dependency treatment facilities (CDTF), are benefits of Texas Medicaid when these services are provided to clients who are experiencing a significant behavioral health issue that is causing distress, dysfunction, or maladaptive functioning as a result of a confirmed or suspected psychiatric condition, as defined in the current edition of the DSM-IV-TR.[101]

Psychologists and LPA Services

Psychologists who are licensed by the TSBEP and enrolled as Medicaid providers and LPAs who are under the direct supervision of a psychologist are authorized to perform counseling and testing for mental illness or debility. Treatment does not include the practice of medicine.

The services provided by a licensed chemical dependency counselor (LCDC), social worker, psychiatric nurse, or mental health worker are not covered by Texas Medicaid.[102] However, the facility can bill Medicaid for services.

Electroconvulsive Therapy (ECT)

ECT is the induction of convulsions by the passage of an electric current through the brain. It is used in the treatment of certain psychiatric disorders. ECT treatments are limited to one per day.

ECT performed by the following providers may be provided in the office, outpatient hospital, and inpatient hospital setting:

- Physicians
- Clinical Nurse Specialists (CNS)
- Physician's Assistant (PA)
- Nurse Practitioner (NP)[103]

[101] Texas Medicaid Provider Procedures Manual, Volume 2: Provider Handbooks. Texas Medicaid & Healthcare Partnership (TMHP). Section 7.2.1, page BH-31.
[102] Texas Medicaid Provider Procedures Manual, Volume 2: Provider Handbooks. Texas Medicaid & Healthcare Partnership (TMHP). Section 7.2.2, page BH-31.
[103]Texas Medicaid Provider Procedures Manual, Volume 2: Provider Handbooks. Texas Medicaid & Healthcare Partnership (TMHP). Section 7.6, page BH-37.

Pharmacological Regimen Oversight and Pharmacological Management Services
Pharmacological regimen oversight and pharmacological management services are a benefit of Texas Medicaid when provided by a physician, CNS, NP, or PA

The focus of a pharmacological management encounter or visit is the use of medication to treat a client's signs and symptoms of mental illness. When the client continues to experience signs and symptoms of mental illness necessitating discussion beyond minimal outpatient psychotherapy/counseling in a given day, the focus of the service is broader and would be outpatient psychotherapy/counseling rather than pharmacological management.[104]

Psychiatric Diagnostic Interviews
Psychiatric diagnostic interviews are a benefit of Texas Medicaid when provided by psychiatrists, psychologists, NPs, CNSs, and PAs when performed in the inpatient and outpatient setting.

An interactive psychiatric diagnostic interview may be covered to the extent that it is medically necessary. Examples of medical necessity include, but are not limited to, clients whose ability to communicate is impaired by expressive or receptive language impairment from various causes, such as conductive or sensorineural hearing loss, deaf mutism, or aphasia.

A psychiatric diagnostic interview may be incorporated into an E/M service provided the required elements of the E/M service are fulfilled.[105]

Psychological and Neuropsychological Testing
Psychological testing and neuropsychological testing are covered services when provided by a psychiatrist, psychologist, or LPA under the direct supervision of the psychologist. Psychologists licensed by the TSBEP and enrolled as Medicaid providers are authorized to perform counseling and testing for mental illness or debility. Psychological and neuropsychological testing are not covered benefits when provided by a CNS, NP, or PA.[106]

Psychotherapy/Counseling
Psychotherapy/counseling is the treatment for mental illness and behavioral disturbances, in which the clinician establishes a professional contract with the client and, through definitive therapeutic communication or therapeutic interactions, attempts to alleviate the emotional

[104] Texas Medicaid Provider Procedures Manual, Volume 2: Provider Handbooks. Texas Medicaid & Healthcare Partnership (TMHP). Section 7.8, page BH-38.
[105] Texas Medicaid Provider Procedures Manual, Volume 2: Provider Handbooks. Texas Medicaid & Healthcare Partnership (TMHP). Section 7.9, page BH-41.
[106] Texas Medicaid Provider Procedures Manual, Volume 2: Provider Handbooks. Texas Medicaid & Healthcare Partnership (TMHP). Section 7.10, page BH-45.

disturbances, reverse or change maladaptive patterns of behavior, and encourage personality growth and development.

The appropriate service is chosen based on the type of inpatient or outpatient psychotherapy/ counseling, the place of service, the face-to-face time spent with the client during inpatient or outpatient psychotherapy/counseling, and whether E/M services are furnished on the same date of service as inpatient or outpatient psychotherapy/counseling.[107]

Narcosynthesis

Narcosynthesis is a treatment for mental illness combining the use of narcotics and hypnosis to induce various mental states. This is a benefit of Texas Medicaid when billed by a physician.[108]

Psychiatric Services for Hospitals

Inpatient admissions to acute care hospitals for adults and children for psychiatric conditions are a benefit of Texas Medicaid. Admissions must be medically necessary and are subject to the Texas Medicaid's retrospective UR requirements. The UR requirements are applicable regardless of the hospital's designation of a unit as a psychiatric unit versus a medical/surgical unit.

Clients who are 20 years of age and younger may be admitted to a freestanding psychiatric facility or a state psychiatric facility. Clients who are 21 years of age and older may be admitted only to an acute care facility. A certification of need must be completed and placed in the client's medical record within 14 days of the admission or once the client becomes Medicaid-eligible while in the facility.

Inpatient psychiatric treatment is a benefit of Texas Medicaid if all the following apply:

- The client has a psychiatric condition that requires inpatient treatment.
- The inpatient treatment is directed by a psychiatrist.
- The inpatient treatment is provided in a nationally accredited facility or hospital.
- The provider is enrolled in Texas Medicaid.

For the Medicaid program, services provided in a free-standing psychiatric facility for persons age 21-64, this can be provided through the Medicaid managed care delivery model as an “in lieu of” service. However, in FFS Medicaid this would not be an allowable service due to the Institutes of Mental Disease (IMD) exclusion.

[107] Texas Medicaid Provider Procedures Manual, Volume 2: Provider Handbooks. Texas Medicaid & Healthcare Partnership (TMHP). Section 7.11, page BH-48.
[108] Texas Medicaid Provider Procedures Manual, Volume 2: Provider Handbooks. Texas Medicaid & Healthcare Partnership (TMHP). Section 7.12, page BH-54.

Inpatient admissions for the single diagnosis of chemical dependency or abuse (such as alcohol, opioids, barbiturates, and amphetamines) without an accompanying medical complication are not benefits of Texas Medicaid. Additionally, admissions for chronic diagnoses such as mental retardation, organic brain syndrome, or chemical dependency or abuse are not covered benefits for acute care hospitals without an accompanying medical complication or medical condition.[109]

Medicaid Substance Use Disorder Benefit
The following service descriptions are provided for the substance abuse services covered under the Medicaid Substance Use Disorder benefit described in Section III.B of the report.

Detoxification Services
Detoxification services are a set of interventions aimed at managing acute physiological substance dependence. According to TAC § 448.902 detoxification services include, but are not limited to, the following components:

- Evaluation
- Monitoring
- Medication
- Daily interactions

All Medicaid clients who are admitted to a detoxification program must meet the current DSM criteria for physiological substance dependence and must meet the admission requirements based on a nationally recognized standard.[110]

Ambulatory (Outpatient) Detoxification Services
Ambulatory (outpatient) detoxification is appropriate when the client's medical needs do not require close monitoring. Ambulatory (outpatient) detoxification is not a stand-alone service and must be provided in conjunction with ambulatory (outpatient) substance abuse treatment services.[111]

Residential Detoxification Services
Residential detoxification is appropriate when the client's medical needs do not warrant an acute inpatient hospital admission, but the severity of the anticipated withdrawal requires close monitoring.

[109] Texas Medicaid Provider Procedures Manual, Volume 2: Provider Handbooks. Texas Medicaid & Healthcare Partnership (TMHP). Section 7.14, page BH-55.
[110] Texas Medicaid Provider Procedures Manual, Volume 2: Provider Handbooks. Texas Medicaid & Healthcare Partnership (TMHP). Section 9.4, page BH-62.
[111] Texas Medicaid Provider Procedures Manual, Volume 2: Provider Handbooks. Texas Medicaid & Healthcare Partnership (TMHP). Section 9.4.1, page BH-62.

Medically-supervised hospital inpatient detoxification, available as a Medicaid benefit only, is appropriate when one of the following criteria is met:

- The client has complex medical needs or complicated comorbid conditions that necessitate hospitalization for stabilization
- The services that are provided to a client are incidental to other medical services that are provided as a component of an acute care hospital stay.[112]

Treatment Services

Treatment may be provided by a CDTF in a residential facility or as an ambulatory (outpatient) service. It should be noted that MAT is considered part of treatment services provided in a residential facility and is not separately reimbursed through Medicaid. MAT may be separately reimbursed in the ambulatory (outpatient) setting and may be provided during the treatment period in conjunction with other ambulatory (outpatient) treatment services.[113]

Medication Assisted Therapy (MAT)

MAT is a benefit of Texas Medicaid when using a drug or biological recognized in the treatment of SUD and provided as a component of a comprehensive treatment program according to TAC § 448.902. MAT is considered part of treatment services that are provided in a residential facility and is not separately reimbursed, however MAT may be separately reimbursed in the ambulatory (outpatient) setting and may be provided during the treatment period in conjunction with other ambulatory (outpatient) treatment services.

MAT is also a benefit as a conjunctive treatment regimen for clients who are addicted to substances that can be abused who meet the current DSM criteria for a SUD.[114]

[112] Texas Medicaid Provider Procedures Manual, Volume 2: Provider Handbooks. Texas Medicaid & Healthcare Partnership (TMHP). Section 9.4.2, page BH-62.
[113] Texas Medicaid Provider Procedures Manual, Volume 2: Provider Handbooks. Texas Medicaid & Healthcare Partnership (TMHP). Section 9.5, page BH-62.
[114] Texas Medicaid Provider Procedures Manual, Volume 2: Provider Handbooks. Texas Medicaid & Healthcare Partnership (TMHP). Section 9.6, BH-63.

Appendix II: Additional Data on Consumers Served by DSHS

The following tables provide additional details regarding the consumers served in the DSHS system of care described in Section III.B of the report.

Table AII.1: Mental Health Diagnoses of Adults Seen By the LMHAs, 2011

Name of LMHA	Schizophrenia	Bipolar	Major Depression	Other Diagnosis	Total
Betty Hardwick	328	472	383	1,202	2,385
Texas Panhandle	560	672	1,175	447	2,854
Austin-Travis	2,992	5,041	2,250	896	11,179
Central Counties	615	1,050	1,235	597	3,497
Center for Health Care	2,935	4,040	2,994	1,097	11,066
Center for Life Resources	242	297	359	78	976
Central Plains	186	213	381	79	859
El Paso MHMR	1,644	2,069	2,720	1,082	7,515
Gulf Coast	1,071	1,425	1,196	130	3,822
Gulf Bend MHMR	406	413	731	227	1,777
Tropical Texas	1,622	2,663	3,847	2,088	10,220
Spindle Top	1,006	1,155	1,496	1,130	4,787
Lubbock Regional	535	510	750	616	2,411
Concho Valley	212	264	255	90	821
Permian Basin	469	754	1,161	633	3,017
Nueces County MHMR	883	1,137	929	192	3,141
Andrews Center	755	1,520	1,453	836	4,564
MHMR Tarrant County	2,861	4,791	3,121	2,556	13,329
Heart of Texas	731	263	625	1,172	2,791
Helen Farabee	667	2,236	1,566	547	5,016
Community HealthCore	1,023	1,361	1,327	409	4,120
Brazos Valley	670	1,009	513	577	2,769
Burke Center	861	1,346	981	662	3,850
Harris MHMRA	5,422	7,600	7,309	2,809	23,140
Texoma MHMR	292	455	460	335	1,542
Pecan Valley	460	1,319	1,430	548	3,757
Tri-County MHMR	581	2,248	943	350	4,122
Denton Co MHMR	459	1,236	1,391	506	3,592
Texana Center	822	1,482	1,719	234	4,257

Name of LMHA	Schizophrenia	Bipolar	Major Depression	Other Diagnosis	Total
Access	283	435	583	319	1,620
West Texas Center	502	713	1,365	186	2,766
Bluebonnet Trails	1,028	2,101	1,358	513	5,000
Hill Country	800	1,580	1,650	485	4,515
Coastal Plains	419	1,104	1,380	308	3,211
Lakes Reg. MHMR	336	655	829	324	2,144
Border Reg. MHMR	477	587	831	242	2,137
Camino Real MHMR	418	713	864	172	2,167
Total	**35,573**	**56,929**	**53,560**	**24,674**	**170,736**
Percentage	**20.84%**	**33.34%**	**31.37%**	**14.45%**	**100.00%**

Source: Raw, de-identified data supplied by: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA)
Data analysis performed by: PCG

Table below shows the percentage of adults by LMHA that were diagnosed with bipolar, schizophrenia, major depression or another diagnosis during 2011. This is the same information as shown above but the numbers below are presented as a percentage of all persons diagnosed by each LMHA.

Table AII.2: Percentage of Adults Diagnosed With Schizophrenia, Bipolar, Major Depression and Other Diagnosis by LMHA, 2011.

Name of LMHA	Schizophrenia	Bipolar	Major Depression	Other Diagnosis	Total
Betty Hardwick	13.75%	19.79%	16.06%	50.40%	100.00%
Texas Panhandle	19.62%	23.55%	41.17%	15.66%	100.00%
Austin-Travis	26.76%	45.09%	20.13%	8.02%	100.00%
Central Counties	17.59%	30.03%	35.32%	17.07%	100.00%
Center for Health Care	26.52%	36.51%	27.06%	9.91%	100.00%
Center for Life Resources	24.80%	30.43%	36.78%	7.99%	100.00%
Central Plains	21.65%	24.80%	44.35%	9.20%	100.00%
El Paso MHMR	21.88%	27.53%	36.19%	14.40%	100.00%
Gulf Coast	28.02%	37.28%	31.29%	3.40%	100.00%
Gulf Bend MHMR	22.85%	23.24%	41.14%	12.77%	100.00%
Tropical Texas	15.87%	26.06%	37.64%	20.43%	100.00%
Spindle Top	21.02%	24.13%	31.25%	23.61%	100.00%
Lubbock Regional	22.19%	21.15%	31.11%	25.55%	100.00%
Concho Valley	25.82%	32.16%	31.06%	10.96%	100.00%

Name of LMHA	Schizophrenia	Bipolar	Major Depression	Other Diagnosis	Total
Permian Basin	15.55%	24.99%	38.48%	20.98%	100.00%
Nueces County MHMR	28.11%	36.20%	29.58%	6.11%	100.00%
Andrews Center	16.54%	33.30%	31.84%	18.32%	100.00%
MHMR Tarrant County	21.46%	35.94%	23.42%	19.18%	100.00%
Heart of Texas	26.19%	9.42%	22.39%	41.99%	100.00%
Helen Farabee	13.30%	44.58%	31.22%	10.91%	100.00%
Community HealthCore	24.83%	33.03%	32.21%	9.93%	100.00%
Brazos Valley	24.20%	36.44%	18.53%	20.84%	100.00%
Burke Center	22.36%	34.96%	25.48%	17.19%	100.00%
Harris MHMRA	23.43%	32.84%	31.59%	12.14%	100.00%
Texoma MHMR	18.94%	29.51%	29.83%	21.73%	100.00%
Pecan Valley	12.24%	35.11%	38.06%	14.59%	100.00%
Tri-County MHMR	14.10%	54.54%	22.88%	8.49%	100.00%
Denton Co MHMR	12.78%	34.41%	38.72%	14.09%	100.00%
Texana Center	19.31%	34.81%	40.38%	5.50%	100.00%
Access	17.47%	26.85%	35.99%	19.69%	100.00%
West Texas Center	18.15%	25.78%	49.35%	6.72%	100.00%
Bluebonnet Trails	20.56%	42.02%	27.16%	10.26%	100.00%
Hill Country	17.72%	34.99%	36.54%	10.74%	100.00%
Coastal Plains	13.05%	34.38%	42.98%	9.59%	100.00%
Lakes Reg. MHMR	15.67%	30.55%	38.67%	15.11%	100.00%
Border Reg. MHMR	22.32%	27.47%	38.89%	11.32%	100.00%
Camino Real MHMR	19.29%	32.90%	39.87%	7.94%	100.00%

Source: Raw, de-identified data supplied by: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA)
Data analysis performed by: PCG

Table AII.3: DSM-IV Codes Used By the LMHAs for Persons with Other Diagnoses, Codes Used With More Than 2000 Persons, 2011.

DSM-IV Code	Most Frequent Diagnoses in the "Other Diagnosis" Category	Number of Persons
311	Depressive disorder not otherwise specified	6,454
296.9	Mood disorder not otherwise specified	4,214
V71.09	No diagnosis on Axis II	3,708
298.9	Psychotic disorder not otherwise specified	3,018

DSM-IV Code	Most Frequent Diagnoses in the "Other Diagnosis" Category	Number of Persons
799.9	Diagnosis Deferred on Axis I or Axis II	2,996
317	Mild mental retardation	2,618

Source: Raw, de-identified data supplied by: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA)
Data analysis performed by: PCG

Table AII.4: Number of Children Diagnosed With Specific DSM-IV Codes, 2011.

DSM-IV Code	Description of DSM-IV Code	Number of Children
314.01	Attention-Deficit Hyperactivity Disorder	11,937
296.90	Mood disorder not otherwise specified	3,412
313.81	Oppositional Defiant Disorder	2,912
314.90	Attention-Deficit Hyperactivity Disorder non specific	1,745
311.00	Depressive disorder non specific	1,580
314.00	Attention-Deficit Hyperactivity Disorder Combined subtype	1,189
312.90	Disruptive Behavior Disorder NOS	1,154
309.40	Adjustment disorder with mixed emotions and conflict	840
V71.09	No diagnosis on Axis II	944
312.82	Conduct disorder adolescent onset	412
309.81	Post Traumatic Stress Disorder	410
300.00	Anxiety disorder	362
	TOTAL FOR ALL CODES	**26,897**

Source: Raw, de-identified data supplied by: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA)
Data analysis performed by: PCG

Appendix III: Mental Health Service Cost and Utilization Analysis for LMHAs

Mental Health Treatment Services provided through LMHAs, 2007-2011

The data files of the Mental Health and Substance Abuse Division (MHSA) characterize mental health services into eight broad categories comprising groups of specific services. To simplify reporting of services, the LMHAs are only required to report on the most frequently used services. For example, the documentation of the encounter reporting data shows that there are eight specific counseling services. At a billing/procedure code level these services are further distinguished by time, setting and type of client, child or adult, for example the eight counseling services are distinguished into 24 billing codes. However, only four services are actually used to report mental health services. The list below shows the general categories used in the MHSA reporting and the number of specific mental health services reported.

- Screening—1 service reported on;
- Assessment –3 services reported on;
- Counseling — 4 services reported on;
- Inpatient Acute—6 services reported on;
- Medications—3 services reported on;
- Residential—3 services reported on;
- Case coordination—6 services reported on;
- Training & Supports—12 services.

The next eight sections of this report discuss each of these eight services. In most sections, three similar tables are presented for each of these mental health services. DSHS does not collect data on the use of hospital emergency rooms and hospital observation rooms. The omission of this essential information prevents a thorough analysis of services and the consequences of changes in service availability. NorthSTAR data not only includes information on emergency and observation room use but also is based on paid claims not frequently reported encounters and thus NorthSTAR data reporting is more comprehensive than the reporting used by DSHS with the LMHAs it funds.

Screening

The following three tables look at screening services. Screening is the first contact; when a person initially contacts an LMHA by phone or in person, the screening is an asking of questions to identify what the person is concerned about, collect some contact information and history about of the person, and triage the person for likely treatment. The table below shows the number of persons treated has gone up 7.50%, but the encounters have gone up less, 4.40%, and the total

hours has gone down as well as the total costs implying that less time is spent per screening.[115] The drop in cost is proportional to the drop in hours.

Table AIII.1: For DSHS-Contracted Screening Services, Number of Persons, Encounters, Total Hours, and Cost, 2007-2011.

Screening						
Year	**Number of Persons**	**Encounters**	**Total Hours**	**Number of Adults**	**Number of Children**	**Reported Cost**
2007	75,873	137,399	61,120	62,549	13,450	$13,952,354
2008	76,422	136,312	60,287	61,796	14,880	$12,494,866
2009	76,011	125,578	50,418	62,359	13,914	$11,284,575
2010	76,654	133,982	49,502	63,420	13,347	$10,954,487
2011	81,564	143,444	52,255	67,285	14,400	$11,632,546
% Change 2007-2011	**7.50%**	**4.40%**	**-14.50%**	**7.57%**	**7.06%**	**-16.63%**

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).[116]

The next table shows per person, per encounter and per hour costs for screening services. The table confirms the data in the above table and shows the encounters per person, the number of hours per person, the number of hours per encounter, the dollars per person, the cost per encounter and the cost per hour have all gone down. In general, there were 2.88% fewer screenings and a 20.47% decrease in the time taken to perform screenings. These changes dropped the cost of the screenings.

[115] In reporting mental health information the MHSA data system provides information on "encounters." As described to PCG by MHSA data staff, "… an encounter is a service. The amount of time is entered with the encounter so, if for instance 15 minutes is a unit the encounter can be an hour and it would be 4 units but it is ONE encounter. It is NOT a composite of procedure codes. An encounter is only one procedure code.

[116] In this and other tables in this section, if you add the number of children and the number of adults you will observe that it is not equal to the total unduplicated count since a person can be counted twice, once as an child and once as an adult if they become 18 years of age during the year and receive services both as a child and as an adult during the year.

Table AIII.2: For DSHS-Contracted Screening Services, Encounters per Person, Number of Hours per Person, Dollars per Person, the Cost per Encounter and the Cost per Hour of Service, 2007-2011.

Screening						
Year	**Encounters per Person**	**Number of Hours per Person**	**Hours per Encounter**	**Dollars per Person**	**Cost per Encounter**	**Cost per Hour**
2007	1.81	0.81	0.44	$183.89	$101.55	$228.28
2008	1.78	0.79	0.44	$163.50	$91.66	$207.26
2009	1.65	0.66	0.40	$148.46	$89.86	$223.82
2010	1.75	0.65	0.37	$142.91	$81.76	$221.29
2011	1.76	0.64	0.36	$142.62	$81.09	$222.61
% Change 2007-2011	**-2.88%**	**-20.47%**	**-18.11%**	**-22.44%**	**-20.14%**	**-2.48%**

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).

The next table shows the use of screening services by adults and children. There is a slight tendency for more adults to be screened than children given an 80% adult and 20% children spilt in the population of persons receiving services. Fitting in with the tables above, are the last two rows of the table that show the percent of both adults and children that had a service provided had, despite the uptick in 2010, fewer screenings from 2007 to 2011.

Table AIII.3: Use of DSHS-Contracted Screening Services by Adults and Children, 2007-2011.

	2007	**2008**	**2009**	**2010**	**2011**
Adults receiving Screening Services	62,549	61,796	62,359	63,420	67,285
Children receiving Screening Services	13,450	14,880	13,914	13,347	14,400
Total	**75,999**	**76,676**	**76,273**	**76,767**	**81,685**
% Receiving Screening that are Adults	82.30%	80.59%	81.76%	82.61%	82.37%
% Receiving Screening that are Children	17.70%	19.41%	18.24%	17.39%	17.63%
All Adults Receiving any Treatment During Year	156,467	168,287	180,651	188,660	192,953
All Children Receiving any Treatment During Year	37,423	42,531	42,076	43,390	44,357
% of all Adults Receiving Screening	39.98%	36.72%	34.52%	33.62%	34.87%
% of all Children Receiving Treatment	35.94%	34.99%	33.07%	30.76%	32.46%

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).

Assessment

The following three tables look at assessment services. Assessment occurs after the screening and is typically done face-to-face. It is a longer collection of information and seeks to more precisely understand the history of the persons, their current behavior, their physical and mental conditions, and what kind of treatment, if any, they should be encouraged to obtain.

During the period 2007-2011, three separate assessment services were reported on by the LMHAs:

- Pre-Admission QMHP-CS Assessment;
- Psychiatric Diagnostic Interview, and
- Psychiatric Diagnostics.

The tables below present combined information for these three assessment services. The next table shows the number of persons, encounters, total hours, and cost. The table is straightforward. Everything about assessment is going down except the cost.

Table AIII.4: For DSHS-Contracted Assessment Services, Number of Persons, Encounters, Total Hours, and Cost, 2007-2011.

Assessment						
Year	**Number of Persons**	**Encounters**	**Total Hours**	**Number of Adults**	**Number of Children**	**Reported Cost**
2007	112,222	302,551	144,531	90,211	22,229	$33,522,608
2008	98,414	198,533	132,056	76,490	15,970	$30,069,084
2009	101,586	211,575	138,829	80,359	21,665	$37,508,799
2010	105,272	218,742	145,048	83,210	22,290	$40,234,840
2011	104,419	216,895	140,599	83,444	21,262	$38,822,217
% Change 2007-2011	**-6.95%**	**-28.31%**	**-2.72%**	**-7.50%**	**-4.35%**	**15.81%**

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).

The next table shows why assessment cost is going up even though utilization is going down. Although the numbers of persons receiving assessments and the average number of assessments per person are going down, the cost per encounter of assessments has risen substantially, 61.54%. The change in the cost per encounter indicates that the cost of labor, staff time, has gone up. This substantive increase in the cost of providing the assessment has over ridden the reduction in costs from the 6.95% reduction in the number of persons assessed and 28.31% drop in the number of assessment encounters as indicated in the prior table.

Table AIII.5: For DSHS-Contracted Assessment Services, Encounters per Person, Number of Hours per Person, Dollars per Person, the Cost per Encounter, and the Cost per Hour of Service, 2007-2011.

Assessment						
Year	**Encounters per Person**	**Number of Hours per Person**	**Hours per Encounter**	**Dollars per Person**	**Cost per Encounter**	**Cost per Hour**
2007	2.696	1.29	0.48	$298.72	$110.80	$231.94
2008	2.017	1.34	0.67	$305.54	$151.46	$227.70
2009	2.083	1.37	0.66	$369.23	$177.28	$270.18
2010	2.078	1.38	0.66	$382.20	$183.94	$277.39
2011	2.077	1.35	0.65	$371.79	$178.99	$276.12
% Change 2007-2011	**-22.95%**	**4.55%**	**35.70%**	**24.46%**	**61.54%**	**19.05%**

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).

The next table takes a closer look at the use of assessment services by adults and children. The table shows that the number of adults that received an assessment has gone down from approximately 90,000 to 83,000. The ratio of adults to children is constant, about 80% of all assessments are done on adults and 20% on children which makes sense since children make up approximately 20% of all persons receiving treatment. The table also shows substantial declines in assessments in the proportion of persons receiving treatment that also get an assessment. The percentage of all adults that received any kind of mental health treatment that also got an assessment dropped from almost 57.65% to 43.25%. The drop in the percentage of children was from 59.40% to 47.93%. In 2011, fewer than half the persons receiving treatment had an assessment reported separately as part of their treatment services.

Table AIII.6: DSHS-Contracted Assessment Services for Adults and Children, 2007-2011.

	2007	2008	2009	2010	2011
Adults receiving Assessment services	90,211	76,490	80,359	83,210	83,444
Children receiving Assessment services	22,229	15,970	21,665	22,290	21,262
Total	**112,440**	**92,460**	**102,024**	**105,500**	**104,706**
% Receiving Assessment that are Adults	80.23%	82.73%	78.76%	78.87%	79.69%
% Receiving Assessment that are Children	19.77%	17.27%	21.24%	21.13%	20.31%
All Adults Receiving any Treatment During Year	156,467	168,287	180,651	188,660	192,953
All Children Receiving any Treatment During Year	37,423	42,531	42,076	43,390	44,357
% of all Adults Receiving Assessments	57.65%	45.45%	44.48%	44.11%	43.25%
% of all Children Receiving Assessments	59.40%	37.55%	51.49%	51.37%	47.93%

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).

Counseling

During the period 2007-2011, four separate counseling services were reported on by the LMHAs:

- Group psychotherapy – Adult;
- Group Psychotherapy – Child;
- Individual/Family Counseling, and
- Psychotherapy with Medical Evaluation.

The following three tables present combined information for the four counseling services. The next table shows that counseling services to adults has increased 48.19% but counseling services to children decreased 19.15%. Trends in counseling treatment are working in opposite directions in adult and children's services.

Table AIII.7: For DSHS-Contracted Counseling Services, Number of Persons, Encounters, Total Hours, and Cost, 2007-2011.

Counseling						
Year	Number of Persons	Encounters	Total Hours	Number of Adults	Number of Children	Reported Cost
2007	10,983	61,517	58,775	5,736	5,263	$8,120,917
2008	11,485	69,752	69,636	6,461	5,102	$9,747,167
2009	10,703	66,989	67,935	6,446	4,306	$9,479,078
2010	11,247	66,896	67,803	7,051	4,247	$9,811,450
2011	12,677	72,898	74,914	8,500	4,255	$10,586,897
% Change 2007-2011	**15.42%**	**18.50%**	**27.46%**	**48.19%**	**-19.15%**	**30.37%**

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).

The next table shows that there were modest increases in all factors of counseling. The change in the number of encounters per person was basically flat, 2.67% over the five years. There was a 10.43% in the number of hours of counseling provided per person and there was modest increase of 7.56 % in the hours per encounter indicating that slightly longer times were spent providing counseling services. Labor cost increases as reflected in the cost per encounter and cost per hour were small over the five-year period.

Table AIII.8: For DSHS-Contracted Counseling Services, Number of Persons, Encounters, Total Hours, and Cost, 2007-2011.

Counseling						
Year	Encounters per Person	Number of Hours per Person	Hours per Encounter	Dollars per Person	Cost per Encounter	Cost per Hour
2007	5.601	5.35	0.96	$739.41	$132.01	$138.17
2008	6.073	6.06	1.00	$848.69	$139.74	$139.97
2009	6.259	6.35	1.01	$885.65	$141.50	$139.53
2010	5.948	6.03	1.01	$872.36	$146.67	$144.71
2011	5.750	5.91	1.03	$835.13	$145.23	$141.32
% Change 2007-2011	**2.67%**	**10.43%**	**7.56%**	**12.95%**	**10.01%**	**2.28%**

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).

Table AIII.9: Use of DSHS-Contracted Counseling Services by Adults and Children, 2007-2011.

	2007	2008	2009	2010	2011
Adults receiving Counseling services	5,736	6,461	6,446	7,051	8,500
Children receiving Counseling services	5,263	5,102	4,306	4,247	4,255
Total	**10,999**	**11,563**	**10,752**	**11,298**	**12,755**
% Receiving Counseling that are Adults	52.15%	55.88%	59.95%	62.41%	66.64%
% Receiving Counseling that are Children	47.85%	44.12%	40.05%	37.59%	33.36%
All Adults Receiving any Treatment During Year	156,467	168,287	180,651	188,660	192,953
All Children Receiving any Treatment During Year	37,423	42,531	42,076	43,390	44,357
% of all Adults Receiving Counseling	3.67%	3.84%	3.57%	3.74%	4.41%
% of all Children Receiving Counseling	14.06%	12.00%	10.23%	9.79%	9.59%

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).

Inpatient Acute

In the MHSA data system, the inpatient acute services category has the superficial appearance of being a large one containing a comprehensive array of approximately 50 procedure codes reflecting all hospital related services including emergency room visits, observation stays, inpatient admissions, consultations, psychotherapy provided at the hospital and crisis transportation.

An examination of the detailed data within the inpatient acute category shows that no emergency room usage is reported by the LMHAs. This statement is not quite true, as one LMHA reported 20 persons for one year used an emergency room. Across all five years, only four LMHAs reported any inpatient hospital admissions. The inpatient acute category also contains a code called Crisis Intervention Rehabilitation which is a large category containing six distinct procedure code categories.

- AO160 Crisis Transportation;
- H0030 Hotline 24/7;
- H0036 Crisis Follow Up and Relapse Prevention; response to calls;
- H0046 Safety Monitoring in Response to a MH Crisis;
- H2011 Crisis Intervention Services (Rehab) ACT SP4, and
- H2016 Crisis Flexible Benefits.

The table below shows encounter data tabulated from procedure code counts for these six crisis intervention rehabilitation services. Each procedure code category contains the basic code such as H0030 and also contains the basic code used with modifiers such as H0030ET. The encounters below include all encounters associated with the basic code plus all encounters with modifiers. The five-year trend data shows different patterns for these six procedure codes. Without studying each service it is difficult to distinguish reporting changes from real utilization changes. For example, the additional crisis funding received by DSHS may well account for the changes in crisis follow-up encounters.

Table AIII.10: Number of DSHS-Contracted Crisis Intervention Service Encounters Reported, 2007-2011.

Year	Crisis Transportation Encounters	Hotline Encounters	Crisis Follow-up Encounters	Safety Monitoring Encounters	Crisis Intervention Encounters	Crisis Flexible Benefits Encounters
	All AO160 Codes	All H0030 Codes	All H0036 Codes	All H0046 Codes	All H2011 Codes	All H2016 Codes
2007	0	0	0	359	60,997	2,409
2008	2,466	39,671	6,522	18,164	66,816	1,450
2009	8,543	77,098	35,491	16,390	103,351	2,351
2010	10,840	87,814	62,481	9,421	117,344	2,124
2011	11,187	90,360	64,374	8,652	121,688	3,116

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).

The data reported by the DSHS regarding the emergency room use and inpatient utilization of persons receiving services in its programs is not complete since costs incurred by hospitals for persons receiving emergency and observation room services through DSHS are not generally reported. For example, if increasing numbers of persons being treated by the LMHAs use hospital services, then it is arguable that the LMHAs need to improve their programs. Conversely, if hospital utilization by persons receiving LMHA services goes down systematically, then it can be argued the LMHA programs are working. When hospital cost data is missing on hospital emergency room or hospital observation facilities then one way of gauging the quality and cost effectiveness of LMHA programs is missing.

The first table below shows the psychiatric costs for the period 2007-2011. The use of such payments has increased substantially over the five-year period. The number of persons paid for, the encounters and the hours paid for have all increased and utilization by adults has increased faster than utilization by children.

Table AIII.11: For DSHS-Contracted Inpatient Psychiatric Services, Number of Persons, Encounters, Total Hours, and Cost, 2007-2011.

Psychiatric Inpatient Services						
Year	Number of Persons	Encounters	Total Hours	Number of Adults	Number of Children	Reported Cost
2007	6,653	75,258	1,806,192	5,989	664	$31,441,386
2008	6,185	62,410	1,497,840	5,582	603	$31,109,396
2009	7,755	74,882	1,797,168	7,118	637	$32,786,045
2010	9,854	99,862	2,396,688	9,200	654	$36,566,717
2011	10,491	90,965	2,183,160	9,735	756	$33,450,863
% Change 2007-2011	**57.69%**	**20.87%**	**20.87%**	**62.55%**	**13.86%**	**6.39%**

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).

While more persons are having psychiatric inpatient services expenses paid for, the encounters and number of hours paid for are declining, with consequent drops in the dollars of person and cost per encounter. This is why overall costs only went up 6.39% although the number of persons went up 57.69%. More persons are receiving psychiatric inpatient services but they are getting fewer days of service.

Table AIII.12: Psychiatric Inpatient Services, Encounters per Person, Number of Hours per Person, Dollars per Person, the Cost per Encounter and the Cost per Hour of Service, 2007-2011.

Psychiatric Inpatient Services						
Year	Encounters per Person	Number of Hours per Person	Hours per Encounter	Dollars per Person	Cost per Encounter	Cost per Hour
2007	11.312	271.49	24.00	$4,725.90	$417.78	$17.41
2008	10.091	242.17	24.00	$5,029.81	$498.47	$20.77
2009	9.656	231.74	24.00	$4,227.73	$437.84	$18.24
2010	10.134	243.22	24.00	$3,710.85	$366.17	$15.26
2011	8.671	208.10	24.00	$3,188.53	$367.73	$15.32
% Change 2007-2011	**-23.35%**	**-23.35%**	**0.00%**	**-32.53%**	**-11.98%**	**-11.98%**

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).

The next table shows that 90% or better of the persons receiving psychiatric inpatient services are adults and that over the period 2007-2011 the percentage of adults receiving such services as grown from 3.83% to 5.05% of all adults receiving treatment while the percentage of children

has remained constant at approximately 1.70%. In 2007 5,989 adults received psychiatric services and in 2011 9,735 received such services.

Table AIII.13: Use of DSHS-Contracted Psychiatric Inpatient Services by Adults and Children, 2007-2011.

	2007	2008	2009	2010	2011
Adults receiving Psychiatric Inpatient services	5,989	5,582	7,118	9,200	9,735
Children receiving Psychiatric Inpatient services	664	603	637	654	756
Total	**6,653**	**6,185**	**7,755**	**9,854**	**10,491**
% Receiving Psychiatric Inpatient that are Adults	90.02%	90.25%	91.79%	93.36%	92.79%
% Receiving Psychiatric Inpatient that are Children	9.98%	9.75%	8.21%	6.64%	7.21%
All Adults Receiving any Treatment During Year	156,467	168,287	180,651	188,660	192,953
All Children Receiving any Treatment During Year	37,423	42,531	42,076	43,390	44,357
% of all Adults Receiving Inpatient Acute	3.83%	3.32%	3.94%	4.88%	5.05%
% of all Children Receiving Inpatient Acute	1.77%	1.42%	1.51%	1.51%	1.70%

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).[117]

Medications

The data shown in the next three tables are for the administration of medications, the labor input, and each encounter represents one meeting with a physician or someone else to discuss the medication.

During the period 2007-2011, three separate medication services were reported on by the LMHAs:

- Administration of Injection;
- Medication Related Services, and
- Medication Training and Supports.

The next three tables present combined information for these three medication services. The costs of the pharmaceuticals per se are not included in the reported cost shown in the right hand column of the table. As shown below, over the five-year period there are normal looking percentage changes. However, the percentage changes are primarily due to growth between 2007

[117] Again readers are reminded that the total counts in this table will not equal the total counts in other tables because a child who receives services at 17 years of age, turns 18 within the year and receives services as an adult will be counted twice, once as an adult and once as a child.

and 2008. Over the four-year period from 2008 to 2011 the growth in utilization and cost of this service are flat.

Table AIII.14: Medication Services, Number of Persons, Encounters, Total Hours, and Cost, 2007-2011.

Medication						
Year	Number of Persons	Encounters	Total Hours	Number of Adults	Number of Children	Reported Cost
2007	119,572	870,016	280,903	99,962	19,992	$69,576,244
2008	125,095	888,840	298,713	103,876	21,715	$79,383,905
2009	127,941	906,413	303,218	106,805	22,217	$81,434,468
2010	127,567	874,241	294,941	105,597	22,614	$79,154,726
2011	126,319	870,741	301,769	104,712	22,189	$78,287,810
% Change 2007-2011	**5.64%**	**0.08%**	**7.43%**	**4.75%**	**10.99%**	**12.52%**

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).

The same moderate program growth is shown in the next table as well.

Table AIII.15: Medication Services, Encounters per Person, Number of Hours per Person, Dollars per Person, the Cost per Encounter and the Cost per Hour of Service, 2007-2011.

Medication						
Year	Encounters per Person	Number of Hours per Person	Hours per Encounter	Dollars per Person	Cost per Encounter	Cost per Hour
2007	7.276	2.35	0.32	$581.88	$79.97	$247.69
2008	7.105	2.39	0.34	$634.59	$89.31	$265.75
2009	7.085	2.37	0.33	$636.50	$89.84	$268.57
2010	6.853	2.31	0.34	$620.50	$90.54	$268.37
2011	6.893	2.39	0.35	$619.76	$89.91	$259.43
% Change 2007-2011	**-5.26%**	**1.69%**	**7.34%**	**6.51%**	**12.43%**	**4.74%**

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).

The third table in this series shows the use of medication services by adults and children. Approximately five out of six persons receiving medication services are adults and one out of six is a child. Consistent with the flat growth is the observation that a smaller percentage of persons who received any treatment are getting medication services. In other words, for example, while

the population of adults receiving any kind of mental health service increased from 156,467 in 2007 to 192,953 in 2011, the number of persons receiving a medication service only increased from 99,962 to 104,712.

Table AIII.16: Medication Services by Adults and Children, 2007-2011.

	2007	2008	2009	2010	2011
Adults receiving Medication services	99,962	103,876	106,805	105,597	104,712
Children receiving Medication services	19,992	21,715	22,217	22,614	22,189
Total	**119,954**	**125,591**	**129,022**	**128,211**	**126,901**
% Receiving Medications that are Adults	83.33%	82.71%	82.78%	82.36%	82.51%
% Receiving Medications that are Children	16.67%	17.29%	17.22%	17.64%	17.49%
All Adults Receiving any Treatment During Year	156,467	168,287	180,651	188,660	192,953
All Children Receiving any Treatment During Year	37,423	42,531	42,076	43,390	44,357
% of all Adults Receiving Medications	63.89%	61.73%	59.12%	55.97%	54.27%
% of all Children Receiving Medications	53.42%	51.06%	52.80%	52.12%	50.02%

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).

Residential

During the period 2007-2011, three separate residential services were reported on by the LMHAs:

- Crisis residential;
- Crisis Stabilization Beds, and
- Residential.

Since the crisis component is different from the non-crisis residential service, rather than combine all three together the analysis below considers each in turn. Since all are used by adults no review of adult and children usage is necessary. The unit of service in residential programs is typically a day and thus the tables will show a proportional relationship between encounters and hours.

The first set of two tables shows the number of persons using crisis residential services had only gone up 12.82%, but their hours of service went up 50%, and total costs went up 624%.

Table AIII.17: For DSHS-Contracted Crisis Residential Services, Number of Persons, Encounters, Total Hours, and Cost, 2007-2011.

Crisis Residential						
Year	**Number of Persons**	**Encounters**	**Total Hours**	**Number of Adults**	**Number of Children**	**Reported Cost**
2007	2,418	27,773	666,552	2,404	14	$1,642,146
2008	2,224	20,488	491,712	2,213	10	$2,537,780
2009	2,892	43,090	1,034,160	2,865	27	$8,294,386
2010	2,848	45,094	1,082,256	2,814	32	$12,709,099
2011	2,728	41,692	1,000,608	2,714	14	$11,892,717
% Change 2007-2011	**12.82%**	**50.12%**	**50.12%**	**12.90%**	**0.00%**	**624.22%**

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).

The following table documents the origin of the 624% increase in total costs shown in the table above. The encounters per person and the number of hours per person have gone up 33% so persons that received services in 2011 are getting more services than persons in 2007. The major driver behind the cost increase is the increase in the cost per encounter. What used to cost $59.13 per day in 2007 now costs $285.25. As a result the program is only serving 300 more persons in 2011 than it did in 2007 but at a cost of more than $10 million more.

The director of one LMHA, when interviewed, said that his LMHA had contracts with hospitals to provide crisis services and the rates charged his LMHA had not changed in three years. He added that he heard other hospitals had substantially increased their charges for crisis beds. The Director's comments provide some explanation for the substantial increases, 382.44%, in the cost per encounter shown below.

Table AIII.18: For DSHS-Contracted Crisis Residential Services, Encounters per Person, Number of Hours per Person, Dollars per Person, the Cost per Encounter, and the Cost per Hour of Service, 2007-2011.

Crisis Residential						
Year	**Encounters per Person**	**Number of Hours per Person**	**Hours per Encounter**	**Dollars per Person**	**Cost per Encounter**	**Cost per Hour**
2007	11.49	275.66	24.00	$679.13	$59.13	$2.46
2008	9.21	221.09	24.00	$1,141.09	$123.87	$5.16

Crisis Residential						
Year	Encounters per Person	Number of Hours per Person	Hours per Encounter	Dollars per Person	Cost per Encounter	Cost per Hour
2009	14.90	357.59	24.00	$2,868.04	$192.49	$8.02
2010	15.83	380.01	24.00	$4,462.46	$281.84	$11.74
2011	15.28	366.79	24.00	$4,359.50	$285.25	$11.89
% Change 2007-2011	**33.06%**	**33.06%**	**0.00%**	**541.92%**	**382.44%**	**382.44%**

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).

The crisis stabilization bed program also shows a substantial percentage increase, 231.72%, in reported cost. The number of persons using the service went up 133% and the total hours of service went up 164%.

Table AIII.19: For DSHS-Contracted Crisis Stabilization Bed Services, Number of Persons, Encounters, Total Hours, and Cost, 2007-2011.

Crisis Stabilization Beds						
Year	Number of Persons	Encounters	Total Hours	Number of Adults	Number of Children	Reported Cost
2007	1,258	6,149	147,576	1,258	0	$1,853,186
2008	980	4,742	113,808	980	0	$742,919
2009	1,901	9,200	220,800	1,901	0	$2,382,618
2010	2,343	13,532	324,768	2,338	5	$4,632,620
2011	2,931	16,265	390,360	2,923	8	$6,147,400
% Change 2007-2011	**132.99%**	**164.51%**	**164.51%**	**132.35%**		**231.72%**

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).

In addition to the 133% increase in the persons served, the next table shows the 231% increase in reported cost also stems from a 13.53% increase in the encounters per person and a 25.41% increase in the cost of an encounter, from $301.38 in 2007 to $377.95 in 2011. The crisis stabilization bed service is a rapidly expanding program with significant costs increases.

Table AIII.20: For DSHS-Contracted Crisis Stabilization Services, Encounters per Person, Number of Hours per Person, Dollars per Person, the Cost per Encounter and the Cost per Hour of Service, 2007-2011.

Crisis Stabilization Beds						
Year	Encounters per Person	Number of Hours per Person	Hours per Encounter	Dollars per Person	Cost per Encounter	Cost per Hour
2007	4.89	117.31	24.00	$1,473.12	$301.38	$12.56
2008	4.84	116.13	24.00	$758.08	$156.67	$6.53
2009	4.84	116.15	24.00	$1,253.35	$258.98	$10.79
2010	5.78	138.61	24.00	$1,977.22	$342.35	$14.26
2011	5.55	133.18	24.00	$2,097.37	$377.95	$15.75
% Change 2007-2011	**13.53%**	**13.53%**	**0.00%**	**42.38%**	**25.41%**	**25.41%**

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).

The next two tables present data on residential programs. Again, the unit of service is a day, 24 hours. The number of adults using the program has gone up 108.81%, but reported costs are flat.

Table AIII.21: For DSHS-Contracted Residential Services, Number of Adults, Encounters, Total Hours, and Cost, 2007-2011.

Residential						
Year	Number of Persons	Encounters	Total Hours	Number of Adults	Number of Children	Reported Cost
2007	556	36,887	885,288	556	0	$2,531,273
2008	640	38,795	931,080	640	0	$2,250,845
2009	888	40,775	978,600	888	0	$4,190,555
2010	1,093	44,610	1,070,640	1,093	0	$2,720,729
2011	1,161	39,969	959,256	1,161	0	$2,515,316
% Change 2007-2011	**108.81%**	**8.36%**	**8.36%**	**108.81%**		**-0.63%**

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).

The next table looking at residential services shows why the reported cost is flat over the five-year period from 2007 to 2011 even though the number of persons using the program grew 108.81%. The number of hours of service a person received declined from 1,592 per person to $826 while the cost per encounter also went down. The reduction in the hours and the cost per hour offset the caseload increase and total costs were flat. Residential services are an example of a program where many more persons are getting substantially fewer services as the number of

persons using the program increased 108% from 2007 to 2011, but the number of hours of service they received dropped by 50%.

Table AIII.22: For DSHS-Contracted Residential Services, Encounters per Person, Number of Hours per Person, Dollars per Person, the Cost per Encounter and the Cost per Hour of Service, 2007-2011.

Residential						
Year	**Encounters per Person**	**Number of Hours per Person**	**Hours per Encounter**	**Dollars per Person**	**Cost per Encounter**	**Cost per Hour**
2007	66.34	1592.24	24.00	$4,552.65	$68.62	$2.86
2008	60.62	1454.81	24.00	$3,516.95	$58.02	$2.42
2009	45.92	1102.03	24.00	$4,719.09	$102.77	$4.28
2010	40.81	979.54	24.00	$2,489.23	$60.99	$2.54
2011	34.43	826.23	24.00	$2,166.51	$62.93	$2.62
% Change 2007-2011	**-48.11%**	**-48.11%**	**0.00%**	**-52.41%**	**-8.29%**	**-8.29%**

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).

Case Coordination

During the period 2007-2011, six separate case coordination services were reported on by the LMHAs:

- Benefit Eligibility Determination;
- Continuity of Service - MH Adult;
- Continuity of Service - MH Child;
- Family Case Management;
- Intensive Case Management, and
- Routine Case Management.

The next three tables present combined information for these six case coordination services.

The first table shows the growth in case coordination over the five-year period 2007-2011. The growth was uneven in that in 2008 adult utilization declined while children utilization did not, but overall from 2007-2011 the number of persons receiving case coordination in DSHS-Contracted mental health programs increased over 10% while costs increased approximately 30%.

Table AIII.23: For DSHS-Contracted Case Coordination Services, Encounters per Person, Number of Hours per Person, Dollars per Person, the Cost per Encounter and the Cost per Hour of Service, 2007-2011.

Case Coordination						
Year	**Number of Persons**	**Encounters**	**Total Hours**	**Number of Adults**	**Number of Children**	**Reported Cost**
2007	122,557	659,533	343,224	97,210	25,670	$ 46,083,623
2008	121,613	635,060	327,151	95,232	28,138	$ 48,104,849
2009	127,624	658,636	338,739	101,655	26,501	$ 50,712,568
2010	134,172	689,250	359,970	106,994	27,733	$ 57,740,170
2011	135,611	690,138	360,158	108,012	28,121	$ 59,611,641
% Change 2007-2011	**10.65%**	**4.64%**	**4.93%**	**11.11%**	**9.55%**	**29.36%**

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).

The second table shows that the 29% increase in the cost of case coordination is due primarily to increases in the cost per encounter as it has risen from $69.87 in 2007 to $86.38 in 2011. There was a 5.17% drop in the number of hours per person. The 5.17% drop in the average services received helped to brake the overall cost increase caused by the 10.65% increase in the numbers of persons served and the increases in the cost per hour of service. In summary, for the period 2007-2011 DSHS funded mental health case coordination services were used by 10.65% more persons, but each person got 5% fewer service hours.

Table AIII.24: For DSHS-Contracted Case Coordination Services, Encounters per Person, Number of Hours per Person, Dollars per Person, the Cost per Encounter and the Cost per Hour of Service, 2007-2011.

Case Coordination						
Year	**Encounters per Person**	**Number of Hours per Person**	**Hours per Encounter**	**Dollars per Person**	**Cost per Encounter**	**Cost per Hour**
2007	5.381	2.80	0.52	$376.02	$69.87	$134.27
2008	5.222	2.69	0.52	$395.56	$75.75	$147.04
2009	5.161	2.65	0.51	$397.36	$77.00	$149.71
2010	5.137	2.68	0.52	$430.34	$83.77	$160.40
2011	5.089	2.66	0.52	$439.58	$86.38	$165.52
% Change 2007-2011	**-5.43%**	**-5.17%**	**0.28%**	**16.90%**	**23.62%**	**23.27%**

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).

The third table shows that about 80% of the persons that receive care coordination are adults and about 20% are children. The data also show that as a percentage of persons who receive any mental health service, the percentage of both adults and children has declined over the past five years.

Table AIII.25: Use of Case Coordination Services by Adults and Children, 2007-2011.

	2007	2008	2009	2010	2011
Adults receiving Case Coordination services	97,210	95,232	101,655	106,994	108,012
Children receiving Case Coordination services	25,670	28,138	26,501	27,733	28,121
Total	**122,880**	**123,370**	**128,156**	**134,727**	**136,133**
% Receiving Case Coordination that are Adults	79.11%	77.19%	79.32%	79.42%	79.34%
% Receiving Case Coordination that are Children	20.89%	22.81%	20.68%	20.58%	20.66%
All Adults Receiving any Treatment During Year	156,467	168,287	180,651	188,660	192,953
All Children Receiving any Treatment During Year	37,423	42,531	42,076	43,390	44,357
% of all Adults Receiving Service and Case Coordination	62.13%	56.59%	56.27%	56.71%	55.98%
% of all Children Receiving Service and Case Coordination	68.59%	66.16%	62.98%	63.92%	63.40%

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).

Training and Supports

During the period 2007-2011, 11 separate training and supports services were reported on by the LMHAs:

- Family Partner;
- Family Training, Individual;
- Flexible Community Supports;
- Parent/Family Support Group;
- Psychosocial Rehab Services;
- Respite;
- Respite Service, Day;
- Respite Services, Hour;
- Skills Training and Development;
- Supported Housing Services, and
- Vocational Services.

The next five tables present combined information for these 11 training and support services. The total reported cost for all these services is basically flat over the five-year period.

Table AIII.26: For DSHS-Contracted Training and Support Services, Number of Persons, Encounters, Total Hours, and Cost, 2007-2011.

Training and Supports						
Year	Number of Persons	Encounters	Total Hours	Number of Adults	Number of Children	Reported Cost
2007	56,740	1,064,942	1,209,839	39,811	16,986	$116,250,414
2008	58,547	1,050,614	1,249,272	40,113	18,613	$113,627,253
2009	60,028	1,051,231	1,719,040	41,027	19,091	$112,619,082
2010	63,612	1,033,841	2,073,550	43,528	20,187	$115,676,590
2011	63,293	1,060,065	2,193,882	42,272	21,129	$118,914,120
% Change 2007-2011	**11.55%**	**-0.46%**	**81.34%**	**6.18%**	**24.39%**	**2.29%**

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).

Given that the number of hours went up 81.34% but total costs did not, implies the number of hours should be looked at more closely. The next table shows the number of hours by year for each of the 11 services included in the Training and Supports category. What the data shows is that almost all increase in hours has been in "respite service, day". With the exception of skills training and development, the other services are down to flat over the five-year period. Supported housing had a large percentage increase but the number of additional hours added was small.

Table AIII.27: For DSHS-Contracted Training and Supports Services, the Number of Hours of Services Provided, 2007-2011.

	2007	2008	2009	2010	2011	(2011-2007)
Specific Services	Hours	Hours	Hours	Hours	Hours	Hours
Family Partner	10,840	13,029	12,814	14,030	14,743	3,903
Family Training, Individual	900	4,097	6,198	1,541	560	(340)
Flexible Community Supports	5,009	5,725	5,413	2,819	4,527	(482)
Parent/Family Support Group	2,876	2,834	2,512	2,595	2,611	(265)
Psychosocial Rehabilitation	854,055	818,141	801,720	747,923	749,605	(104,451)
Respite	3,021	574	1,204	1,028	704	(2,317)

	2007	2008	2009	2010	2011	(2011-2007)
Specific Services	**Hours**	**Hours**	**Hours**	**Hours**	**Hours**	**Hours**
Respite Service, Day	*	40,704	518,520	935,376	1,028,928	1,028,928
Respite Services, Hour	*	5,057	1,667	1,964	1,917	1,917
Skills Training and Development	322,155	349,584	360,009	356,664	380,260	58,105
Supported Housing	1,083	2,325	2,825	3,586	3,527	2,444
Vocational Services	9,901	7,203	6,155	6,023	6,501	(3,400)
Total	**1,209,839**	**1,249,272**	**1,719,036**	**2,073,550**	**2,193,882**	**984,043**

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).
*** = Data not reported for this year**

The next table looks at average cost and shows a rise in the average hours per persons and number of hours per persons is being offset by a flat cost per encounter and a substantial drop in the cost per hour of services.

Table AIII.28: For DSHS-Contracted Training and Support Services, Encounters per Person, Number of Hours per Person, Dollars per Person, the Cost per Encounter and the Cost per Hour of Service, 2007-2011.

Training and Supports						
Year	**Encounters per Person**	**Number of Hours per Person**	**Hours per Encounter**	**Dollars per Person**	**Cost per Encounter**	**Cost per Hour**
2007	18.769	21.32	1.14	$2,048.83	$109.16	$96.09
2008	17.945	21.34	1.19	$1,940.79	$108.15	$90.95
2009	17.512	28.64	1.64	$1,876.12	$107.13	$65.51
2010	16.252	32.60	2.01	$1,818.47	$111.89	$55.79
2011	16.749	34.66	2.07	$1,878.79	$112.18	$54.20
% Change 2007-2011	**-10.76%**	**62.56%**	**82.17%**	**-8.30%**	**2.76%**	**-43.59%**

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).

This a large category and has non-random events occurring in it such as a substantial increase in respite hours accompanied by the hours of most other services being flat or down. Therefore it makes sense to examine the cost per hour drop more closely. The table shows "Respite service, day" has a very low cost, $2.31 per hour in 2011 so a lot of hours can be provided at low cost.

The table also shows that the cost per hour of psychosocial rehabilitation services is high, $99.53 in 2011 and when you cut 100,000 hours over a five-year period you make significant savings. Other factors that contributed to a flat 2.29% increase in reported cost over the five-year period were the fact that most cost per hour increases over the five-year period have been modest except in supported housing and fewer hours of service were provided in six of the eleven categories.
For the period 2007-2011, the MHSA funded mental health training and support services saw a significant shift as a million more hours of low cost respite care were provided and funded by a 12 percent cut in more expensive psychosocial rehabilitation services.

Table AIII.29: DSHS-Contracted Specific Training and Support Services, Cost per Hour of Service, 2007-2011.

	2007	2008	2009	2010	2011	(2011-2007)
Specific Services	Cost Per Hour	Cost Per Hour	Cost Per Hour	Cost Per Hour	Cost Per Hour	Cost Per Hour Difference
Family Partner	$135.57	$140.86	$146.57	$145.63	$140.65	$5.08
Family Training, Individual,	$127.70	$82.96	$82.98	$108.12	$82.16	-$45.54
Flexible Community Supports	$1.57	$74.67	$22.92	$22.04	$22.58	$21.01
Parent/Family Support Group	$484.53	$48.33	$69.53	$35.62	$34.35	-$450.18
Psychosocial Rehab Services	$91.92	$92.31	$89.92	$98.89	$99.53	$7.61
Respite	$25.32	$67.64	$27.42	$17.58	$20.00	-$5.32
Respite Service, Day	*	$3.56	$3.94	$2.35	$2.31	$2.31
Respite Services, Hour	*	$64.94	$38.32	$17.64	$17.76	$17.76
Skills Training and Development	$103.25	$95.91	$95.03	$99.74	$99.87	-$3.38
Supported Housing Services	$116.42	$191.49	$142.75	$179.09	$200.90	$84.48
Vocational Services	$130.84	$121.92	$175.95	$146.22	$136.60	$5.77
Total	**$96.09**	**$90.95**	**$65.51**	**$55.79**	**$54.20**	**-$41.88**

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).
*** = Data not reported for this year**

The table below shows that, as a percentage of all persons receiving training and support, the adult percentage slightly declined and the children's percentage slightly increased so that by 2001 two thirds of all persons receiving training and support were adults. As a percentage of all persons who got any mental health service during the five-years from 2007-2011, the percent of adults declined and the percentage of children increased. By 2011, close to half the children that received a mental health service also received a training and supports service.

Table AIII.30: DSHS-Contracted Training and Support Services by Adults and Children, 2007-2011.

	2007	2008	2009	2010	2011
Adults receiving Training and Supports services	39,811	40,113	41,027	43,528	42,272
Children receiving Training and Supports services	16,986	18,613	19,091	20,187	21,129
Total	**56,797**	**58,726**	**60,118**	**63,715**	**63,401**
% Receiving Training and Supports that are Adults	70.09%	68.31%	68.24%	68.32%	66.67%
% Receiving Training and Supports that are Children	29.91%	31.69%	31.76%	31.68%	33.33%
All Adults Receiving any Treatment During Year	156,467	168,287	180,651	188,660	192,953
All Children Receiving any Treatment During Year	37,423	42,531	42,076	43,390	44,357
% of all Adults Receiving Training and Supports	25.44%	23.84%	22.71%	23.07%	21.91%
% of all Children Receiving Training and Supports	45.39%	43.76%	45.37%	46.52%	47.63%

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).

The above tables show an increase in the number of children receiving training and supports services. Since the training and supports category contains 11 services it is useful to look at the specific services to see which are used by children. The table below shows that the increase in children's services occurred in two specific services: Family Partner, and Skills Training and Development.

Table AIII.31: DSHS-Contracted Training and Support Services by Children, 2007-2011.

	2007	2008	2009	2010	2011	(2011-2007)
	Number of Children	Number of Children	Number of Children	Number of Children	Number of Children	Number of Children
Family Partner	1,850	2,194	2,355	2,747	2,770	920
Family Training, Group,	0	0	2	0	0	0
Family Training, Individual,	395	1,133	1,242	560	166	(229)
Flexible Community Supports	128	110	174	159	159	31

	2007	2008	2009	2010	2011	(2011-2007)
	Number of Children	Number of Children	Number of Children	Number of Children	Number of Children	Number of Children
Parent/Family Support Group	511	609	623	592	617	106
Psychosocial Rehab Services	0	0	0	0	0	0
Respite	99	40	33	23	16	(83)
Respite Service, Day	0	4	31	29	35	35
Respite Services, Hour	0	0	0	0	0	0
Skills Training and Development	17,723	19,241	19,635	20,585	21,793	4,070
Supported Housing Services and	0	0	0	0	0	0
Vocational Services	0	0	0	0	0	0

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).

For comparative purposes the next table shows the changes in training and supports provided to adults. The table shows that there have been declines in the number of adults reported to be using psychosocial rehabilitation, skills training and development, and vocational support. Adults are receiving more respite services and housing supports. These declines in the absolute number of persons using these services occur in the midst of substantial increases in the total number of persons getting some kind of service. The implication is that a smaller percentage of adults are receiving these services. Respite and housing are the two services to adults that have increased over time.

Table AIII.32: DSHS-Contracted Training and Support Services by Adults, 2007-2011.

	2007	2008	2009	2010	2011	(2011-2007)
	Number of Adults	Number of Adults	Number of Adults	Number of Adults	Number of Adults	Number of Adults
Family Partner	0	0	0	0	0	0
Family Training, Group,	0	0	0	0	0	0
Family Training, Individual,	0	0	0	0	0	0
Flexible Community Supports	0	17	169	310	291	291
Parent/Family Support Group	0	0	0	0	0	0
Psychosocial Rehab Services	28,547	27,825	27,949	27,814	27,802	-745
Respite	0	0	0	0	0	0
Respite Service, Day	0	229	1,492	2,314	2,718	2,718
Respite Services, Hour	0	44	24	33	30	30
Skills Training and Development	21,929	22,073	20,911	22,023	20,621	-1,308
Supported Housing Services	585	1,063	1,710	1,702	1,370	785
Vocational Services	1,343	1,097	1,070	1,084	914	-429

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).

The concept of recovery in mental health is widely discussed and is generally described as the process whereby a person begins leading a normal life again: regular job, family, stable housing, going back to school, providing for their own transportation. While services and supports such as housing and vocational assistance are often cited as assisting with a person's reintegration into a more normal social life, few adults in Texas currently receive such services.

Crisis Residential Services

DSHS reports statistics on its operations to the Legislative Budget Board through the Automated Budget and Evaluation System of Texas (ABEST).

Measure 2.2.3 EF 1 is the "Average general revenue (GR) spent per person for Crisis Residential Services": As conceptualized by DSHS there are five crisis residential services:

- respite,
- crisis residential,
- crisis stabilization unit,
- extended observation, and
- inpatient psychiatric.

Facilities that provide these services may shift the level of care they provide over time. A facility may change from respite, to residential to a Crisis Stabilization Unit (CSU) by making targeted changes such as increased staffing. It is for this reason that DSHS places these Crisis Residential Services in one category and in one measure.

In the information above, these services are shown in separate service areas following their service description in the DSHS data system. For example, respite is shown as a training and supports service. While each is discussed above, the purpose of the table below is to add together all the crisis residential services and show them in one place. The table below shows the competitive funding for crisis residential options for LMHAs and NorthSTAR during the fiscal years FY 2010, FY 2011, and FY 2012. The table shows that approximately $2,400 to $2,500 are reported spent per person in fiscal period and that approximately 15,862 unique persons received some type of crisis service.[118]

[118] By "unique", we mean an unduplicated count as a person could have received more than one service, but in this table showing LBB data they are only counted once regardless if they received two or more services.

AIII.33 LBB Measure 2.2.3.EF.1 Average General Revenue Spent Per Person for Crisis Residential Services

	Cost /person served LMHA and NorthSTAR	Cost/ person served LMHA Only	Number Served LMHA Only	Total Dollars Expended LMHA Only
FY12 Quarter 3	$2,390.22	$2,195.17	9,454	$20,753,143
FY11 End of Year	$2,393.68	$2,108.24	15,862	$33,440,947
FY10 End of Year	$2,528.39	$2,450.55	14,628	$35,846,666

Notes: This LBB reporting measure was developed in FY09. It is a required measure for the FY10-11 Biennium and the FY12-13 Biennium. There is a companion LBB measure that reflects the number served and cost for crisis outpatient services. Although the LBB measure includes both LMHA and NorthSTAR crisis residential services, this measure adds together data from each system. The data labeled as "LMHA Only" above reflects the LMHA data used to calculate the LBB measure.

Appendix IV: DSHS Substance Abuse Service Cost and Utilization Analysis

2007-2011 Data on the Number of Distinct Persons, Payments and Encounters for DSHS-Contracted Substance Abuse Treatment Providers 2007-2011

DSHS's **Clinical Management for Behavioral Health Services** (CMBHS) information system contains information by DSHS-paid provider by year on the number of distinct persons using each substance abuse treatment service. The table below shows data on the number of distinct persons using different types of substance abuse services for the five-year period from 2007-2011.[119]

The data shown in this and subsequent tables represent the most frequent substance abuse treatment services provided to adults and children. The tables do not contain data on one-time special programs that come and go from year to year. Rather the data in the tables has been "smoothed" by taking out temporarily funded programs that are dependent upon one-time state or federal grants.[120]

For example, program types that were excluded in the 2010 data are shown in the table below.

[119] The phrase "number of distinct persons" refers to the unduplicated count of persons using services.
[120] Thus the financial data shown in these tables will not match total expenditures spent on substance abuse funding. Other parts of this report contain a comprehensive review of funding. Rather the purpose of these tables is to document the utilization of the most frequently used services. Readers of this utilization data are also advised that the data was obtained in mid-October and the fiscal year closes in November so that a small amount of additional utilization could be recorded between mid-October and the November contract closes.

Table AIV.1: Programs Excluded From Treatment Analysis to Smooth the FY 2010 Service Patterns.

Program Type	Program Type Description	Amount Expended
SA/ACL	Substance Abuse - ATRII Community Liaison	$262,169
SA/AP-A	Substance Abuse - Assessment Provider MOAs for Access to Recovery II	$1,767,250
SA/DHH	Treatment Interpreter Services	$104,127
SA/NMO	Network Management Organization	$340,004
SA/RS-A	Substance Abuse - Recovery Support Provider MOAs for Access to Recovery II	$1,561,420
SA/SS-R	SA-SSBG-Recovery Oriented Sys/Care	$108,391
SA/SS-T	SA-SSBG-Treatment Cost Reimbursement	$70,542
SA/SUR	Survey - Treatment	$240,000
SA/TAP	Treatment Alternative to Incarceration Program	$3,250,000
SA/TP-A	Substance Abuse - Treatment Provider MOAs for Access to Recovery II	$1,552,745
Total		**$9,256,648**

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).

Also, in 2010, the Mental Health and Substance Abuse Division shifted to a new data system, the **Clinical Management for Behavioral Health Services** (CMBHS) and the reporting categories changed from the 2007-2009 period. For example, Outpatient Group and Outpatient Individual were combined into one Outpatient reporting category, and the Methadone and Buprenorphine reporting categories were combined into Opioid Substitution Therapy. In the tables below an asterisk, *, marks years in which data were not reported either because the service was not offered that year or reporting categories changed.

The table of distinct persons below shows that overall the number of persons treated in MHSA substance abuse programs declined over the period from 2007 to 2011. The decline impacted all programs types: outpatient, residential and detoxification programs. A few smaller specialized programs for women and children did not drop.

The four most frequently used services in 2011 were Outpatient (19,205 persons), Intensive Residential (7,532 persons), Residential Detoxification (5,763 persons) and Co-Occurring Psychiatric and Substance Use Disorders (COPSD), (4,265 persons).

Table AIV.2: Number of Distinct Persons Receiving Substance Abuse Treatment Services from FY 2007 to FY 2011.

Persons	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	% Change 2007-2011
Adolescent Support	514	2,206	2,791	*	*	
Ambulatory Detoxification	1,010	1,127	1,125	1,041	586	-41.98%
Ambulatory Detoxification (Specialized Female)	159	166	213	143	91	-42.77%
Buprenorphine	28	27	23	*	*	
COPSD	5,270	5,505	5,070	4,568	4,265	-19.07%
Family Counseling	453	1,971	2,864	*	*	
Family Support	356	1,583	1,963	*	*	
HIV Residential	123	122	122	117	96	-21.95%
Intensive Residential	9,004	8,152	7,675	8,028	7,532	-16.35%
Intensive Residential (Specialized Female)	2,351	2,213	2,265	2,415	1,959	-16.67%
Intensive Residential (Women and Children Medicaid Wrap Around)	*	*	*	*	49	
Intensive Residential (Women and Children)	950	832	840	823	616	-35.16%
Intensive Residential (Youth Medicaid Wrap Around-Room/Board)	*	*	*	*	165	
Methadone	2,330	2,252	2,275	*	*	
Opioid Substitution Therapy	*	*	*	2,201	2,081	
Outpatient - Group/Specialized Female	3,706	3,237	3,227	*	*	
Outpatient - Individual/Specialized Female	4,007	3,497	3,386	*	*	
Outpatient-Group	19,171	17,919	17,796	*	*	
Outpatient-Individual	20,108	18,930	19,181	*	*	
Outpatient	*	*	*	21,110	19,205	
Outpatient (Specialized	*	*	*	3,513	3,183	

Persons	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	% Change 2007-2011
Female)						
Psychiatrist Consultation	1	51	114	*	*	
Residential Detoxification	5,114	5,262	5,677	6,363	5,763	12.69%
Residential Detoxification (Specialized Female)	803	834	802	1,093	835	3.99%
Supportive Residential	1,816	1,454	1,683	1,622	1,417	-21.97%
Supportive Residential (Specialized Female)	577	578	468	501	521	-9.71%
Supportive Residential (Women and Children)	196	215	178	178	205	4.59%
Total	**44,935**	**42,891**	**42,348**	**43,051**	**38,578**	**-14.17%**

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).
* = **Data not reported for this year.**

The next table shows the payments made to substance abuse providers for the relatively permanent key services. The payments to providers of MHSA funded substance abuse services confirm the general across the board reductions seen in the numbers of persons receiving treatment. The funding level for 2011 is noticeably lower than the funding levels in the four previous years. As the table shows there are two large programs: intensive residential where approximately $20 million was spent and outpatient where approximately $17 million was spent. These two programs accounted for about 54% of all substance abuse treatment spending. The State's greater use of intensive residential services is also observed in Federal N-SSATS data.

Table AIV.3: Payments made to DSHS Providers of Substance Abuse Treatment Services from FY 2007 to FY 2011.

Payments	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	% Change 2007-2011
Adolescent Support	$81,290	$292,786	$420,426	*	*	
Ambulatory Detoxification	$722,008	$791,657	$879,363	$1,038,323	$472,845	-34.51%
Ambulatory Detoxification (Specialized Female)	$99,918	$113,560	$132,515	$169,745	$73,457	-26.48%

Payments	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	% Change 2007-2011
Buprenorphine	$39,520	$49,511	$42,246	*	*	
COPSD	$3,693,744	$3,800,048	$3,655,371	$3,606,815	$2,972,566	-19.52%
Family Counseling	$232,091	$1,123,888	$2,150,089	*	*	
Family Support	$65,029	$281,833	$418,150	*	*	
HIV Residential	$331,821	$517,968	$516,456	$591,096	$441,072	32.92%
Intensive Residential	$21,678,819	$21,285,592	$20,265,656	$22,116,787	$20,185,990	-6.89%
Intensive Residential (Specialized Female)	$4,303,875	$4,611,763	$4,764,329	$5,669,173	$4,395,017	2.12%
Intensive Residential (Women and Children Medicaid Wrap Around)	*	*	*	*	$133,591	
Intensive Residential (Women and Children)	$6,265,550	$5,980,411	$6,208,275	$6,292,759	$4,382,749	-30.05%
Intensive Residential (Youth Medicaid Wrap Around-Room/Board)	*	*	*	*	$110,245	
Methadone	$5,325,939	$5,617,357	$5,650,747	*	*	
Opioid Substitution Therapy	*	*	*	$5,808,806	$4,964,322	
Outpatient - Group/Specialized Female	$2,358,588	$2,050,706	$2,154,791	*	*	
Outpatient - Individual/Specialized Female	$1,355,418	$1,238,172	$1,130,228	*	*	
Outpatient-Group	$11,218,377	$10,404,356	$10,185,407	*	*	
Outpatient-Individual	$5,045,888	$4,622,781	$4,556,190	*	*	
Outpatient	*	*	*	$19,180,589	$17,013,315	
Outpatient (Specialized Female)	*	*	*	$3,373,532	$3,022,334	
Psychiatrist Consultation	$125	$7,469	$20,313	*	*	

Payments	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	% Change 2007-2011
Residential Detoxification	$4,225,735	$4,740,058	$5,148,167	$5,688,816	$4,979,202	17.83%
Residential Detoxification (Specialized Female)	$631,022	$681,009	$653,597	$857,071	$707,316	12.09%
Supportive Residential	$2,631,182	$2,298,627	$2,783,388	$2,561,432	$2,318,006	-11.90%
Supportive Residential (Specialized Female)	$1,215,487	$1,402,250	$1,085,460	$1,130,217	$1,253,019	3.09%
Supportive Residential (Women and Children)	$1,022,835	$1,399,008	$1,149,261	$958,652	$1,267,837	23.95%
Total	**$72,544,259**	**$73,310,809**	**$73,970,425**	**$79,043,813**	**$68,692,882**	**-5.31%**

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).
*** = Data not reported for this year.**

The next table shows units of service. In general, the unit of service used with residential programs is by the day and the unit of service used with outpatient programs is by the hour. The encounter data for MHSA funded substance abuse programs also shows a decline in the 2011 year. The greatest declines are in the detoxification programs, Co-Occurring Psychiatric and Substance Use Disorders (COPSD) programs, and the residential programs for women and children.

Table AIV.4: Units of Service Provided to Persons of DSHS Substance Abuse Treatment Services From FY 2007 to FY 2011.

Encounters	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	% Change 2007-2011
Adolescent Support	1,367	5,020	7,336	*	*	
Ambulatory Detoxification	8,508	9,326	10,356	12,229	5,569	-34.55%
Ambulatory Detoxification (Specialized Female)	1,178	1,336	1,559	1,997	866	-26.45%

Encounters	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	% Change 2007-2011
Buprenorphine	2,214	2,787	2,347	*	*	
COPSD	61,786	59,588	57,315	56,367	46,448	-24.82%
Family Counseling	3,120	15,127	28,918	*	*	
Family Support	872	3,791	5,602	*	*	
HIV Residential	4,809	4,796	4,782	5,398	4,084	-15.08%
Intensive Residential	262,353	224,786	215,052	229,287	210,486	-19.77%
Intensive Residential (Specialized Female)	58,191	58,396	60,334	71,803	55,305	-4.96%
Intensive Residential (Women and Children Medicaid Wrap Around)	*	*	*	*	1,297	
Intensive Residential (Women and Children)	37,987	33,789	35,075	35,631	24,806	-34.70%
Intensive Residential (Youth Medicaid Wrap Around-Room/Board)	*	*	*	*	4,424	
Methadone	533,637	511,962	514,436	*	*	
Opioid Substitution Therapy	*	*	*	527,173	446,109	
Outpatient - Group/Specialized Female	147,659	120,793	126,843	*	*	
Outpatient - Individual/Specialized Female	27,174	23,006	21,003	*	*	
Outpatient-Group	704,453	615,275	602,102	*	*	
Outpatient-Individual	101,360	86,103	84,816	*	*	
Outpatient	*	*	*	779,244	647,129	
Outpatient (Specialized Female)	*	*	*	154,300	134,850	
Psychiatrist Consultation	1	60	163	*	*	
Residential Detoxification	30,253	31,658	34,370	37,978	33,237	9.86%

Encounters	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	% Change 2007-2011
Residential Detoxification (Specialized Female)	4,514	4,871	4,674	6,128	4,721	4.59%
Supportive Residential	52,770	43,275	50,812	48,260	41,150	-22.02%
Supportive Residential (Specialized Female)	16,446	17,750	13,740	14,320	15,870	-3.50%
Supportive Residential (Women and Children)	6,199	7,904	6,493	5,419	7,163	15.55%
Total	**2,066,851**	**1,881,399**	**1,888,128**	**1,985,533**	**1,683,514**	**-18.55%**

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA).
*** = Data not reported for this year.**

The substance abuse data for DSHS-Contracted programs for the period 2007-2011 show declines in the number of persons receiving treatment, the dollars spent on substance abuse treatment and the units of service reported.

Appendix V: NorthSTAR Mental Health Service Cost and Utilization Analysis

Utilization of NorthSTAR Mental Health Services, 2006-2010.

The tables in this Appendix provide a closer look at the specific mental health services provided by NorthSTAR.[121] The first three present data on the total number of persons receiving the service, the units of service, and the reported cost of the services as measured in the claims paid by the ValueOptions the company that manages NorthSTAR. The next tables look at per person changes in dollars, per person changes in the units of service and changes in the cost per unit of service. The tables are then followed by summary comments about the mental health services provided.

The tables summarize descriptive percentage changes in 15 NorthSTAR services over the five-year period from 2006 to 2010. The descriptions below of these 15 services take place in the context of a steady unabated increase in the North Star enrollment which added 278,000 persons to its enrollment between September 2005 and August 2011.

Like reporting for the mental health services provided by LMHAs, NorthSTAR reports service data for groups of specific services. The table below shows the reported service utilization in NorthSTAR for the five-year period from 2006-2010. The table shows that the number of persons provided services through the NorthSTAR network increased by about 40% over this five-year period. The largest increases were an 83% increase in the number of persons receiving assessments and 62% more persons got medication management. There was an absolute decline in the number of persons who received case management and counseling. There is also a large "Other" category with a 105% increase in its utilization. The Other category contains crisis services, jail diversion, intensive outpatient, supported employment, and other disparate services which render a five-year comparison difficult.

In general, data on the number of person receiving specific services shows substantive program changes have occurred within the five-year period. The 2010 utilization pattern is not simply a larger version of the 2006 distribution of services. The total unduplicated count of persons receiving services increased by 39.56% a rate substantially higher than the 7% rate of growth in the population of Texas during this period.[122] As shown below, in Fiscal Year 2010 67,592 unique persons received services. Assuming that the population of eligible persons is approximately 1,358,000 persons, then the annual served penetration rate of the NorthSTAR program in 2010 was about 4.9%, (67,952/1,385,000).[123]

[121] NorthSTAR data tables discussing mental health also provide information on two substance abuse services and this information is also analyzed in this section.
[122] Population of Texas in 2006 was estimated to be 23,507,783 and in 2010 it was estimated to be 25,145,561. See retrieved on 23-23-2011 from http://www.dshs.state.tx.us/chs/popdat/ST2010.shtm
[123] In calendar year 2010 approximately 1,358,000 persons in these six counties were under 200% of the Federal Poverty Level (FPL), the eligibility level for NorthSTAR.

Table AV.1: NorthSTAR Mental Health Services, Number of Persons Receiving Services by Service, 2006 – 2010.

Service Category	Fiscal Year 2006	Fiscal Year 2007	Fiscal Year 2008	Fiscal Year 2009	Fiscal Year 2010	% Change 2006-2010
Assessment	14,903	16,827	21,816	25,675	27,260	82.92%
Medication Services	25,118	25,736	28,926	35,256	40,726	62.14%
Assertive Community Treatment (ACT)	798	679	670	741	887	11.15%
Rehabilitation Services	19,708	22,174	24,262	32,946	24,642	25.04%
Case Management	18,633	22,083	23,748	23,207	16,657	-10.60%
Counseling	10,091	7,882	7,431	8,744	9,140	-9.42%
23 Hour Observation	5,989	5,918	6,044	6,359	6,985	16.63%
Emergency Room	4,723	4,662	4,146	4,324	5,289	11.98%
Community Inpatient	4,166	4,543	4,906	5,084	5,113	22.73%
State Hospital	2,089	2,293	2,328	2,349	2,474	18.43%
Non New Gen Medication Drug Claimants	23,250	19,928	21,928	26,467	29,648	27.52%
New Gen Medication Drug Claimants	2,241	1,352	2,859	8,063	11,559	415.80%
Substance Abuse Non Residential	5,907	6,346	7,141	8,197	8,186	38.58%
Substance Abuse Residential	3,423	3,213	2,766	2,768	3,248	-5.11%
Other	14,115	15,210	16,030	14,106	28,907	104.80%
Totals Across all Service Categories	**48,431**	**49,271**	**53,625**	**62,016**	**67,592**	**39.56%**

Source: Medicaid Services Unit, Mental Health and Substance Abuse Division (MHSA)[124]

The table below shows the number of units of service provided through the NorthSTAR network during the period 2006-2010. There was a 161% increase in the number of assessment service units, a 62% increase in medication management units of service, a 43% increase in emergency room units, and a 147% increase in persons using new generation drugs. Despite a 39.56% change in enrollees, overall there was only a 4.35% increase in the total units of service received by enrollees.

[124] The counts of unduplicated NorthSTAR persons, dollars and units of service in these tables differ slightly from similar counts in other parts of this report since the different data sets were obtained at different points in time and the data base is constantly changing.

Again, the unit of service data show substantive program changes have occurred over the five-year period especially in assessment, medication services, Assertive Community Treatment (ACT), and emergency room use. The 2010 utilization pattern was not simply a larger version of the 2006 distribution of services. For example, as with the data on the number of persons, there was also a noticeable drop in the reported units of service of rehabilitation services from 2009 to 2010.

Table AV.2: NorthSTAR Number of Mental Health Units of Service, 2006 – 2010[125]

Service Category	Fiscal Year 2006	Fiscal Year 2007	Fiscal Year 2008	Fiscal Year 2009	Fiscal Year 2010	% Change 2006-2010
Assessment	16,546	20,652	27,252	35,723	43,260	161.45%
Medication Services	118,851	125,243	148,391	177,742	193,210	62.56%
Assertive Community Treatment (ACT)	5,257	4,935	5,231	5,726	6,610	25.74%
Rehabilitation Services	822,361	831,431	860,233	1,065,198	609,828	-25.84%
Case Management	110,520	149,974	147,887	134,403	108,500	-1.83%
Counseling	37,804	38,352	37,542	42,145	45,004	19.05%
23 Hour Observation	8,987	10,004	9,964	10,480	10,706	19.13%
Emergency Room	8,261	8,897	8,521	9,148	11,778	42.57%
Community Inpatient	21,314	23,014	26,448	25,344	25,066	17.60%
State Hospital	142,849	153,936	151,509	145,630	144,644	1.26%
Non New Gen Medication Drug Claimants	172,542	129,020	147,555	176,824	207,162	20.06%
New Gen Medication Drug Claimants	8,037	3,580	5,906	13,166	19,842	146.88%
Substance Abuse Non Residential	303,544	297,489	324,188	369,364	376,733	24.11%
Substance Abuse Residential	36,347	36,424	31,229	30,402	36,542	0.54%
Other	117,129	129,387	132,101	90,884	175,590	49.91%
Totals Across all Service Categories	**1,930,349**	**1,962,338**	**2,063,957**	**2,332,179**	**2,014,475**	**4.36%**

[125] For purposes of display brevity, pharmaceutical units of the Gen and non-new Gen medications are shown at 1/100 of the actual units i.e. pills provided.

Source: Department of State Health Services, NorthSTAR Data Book and Trending Reports.

The table below shows expenditures for services reported in the NorthSTAR data for the period 2006-2010. As expected, based on the look at the changes in the number of persons and units of service, there was a 194% increase in assessment expenditures, a 100% increase in medication management expenditures, and from 40% to 55% increases in assertive community treatment (ACT), counseling and emergency room use. Overall there was a 73% increase in expenditures across the five years.

Table AV.3: NorthSTAR Mental Health Expenditures by Service, 2006 – 2010.

Service Category	Fiscal Year 2006	Fiscal Year 2007	Fiscal Year 2008	Fiscal Year 2009	Fiscal Year 2010	% Change 2006-2010
Assessment	$1,140,939	$1,316,464	$2,307,171	$3,280,461	$3,360,333	194.52%
Medication Services	$5,153,136	$5,207,731	$6,893,162	$9,319,387	$10,328,908	100.44%
Assertive Community Treatment (ACT)	$4,205,600	$3,948,000	$4,391,895	$5,153,190	$6,010,210	42.91%
Rehabilitation Services	$11,679,440	$11,715,874	$15,216,204	$22,362,332	$13,294,950	13.83%
Case Management	$2,108,009	$2,761,591	$2,885,426	$3,462,662	$2,515,680	19.34%
Counseling	$1,598,312	$1,686,212	$1,835,656	$2,247,216	$2,485,843	55.53%
23 Hour Observation	$6,308,874	$6,705,931	$7,341,354	$7,900,110	$8,286,120	31.34%
Emergency Room	$912,376	$996,823	$830,066	$970,481	$1,438,942	57.71%
Community Inpatient	$11,507,117	$11,661,312	$13,974,770	$13,325,085	$14,031,403	21.94%
State Hospital			$35,775,947	$35,159,759	$39,339,633	9.96%
Non New Gen Medication Drug Claimants	$9,068,696	$4,097,231	$3,569,381	$4,364,674	$4,745,853	-47.67%
New Gen Medication Drug Claimants	$5,288,657	$1,672,533	$3,438,076	$5,759,326	$5,477,787	3.58%
Substance Abuse Non Residential	$4,787,233	$4,819,847	$5,258,500	$6,226,112	$6,256,514	30.69%

Service Category	Fiscal Year 2006	Fiscal Year 2007	Fiscal Year 2008	Fiscal Year 2009	Fiscal Year 2010	% Change 2006-2010
Substance Abuse Residential	$4,611,408	$4,756,998	$4,150,078	$4,145,834	$4,899,640	6.25%
Other	$6,413,493	$6,770,835	$6,554,582	$7,307,624	$6,919,970	7.90%
Totals Across all Service Categories	**$74,783,290**	**$68,117,382**	**$114,422,268**	**$130,984,253**	**$129,391,786**	**73.02%**

Source: Department of State Health Services, NorthSTAR Data Book and Trending Reports.

The above three tables looked at persons, units of service, and dollars. The next three tables look at per person changes in dollars, per person changes in the units of service, and changes in the cost per unit of service.

The next table below shows the average NorthSTAR expenditures per person by service for the period from 2006 through 2010. This view of the data holds constant the number of persons served and simply looks at changes in the per person expenditure. The three largest percentage increases were in counseling expenditures which went up 72% on a per person basis, assessment expenditures per person which rose 61% over the five years, and per person emergency room expenditures which went up about 41%. Four services were effectively flat over the five year period: rehabilitation, 23-hour observation, community inpatient, and per person state hospital expenditures.

Table AV.4: Mental Health Expenditures per Person by Service, 2006 – 2010.

Service Category	FY 2006 Average $ per Person	FY 2007 Average $ per Person	FY 2008 Average $ per Person	FY 2009 Average $ per Person	FY 2010 Average $ per Person	% Change 2006-2010
Assessment	$77	$78	$106	$128	$123	61.02%
Medication Services	$205	$202	$238	$264	$254	23.62%
Assertive Community Treatment (ACT)	$5,270	$5,814	$6,555	$6,954	$6,776	28.57%
Rehabilitation Services	$593	$528	$627	$679	$540	-8.96%
Case Management	$113	$125	$122	$149	$151	33.50%
Counseling	$158	$214	$247	$257	$272	71.71%
23 Hour Observation	$1,053	$1,133	$1,215	$1,242	$1,186	12.61%
Emergency Room	$193	$214	$200	$224	$272	40.84%

Service Category	FY 2006 Average $ per Person	FY 2007 Average $ per Person	FY 2008 Average $ per Person	FY 2009 Average $ per Person	FY 2010 Average $ per Person	% Change 2006-2010
Community Inpatient	$2,762	$2,567	$2,849	$2,621	$2,744	-0.65%
State Hospital	$0	$0	$15,368	$14,968	$15,901	3.47%
Non New Gen Medication Drug Claimants	$390	$206	$163	$165	$160	-58.96%
New Gen Medication Drug Claimants	$2,360	$1,237	$1,203	$714	$474	-79.92%
Substance Abuse Non Residential	$810	$760	$736	$760	$764	-5.69%
Substance Abuse Residential	$1,347	$1,481	$1,500	$1,498	$1,509	11.98%
Other	$454	$445	$409	$518	$239	-47.31%
Totals Across all Service Categories	**$1,544**	**$1,383**	**$2,134**	**$2,112**	**$1,914**	**23.97%**

Source: Department of State Health Services, NorthSTAR Data Book and Trending Reports.

The next table looks at the average units of service per persons and shows that, consistent with the average dollar spent per person data above, only three services had any noticeable increase in the units of service: assessment, counseling, and emergency room.

Table AV.5: Average NorthSTAR Mental Health Units of Service per Person by Service, 2006 – 2010.

Service Category	FY 2006 Average Units per Person	FY 2007 Average Units per Person	FY 2008 Average Units per Person	FY 2009 Average Units per Person	FY 2010 Average Units per Person	% Change 2006-2010
Assessment	1.11	1.23	1.25	1.39	1.59	42.94%
Medication Services	4.73	4.87	5.13	5.04	4.74	0.26%
Assertive Community Treatment (ACT)	6.59	7.27	7.81	7.73	7.45	13.12%
Rehabilitation Services	41.73	37.50	35.46	32.33	24.75	-40.69%
Case Management	5.93	6.79	6.23	5.79	6.51	9.82%
Counseling	3.75	4.87	5.05	4.82	4.92	31.43%

Service Category	FY 2006 Average Units per Person	FY 2007 Average Units per Person	FY 2008 Average Units per Person	FY 2009 Average Units per Person	FY 2010 Average Units per Person	% Change 2006-2010
23 Hour Observation	1.50	1.69	1.65	1.65	1.53	2.14%
Emergency Room	1.75	1.91	2.06	2.12	2.23	27.32%
Community Inpatient	5.12	5.07	5.39	4.99	4.90	-4.18%
State Hospital	68.38	67.13	65.08	62.00	58.47	-14.50%
Non New Gen Medication Drug Claimants	7.42	6.47	6.73	6.68	6.99	-5.84%
New Gen Medication Drug Claimants	3.59	2.65	2.07	1.63	1.72	-52.14%
Substance Abuse Non Residential	51.39	46.88	45.40	45.06	46.02	-10.44%
Substance Abuse Residential	10.62	11.34	11.29	10.98	11.25	5.95%
Other	8.30	8.51	8.24	6.44	6.07	-26.80%
Totals Across all Service Categories	**39.86**	**39.83**	**38.49**	**37.61**	**29.80**	**-25.23%**

Source: Department of State Health Services, NorthSTAR Data Book and Trending Reports.

The next table looks at the average cost per unit by service over the five-year period. All services except two pharmaceutical cost categories went up. The highest percentage increase was in rehabilitation services which went up 50% per unit. Medication services, case management, and counseling went up from 20% to 30%. Five services went up on per unit basis from 10% to 15%: assessment, assertive community treatment, 23 hour observation, emergency room, and State Hospital. The two substance abuse services and community inpatient barely went up over the five year period, 4% to 6%.

Table AV.6: Average NorthSTAR Mental Health Cost per Units of Service by Service, 2006 – 2010.

Service Category	FY 2006 Average Cost per Unit	FY 2007 Average Cost per Unit	FY 2008 Average Cost per Unit	FY 2009 Average Cost per Unit	FY 2010 Average Cost per Unit	% Change 2006-2010

Service Category	FY 2006 Average Cost per Unit	FY 2007 Average Cost per Unit	FY 2008 Average Cost per Unit	FY 2009 Average Cost per Unit	FY 2010 Average Cost per Unit	% Change 2006-2010
Assessment	$68.96	$63.75	$84.66	$91.83	$77.68	12.65%
Medication Services	$43.36	$41.58	$46.45	$52.43	$53.46	23.30%
Assertive Community Treatment (ACT)	$800.00	$800.00	$839.59	$899.96	$909.26	13.66%
Rehabilitation Services	$14.20	$14.09	$17.69	$20.99	$21.80	53.50%
Case Management	$19.07	$18.41	$19.51	$25.76	$23.19	21.56%
Counseling	$42.28	$43.97	$48.90	$53.32	$55.24	30.65%
23 Hour Observation	$702.00	$670.32	$736.79	$753.83	$773.97	10.25%
Emergency Room	$110.44	$112.04	$97.41	$106.09	$122.17	10.62%
Community Inpatient	$539.89	$506.71	$528.39	$525.77	$559.78	3.68%
State Hospital	$0.00	$0.00	$236.13	$241.43	$271.98	15.18%
Non New Gen Medication Drug Claimants	$52.56	$31.76	$24.19	$24.68	$22.91	-56.41%
New Gen Medication Drug Claimants	$658.03	$467.22	$582.14	$437.42	$276.07	-58.05%
Substance Abuse Non Residential	$15.77	$16.20	$16.22	$16.86	$16.61	5.30%
Substance Abuse Residential	$126.87	$130.60	$132.89	$136.37	$134.08	5.68%
Other	$54.76	$52.33	$49.62	$80.41	$39.41	-28.03%
Totals Across all Service Categories	**$38.74**	**$34.71**	**$55.44**	**$56.16**	**$64.23**	**65.80%**

Source: Department of State Health Services, NorthSTAR Data Book and Trending Reports.

The next table takes data from the preceding six tables to show both the percent changes in persons, units of service, expenditures and the per person average changes in expenditures, units of service, and the cost per unit.

Table AV.7: NorthSTAR Mental Health Services, Percent Changes in Persons, Units, and Expenditures, 2006 – 2010.

Service Category	% Change in the Persons Served 2006-2010	% Change in the Units of Service 2006-2010	% Change in Expenditures 2006-2010	% Change in Average $ per Person 2006-2010	% Change Units of Service per Person 2006-2010	% Change Cost per Unit of Service 2006-2011
Assessment	82.92%	161.45%	194.52%	61.02%	42.94%	12.65%
Medication Services	62.14%	62.56%	100.44%	23.62%	0.26%	23.30%
Assertive Community Treatment (ACT)	11.15%	25.74%	42.91%	28.57%	13.12%	13.66%
Rehabilitation Services	25.04%	-25.84%	13.83%	-8.96%	-40.69%	53.50%
Case Management	-10.60%	-1.83%	19.34%	33.50%	9.82%	21.56%
Counseling	-9.42%	19.05%	55.53%	71.71%	31.43%	30.65%
23 Hour Observation	16.63%	19.13%	31.34%	12.61%	2.14%	10.25%
Emergency Room	11.98%	42.57%	57.71%	40.84%	27.32%	10.62%
Community Inpatient	22.73%	17.60%	21.94%	-0.65%	-4.18%	3.68%
State Hospital	18.43%	1.26%	9.96%	3.47%	-14.50%	15.18%
Non New Gen Medication Drug Claimants	27.52%	20.06%	-47.67%	-58.96%	-5.84%	-56.41%
New Gen Medication Drug Claimants	415.80%	146.88%	3.58%	-79.92%	-52.14%	-58.05%
Substance Abuse Non Residential	38.58%	24.11%	30.69%	-5.69%	-10.44%	5.30%
Substance Abuse Residential	-5.11%	0.54%	6.25%	11.98%	5.95%	5.68%
Other	104.80%	49.91%	7.90%	-47.31%	-26.80%	-28.03%
Totals Across all Service	**39.56%**	**4.36%**	**73.02%**	**23.97%**	**-25.23%**	**65.80%**

Service Category	% Change in the Persons Served 2006-2010	% Change in the Units of Service 2006-2010	% Change in Expenditures 2006-2010	% Change in Average $ per Person 2006-2010	% Change Units of Service per Person 2006-2010	% Change Cost per Unit of Service 2006-2011
Categories						

Source: Calculated by PCG from Department of State Health Services, NorthSTAR Data Book and Trending Reports.

The tables show:

Assessment – The steady unabated growth in NorthSTAR enrollments has generated significant percentage increases in assessment procedures and costs. Over the five-year period the number of persons who received assessments went up from roughly 15,000 per year to 27,000 per year. The units of service per year went from 16,000 to 43,000. Total annual expenditures basically tripled over the five-year period. Since the percent change in the cost per unit only increased 12.65% it is clear that the increase in expenditures was a combination of 83% more persons getting about 160% more services. Not only was there an increase in the number of persons getting the assessments but there was increase in the number of assessments per person.

The unit of service in assessment is time based. For example, some units are billed in 15 minute increments, some in 30 minute increments, and some in 45-minute increments. Changes in the units of service are not straightforward to analyze since there could be a change in the mix of units over time.

Medication – Medication management services saw steady growth over the five year period as it was a commonly provided service. The unit of service in this service is an encounter with a physician or other licensed person in which medications are discussed. The cost of the service is the cost of labor component of the service and does not include the cost of the pharmaceuticals. Annual expenditures for medication services doubled. The number of persons receiving medications increased from about 25,000 in 2006 to 41,000 in 2010. The cost per unit of service went up 23% but the number of units per person did not. The doubling of expenditures was due only to the increase in the number of persons receiving medications and the cost per unit increases in the administration of the medications.

Assertive Community Treatment (ACT) – This is the most expensive and the least used service provided through NorthSTAR. The unit of service is a month. Expenditures increased by 43% over the five-year period and were due to an 11% increase in the number of persons receiving the service, and a 26% increase in the number of units received and a 14% increase in the cost per unit. Rather the net result of l double-digit increases in all three cost factors produced the 43% increase in total costs.

Rehabilitation Services – Rehabilitation services had the highest per unit cost growth of any service. The cost per unit increased about 54% over the four year period. Total expenditures only went up 14%. On the one hand, 25% more persons used the service, but on the other hand there was a 41% decrease in the average number of units of service used by each person. The substantial drop in the average number of units offset the 54% increase in the cost per unit with the result that there was only a 14% increase in total costs. In FY 2010 a greater percentage of persons were getting the service but those who were getting the services were getting 41% fewer services than they would have gotten five years ago.

A rehabilitation unit is a 15-minute unit. Relative to counseling, it is a lower cost unit to provide since service providers do not require the social work, psychology or other licensed staff requirements that counseling does. This difference can be seen in the average cost per unit of rehabilitation which was $21.80 in FY 2010 versus $55.24 for counseling.

Case Management – Case management expenditures have gone went up 19% over the five year period. The 190% increase appears due to a mix of countervailing offsets. On the one hand, ten percent fewer persons used case management services and the total number of case management units provided was essentially flat but the offset was a 10% increase in the average number of units per client and an increase of 21% in the cost per unit. The result was a 33% increase in the cost per person using the service and an overall increase of 20% in total expenditures.

Counseling –There was an approximate 10% decline in the persons using counseling services, but a 31% increase in the average number of units per client and an increase of 31% in the cost per unit. The result was a 72% increase in the cost per person using the service and an overall increase of 56% in total expenditures. As noted above in the discussion of rehabilitation, counseling is a more expensive service to provide since it requires licensed staff. A unit of counseling is generally an hour in duration. In 2010 a lower percentage of persons were getting the service but they were getting 31% more services than they would have gotten five years ago.

23-Hour Observation –There was an overall increase of about 30% in annual expenditures. This increase was due to a 17% increase in the number of persons using the service and a cost increase of about 10% in the cost per unit. There was a negligible change in the number of

units of service used by the average person and this change in the number of units did not substantively contribute to the 30% increase in annual expenditures.

Emergency Room – Expenditures increased by 58% over the five-year period and were due to a 12% increase in the number of persons receiving the service, a 43% increases in the number of units received, and an 11% increase in the cost per unit.

Community Inpatient – The services in this category are inpatient admissions to community psychiatric hospital beds. Expenditures increased by 22% over the five-year period and were due to a 23% increase in the number of persons receiving the service with a consequent 18% increase in the units received. A four percent decline in the average number of units provided a person helped offset these increases.

State Hospital – More persons were admitted to the hospital but stayed a shorter period of time. Total expenditures increased by 10% over the five-year period due to a 15% increase in the cost per unit. On the one hand, the number of persons using the service increased by 18%, but the units of service per person decreased by 15%. The result was that the total number of units only increased 1% even though the number of persons increased by 18%. The NorthSTAR data do not contain information to understand why there was a 15% decrease in the units of service. Is it reasonable to expect state hospitals to find better or the same outcomes with a 15% reduction in services?

Non New Gen Medication Drug Claimants – Total expenditures for this pharmaceutical category decreased 48%. The unit of service is a pill. The cost of the service represents the cost of the pharmaceuticals. Even though 28% more persons received this class of drugs, the drivers of the decrease in total expenditures were a 56% decline in cost of a unit and a six percent decline in the average number of units that a person received. As discussed below, the state has been able to obtain better pricing on drugs due to obtaining 340B status for the NorthSTAR persons receiving service through UTMB.

New Gen Medication Drug Claimants – The Texas State Legislature has allocated a fixed amount of funding for what are called "New Generation Antipsychotic Medications." For example these include Clozapine, Risperdal, Zyprexa, Seroquel, Geodon, and Abilify.[126] Because these drugs have a special funding history they are shown as a separate service. The unit of service is a pill. The costs of the service represent the cost of the pharmaceuticals. The total expenditures for these drugs only increased 5 per cent over the five-year period. This seemingly unexciting increase was the net result of three remarkable changes. A large

[126] NorthSTAR Pharmacy Manual (2008, March). Retrieved on 11-21-2011 from http://www.valueoptions.com/northstar/providers/education.htm

increase in the number of persons using them, 416%, was offset by a 53% decline in the units of service per person and a 58% decline in the cost per unit.

Substance Abuse Non Residential –Total expenditures went up 31% over the five-year period. A 39% increase in the number of persons served was partially offset by a 10% drop in the average number of units provided and a modest five percent increase in the cost per unit.

Substance Abuse Residential –There was a six percent increase in expenditures over the five-year period from 2006-2010. A drop of five percent in the number of persons using residential substance abuse services was offset by six percent increases in the cost per unit and the average number of units of service used by a person.

Appendix VI: NorthSTAR Substance Abuse Service Cost and Utilization Analysis

NorthSTAR is under the direction of the Department of State Health Services. It provides mental health and substance abuse treatment to eligible individuals, and access to benefits is not determined by funding source, since NorthSTAR provides treatment to both Medicaid and non-Medicaid persons.

The tables in this Appendix provide comparisons of NorthSTAR services across the period 2008-2011. The table below shows the yearly unduplicated count of persons receiving any NorthSTAR service and the number each year that used a substance abuse treatment service. These are unduplicated counts and any one person could have received multiple services or only one service. The available data indicates that the percentage of NorthSTAR users that received a treatment for substance abuse declined from 19.2% to 16.6%. The absolute number of persons receiving a substance abuse service went up from 10,282 persons in 2008 to 11,857 in 2011. But as a percentage of all persons served, a smaller percentage of persons are receiving substance abuse services.

Table AVI.1: Percent of Persons Receiving any NorthSTAR Service during Year That Received a Substance Abuse Treatment Service, 2008-2011.

NorthSTAR	2008	2009	2010	2011
Number receiving Substance Abuse treatment services	10,282	11,259	11,948	11,857
Total number of Unduplicated Persons receiving any NorthSTAR service	53,625	62,016	67,592	73,359
% receiving Substance Abuse Services	**19.2%**	**18.2%**	**17.7%**	**16.16%**

Source: Medicaid Services Unit, Mental Health and Substance Abuse Division (MHSA)

NorthSTAR reimburses for six types of substance abuse treatment services:

- Chemical dependency non-residential services;
- Chemical dependency residential services;
- Community inpatient;
- Community inpatient services;
- Emergency room services, and
- Observation room services.

The next set of tables shows the change over time from 2008 through 2011 in the numbers of person that used the services, the payments for the services, and the units of service paid for.

The table below shows that the unduplicated number of persons receiving treatment grew 14% between 2008 and 2011 and the greatest percentage increases in services were for hospital related services: community inpatient and emergency room services.

Table AVI.2: Number of Distinct Persons Receiving NorthSTAR Substance Abuse Treatment Services, 2008-2011.

NorthSTAR	2008	2009	2010	2011	% Change 2008-2011
CD Non Residential	11,806	13,255	13,424	12,451	5.46%
CD Residential	3,275	3,228	3,857	3,888	18.72%
Community Inpatient	547	564	623	447	-18.28%
Community Inpatient Services	260	206	407	350	34.62%
Emergency Room Services	1,921	1,646	2,485	2,719	41.54%
Observation Room	1,556	1,561	1,761	1,423	-8.55%
Total	**10,282**	**11,259**	**11,948**	**11,857**	**14.13%**

Source: Decision Support Unit, Mental Health and Substance Abuse Division (MHSA)

The next table shows that payments of substance abuse treatment increased approximately nine percent from 2008 to 2011 and the largest increase, 140%, was for emergency room services. Community inpatient services payments decreased 36%. The base of payments for community inpatient service in 2008 was only $27,109 so small changes such as the $10,000 drop create large percentage fluctuations.

Table AVI.3: Payments for NorthSTAR Substance Abuse Treatment Services, 2008-2011.

NorthSTAR	2008	2009	2010	2011	% Change 2008-2011
CD Non Residential	$5,258,740	$6,223,932	$6,247,904	$5,906,174	12.31%
CD Residential	$4,146,324	$4,128,762	$4,889,650	$4,284,891	3.34%
Community Inpatient	$1,040,273	$1,119,485	$1,250,223	$1,057,971	1.70%
Community Inpatient Services	$27,109	$15,669	$22,917	$17,333	-36.06%
Emergency Room Services	$184,440	$201,826	$364,785	$442,677	140.01%
Observation Room	$1,736,118	$1,781,892	$2,119,956	$1,786,392	2.90%
Total	**$12,393,003**	**$13,471,566**	**$14,895,435**	**$13,495,438**	**8.90%**

Source: Medicaid Services Unit, Mental Health and Substance Abuse Division (MHSA)

The following table shows that the number of units of service increased 5.44% over the four-year period from 2008-2011. The most significant change in NorthSTAR substance abuse use over the four-year period is the 59% increase in emergency room usage. NorthSTAR community inpatient services decreased about 23% over this time period.

Table AVI.4: Units of service for NorthSTAR Substance Abuse Treatment Services, 2008-2011.

NorthSTAR	2008	2009	2010	2011	% Change 2008-2011
CD Non Residential	324,191	369,264	376,006	344,606	6.30%
CD Residential	31,184	30,262	36,466	29,461	-5.53%
Community Inpatient	1,617	1,686	1,820	1,555	-3.83%
Community Inpatient Services	477	285	441	369	-22.64%
Emergency Room Services	2,055	1,862	2,851	3,273	59.27%
Observation Room	2,348	2,363	2,739	2,308	-1.70%
Total	**361,872**	**405,722**	**420,323**	**381,572**	**5.44%**

Source: Medicaid Services Unit, Mental Health and Substance Abuse Division (MHSA)

The next table shows the payment per person for the NorthSTAR substance abuse treatment services. Overall the payment per person over the four year period is down 4.59% despite an almost 70% increase in emergency room payments per person and a 24% increase in community inpatient per person payments.

Table AVI.5: Payment per Person for NorthSTAR Substance Abuse Treatment Services, 2008-2011.

	2008	2009	2010	2011	% Change 2008-2011
CD Non Residential	$445	$470	$465	$474	6.49%
CD Residential	$1,266	$1,279	$1,268	$1,102	-12.95%
Community Inpatient	$1,902	$1,985	$2,007	$2,367	24.45%
Community Inpatient Services	$104	$76	$56	$50	-52.50%
Emergency Room Services	$96	$123	$147	$163	69.57%
Observation Room	$1,116	$1,142	$1,204	$1,255	12.51%
Total	**$1,205**	**$1,197**	**$1,247**	**$1,150**	**-4.59%**

Source: Medicaid Services Unit, Mental Health and Substance Abuse Division (MHSA)

The next table shows the payment per units of service data. The percentage that sticks out is the large percentage increase in emergency room of approximately 51%.

Table AVI.6: Payment per Unit of Service for NorthSTAR Substance Abuse Treatment Services, 2008-2011.

	2008	2009	2010	2011	% Change 2008-2011
CD Non Residential	$16	$17	$17	$17	5.66%
CD Residential	$133	$136	$134	$145	9.39%
Community Inpatient	$643	$664	$687	$680	5.76%
Community Inpatient Services	$57	$55	$52	$47	-17.35%
Emergency Room Services	$90	$108	$128	$135	50.69%
Observation Room	$739	$754	$774	$774	4.68%
Total	**$34**	**$33**	**$35**	**$35**	**3.27%**

Source: Medicaid Services Unit, Mental Health and Substance Abuse Division (MHSA)

The next table shows the trends in the number of units per person. The largest increases are in community inpatient, 17.68%, and in emergency room use at 12.53%. Chemical dependency residential services and community inpatient services are down 20.42% and 42.53% respectively.

Table AVI.7: Number of Units per Person for NorthSTAR Substance Abuse Treatment Services, 2008-2011.

	2008	2009	2010	2011	% Change 2008-2011
CD Non Residential	27.46	27.86	28.01	27.68	0.79%
CD Residential	9.52	9.37	9.45	7.58	-20.42%
Community Inpatient	2.96	2.99	2.92	3.48	17.68%
Community Inpatient Services	1.83	1.38	1.08	1.05	-42.53%
Emergency Room Services	1.07	1.13	1.15	1.20	12.53%
Observation Room	1.51	1.51	1.56	1.62	7.48%
Total	**35.19**	**36.04**	**35.18**	**32.52**	**-7.61%**

Source: Medicaid Services Unit, Mental Health and Substance Abuse Division (MHSA)

Data over the four-year period from the six tables above can be summarized for each service:

Chemical Dependency Non-residential – There are sixteen specific services in this category. They include alcohol and drug assessment, subacute detoxification, methadone treatment, case management, parent education, and peer support. CD non-residential services expenditures increased about 12% due to modest single digit percentage changes in the number of persons using the services and the per unit cost. Service utilization per persons was essentially flat and did not contribute to expenditures changes.

An examination of the sixteen services within the general category of CD non-residential shows there were large changes in the persons using these services over the four-year period 2008-2011. The number of persons receiving:

- Alcohol and or drug assessment decreased 28% from 2,360 persons to 1,693;
- Methadone administration decreased 39% from 1,284 persons to 785;
- Unspecified alcohol and drug services decreased 23% from 4,457 persons to 3,428;
- Hourly alcohol and drug services decreased 43% from 1,314 persons to 749;
- Group peer support billed in 15-minute increments increased 248% from 451 persons to 1,570; and
- Individual peer support billed in 15-minute increments increased 533% from 329 persons to 2,083.

Chemical Dependency Residential – There are only two services in this category: subacute residential detoxification and residential treatment programs receiving a per diem. CD residential expenditures increased only 3%. The 3% increase is a net effect; the number of persons using the service went up 18.72% but the number of units used per person went

down 20.42%. The payment per unit went up about 9%, but the drop in the units of service dropped the per person payment by approximately 13% and kept total increases to the 3%. In essence, the growth in the number of persons using the services has been offset by providing fewer services.

Community Inpatient – There are only two services in what NorthSTAR records classify as community inpatient. These are "detoxification services in a hospital setting" and "room and board psychiatric semi-private." Community inpatient service expenditures were essentially flat over the four year period. This flat result was due to the number of persons receiving the service decreasing by 18% while the payment per person went up 24%. The total number of units of service provided all persons decreased by about 4% even though the number of units of service per person increased by 17%. The net of these significant programmatic changes was a flat expenditure rate. Fewer persons received the service but those who received the service received more.

Community Inpatient Services – This category has three hospital services in it: a daily inpatient care-moderate complexity, hospital discharge 30 minutes or less, and hospital discharge more than 30 minutes. More than 90 percent of the services are in the hospital discharge 30 minutes or less service item. This is a small category with only $17,000 expenditures showing for 2011.

Emergency Room Services – This category contains six types of specific emergency room billing procedures. Expenditures for emergency room services increased significantly across the four years, 140%. This substantive increase was fueled by 41% increase in the number of persons using the emergency rooms, a 51% increase in the payment per unit of service, and a 12% in the number of units per person. More persons are using emergency room, payments for the use are going up, and persons are using them more intensively. When interviewed, staff associated with the NorthSTAR program said that one reason emergency room use was going up was that in recent years over a 1,000 police officers in Dallas have had crisis intervention training (CIT) and that persons with mental health issues were being diverted to hospitals rather than jails as a result of this training.

Observation Room – There is only one service in this category, as the name implies, it is the use of a hospital observation room. Expenditures over the four-year period only went up about 3%. The number of persons using the service went down about 8.5% but this was offset by increases in the payment per unit and a 7.48% increase in the units of service.

NorthSTAR Substance Abuse Treatment Utilization in 2011

The tables in this section of the Appendix provide a closer look at the substance abuse treatment services provided by NorthSTAR in 2011 to the 11,857 NorthSTAR eligible persons who received a substance abuse service during 2011.

The table below shows utilization services for chemical dependency non-residential services provided by the 28 providers of these services. As shown in the table, in FY 2011 NorthSTAR paid 28 separate providers for 15 non-residential substance abuse treatment services. Of the 11,857 persons who received any substance abuse treatment service, approximately 1,700 received alcohol and or drug assessments and approximately 140 had two assessments. There were five methadone outpatient providers and the average length of stay was 226 days. This average is similar to the average in other non-NorthSTAR detoxification programs paid for by DSHS. There was one outpatient detoxification program with an approximate length of stay of five days.

The largest service billed for is "Alcohol and/or other drug abuse services, not otherwise specified." In the *Healthcare Common Procedure Coding System* **(***HCPCS) this is code H0047.*[127] *This code is a catchall code that can be used for multiple purposes.*[128] *In Texas, the new Substance Use Disorder Medicaid benefit uses H0047 to pay the room and board expenses of persons in residential detoxification programs.*[129] *Group and individual therapy using peer support is a significant service provided under NorthSTAR as judged by the number of beneficiaries that received these services. Persons receiving 15-minute group skill building sessions involving peers receive about 33 such sessions on average and persons receiving 15-minute individual skill building sessions involving peers receive about 11 such sessions.*

[127] See description of the H0047 at, retrieved on 10-20-2011 from, http://www.hipaaspace.com/Medical_Billing/Coding/Healthcare.Common.Procedure.Coding.System/H0047

[128] For example, Ohio Medicaid describes the 0047 as "Alcohol and/or Substance Abuse Services, Not Otherwise Classified" means services other than those listed as specific alcohol and/or drug treatment services provided to individuals enrolled in an alcohol and other drug program or their family members, which are supportive of alcohol and/or drug addiction treatment services. O.A.C.3793:2-1-08. Retrieved on 10-20-2011 from http://www.mh.state.oh.us/assets/macsis/codes/odadas-hcpcs-procedure-codes.pdf

[129] For a description of the use of H0047 in the substance use disorder benefit initiated on January 1, 2011 see, retrieved on 10-20-2011 from, www.hhsc.state.tx.us/rad/downloads/05-2010-sud-rp.xls

Table AVI.8: Non-Residential Services, shows the Number of Providers, Number of Distinct Persons, the Payments, the Number of Units of Service paid, and the Number of Units per Person FY 2011.

	Number of Providers	Sum of Distinct Clients	Sum of Payment Amount	Sum of Units	Units per Client
Alcohol and/or drug assessment	14	1,693	$53,308	1,831	1.08
Alcohol and/or drug services; methadone administration and/or service(provision of the drug by a licensed program)	5	785	$1,640,602	178,187	226.99
Alcohol and/or drug services; sub-acute detoxification (residential addiction program outpatient)	1	962	$439,686	5,174	5.38
Alcohol and/or other drug abuse services, not otherwise specified	18	3,428	$2,661,300	59,651	17.40
Alcohol and/or other drug treatment program, per hour	6	749	$201,600	17,150	22.90
Case Management	5	249	$22,459	1,498	6.02
Family Counseling/Therapy - In-home	6	104	$15,705	211	2.03
MET/CBT for Adolescents – Intensive	5	95	$46,185	905	9.53
MET/CBT for Adolescents – Supportive	7	227	$72,495	2,410	10.62
Parent Education Group – Intensive	2	43	$1,560	104	2.42
Parent Education Group – Supportive	3	153	$8,880	592	3.87
Peer Support substance abuse/chemical dependency skill building-group per 15 minutes	1	1,570	$354,139	52,474	33.42
Peer Support substance abuse/chemical dependency skill building-individual - Family Partner w/o child present	1	17	$743	33	1.94

	Number of Providers	Sum of Distinct Clients	Sum of Payment Amount	Sum of Units	Units per Client
Peer Support substance abuse/chemical dependency skill building-individual - Family partner with child present	1	293	$15,728	699	2.39
Peer Support substance abuse/chemical dependency skill building-individual per 15 minutes	1	2,083	$371,786	23,687	11.37
Non-Residential Services	**28**	**7,947**	**$5,906,174**	**344,606**	**43.36**

Source: Medicaid Services Unit, Mental Health and Substance Abuse Division (MHSA)

The following table shows NorthSTAR residential programs. There are two levels of programs. One is a sub-acute detoxification program that provides an average of 1.7 days of service. This is an expensive service costing about $460 a day. The detoxification and withdrawal monitoring is usually performed by physicians and nurses in a 24-hour inpatient clinical setting. This is typical service offered in state behavioral health programs and the billing code is the HCPCS code of H0010. [130]

The service called "Alcohol and/or other drug treatment program, per diem" is also a medically managed withdrawal program. This is also a typical service offered in state behavioral health programs and the billing code is the HCPCS code of H2036. The unit of service is also a day. In the FY 2011 NorthSTAR program the average cost per day was $108 and the average length of stay was close to 13 days. *In Texas, the new Substance Use Disorder Medicaid benefit uses*

[130] See for example, retrieved on 10-20-2011 http://www.pathwayslme.org/provider/pdf/IPRS%20GRIDS.pdf and http://www.bhc.state.nm.us/pdf/H0010%20TG%20Sub%20Acute%20Detox%20Med.%20Monitored%20(5.17.10).pdf

H2036 to pay for medically managed detoxification and the payment level was set at $150 day in the rates implemented January 1, 2011.

Table AVI.9: Residential Services, Number of Providers, Number of Distinct Persons, Payments, Number of Units of Service Paid, and Number of Units per Person FY 2011

Residential Services	Number of Providers	Sum of Distinct Persons	Sum of Payment Amount	Sum of Units	Units per Person
Alcohol and/or drug services; sub-acute detoxification (residential addiction program inpatient)	2	1,834	$ 1,429,750	3,109	1.70
Alcohol and/or other drug treatment program, per diem	5	2,054	$ 2,855,141	26,352	12.83
Residential Total	**5**	**3,204**	**$ 4,284,891**	**29,461**	**9.19**

Source: Medicaid Services Unit, Mental Health and Substance Abuse Division (MHSA)

The next table shows that four providers provided hospital based detoxification and the average length of the 91 persons receiving this treatment was approximately three and a half days.

Table AVI.10: Hospital-Based Detoxification Treatment Services, Number of Providers, Number of Distinct Persons, Payments, Number of Units of Service paid, and Number of Units per Person FY 2011

Community Inpatient Services	Number of Providers	Sum of Distinct Persons	Sum of Payment Amount	Sum of Units	Units per Person
Detoxification Services in a hospital setting	4	91	$199,100	313	3.44
Community Inpatient Total	**4**	**91**	**$199,100**	**313**	**3.44**

Source: Medicaid Services Unit, Mental Health and Substance Abuse Division (MHSA)

The table below shows that the 11,857 persons who received substance abuse services during 2011 also generated approximately 2,700 emergency room visits or uses of emergency rooms and 1,400 observation room stays.

Table AVI.11: Inpatient and Hospital Use by Persons Receiving Substance Abuse Treatment Services, 2011.

Other Services used per Persons with a Substance Abuse Diagnosis	Sum of Distinct Persons	Sum of Payment Amount	Sum of Units
R & B Psychiatric Semiprivate	356	$858,871	1,242
Daily Inpatient Care - moderate complexity	1	$40	1
Hospital Discharge - 30 minutes or less	322	$16,033	340
Hospital Discharge - more than 30 minutes	27	$1,260	28
Emergency department visit	17	$514	17
Emergency department visit - detail history, moderate complexity	224	$19,067	230
Emergency department visit - high complexity	9	$984	9
Emergency department visit - low complexity	235	$13,209	247
Emergency department visit - moderate complexity	816	$58,487	855
Emergency Room	1,418	$350,416	1,915
Observation Room	1,423	$1,786,392	2,308
Total Emergency Room	**2,719**	**$442,677**	**3,273**
Total		**$3,105,273**	

Source: Medicaid Services Unit, Mental Health and Substance Abuse Division (MHSA)

A review of the 2011 substance abuse treatment services shows there that eight treatment services were used by more 1,000 persons of the 11,857 persons receiving treatment:

- Alcohol and/or drug assessment, N=1,693;
- Alcohol and/or other drug abuse services, not otherwise specified, N=3,428;
- Peer Support substance abuse/chemical dependency skill building-group per 15 minutes, N=1,570;

- Peer Support substance abuse/chemical dependency skill building-individual per 15 minutes, N=2,083;
- Alcohol and/or drug services; sub-acute detoxification (residential addiction program inpatient, N=1,834;
- Alcohol and/or other drug treatment program, per diem, N=2,054;
- Emergency Room, N=1,418 and
- Observation Room, N=1,423.

Appendix VII: LMHA RDM Utilization Analysis

During reviews of this report, PCG was asked to include data on the utilization of services by adults and children receiving Resiliency Disease Management service packages. The data in this Appendix cover services provided through the LMHAs and does not contain information on the use of RDM service packages within the NorthSTAR system. NorthSTAR publications provide some data on RDM utilization and previous studies have also presented data on NorthSTAR service package utilization.

House Bill 2292 became effective in September 2004 and brought a significant change to the way publically funded mental health services were provided in Texas. The transformation HB 2292 created became known as Resiliency and Disease Management (RDM). The RDM initiative created standardized service packages and promulgated clinical guidelines that identified the evidence-based services, and the amount, duration, and scope of the delivery of the services, as well as the population to be served. Separate guidelines were established for adult and children services.[131]

This part of the report presents utilization data for FY 2011 on the services reported for four adult and seven children's RDM service packages:

Adult Service Package 1 (A1): Basic RDM Services
Adult Service Package 2 (A2): Basic RDM Services with Counseling Services
Adult Service Package 3 (A3): Intensive RDM Services with Team Approach
Adult Service Package 4 (A4): Assertive Community Treatment (ACT)
Children's Service Package 1.1 (C1.1): Externalizing Disorders
Children's Service Package 1.2 (C1.2): Internalizing Disorders
Children's Service Package 2.1 (C2.1): Multi-systemic Therapy
Children's Service Package 2.2 (C2.2): Externalizing Disorders
Children's Service Package 2.3 (C2.3): Internalizing Disorders
Children's Service Package 2.4 (C2.4): Major Disorders
Children's Service Package 4 (C4): Aftercare Services

Not considering crisis or transitional services, the table below shows the unduplicated number of persons that used each service package in the years 2007-2011. As the table shows, RDM is a sizeable program serving about 137,000 persons in 2011. In general, the service utilization patterns are different across the packages and are consistent with the intent of the service packages. In other words, the packages show "fidelity" to their intent.

[131] For the adult and children's guidelines see, retrieved on 2-28-2012 , http://www.dshs.state.tx.us/mhsa/umguidelines/

For adults, the clear majority of persons use service package 1; a medication management service package that also provides some support services. The second most frequently used package is service package 3 which emphasizes psychosocial services provided by a team of persons.

The most frequently used children's package is service package 1.1 which is called "Externalizing Disorders" and is a lower level of service for children that need some services but do not require extensive services.

Table AVII.1: Unduplicated Count of Persons Served by LMHAs using RDM Service Packages 2007-2011.

Service Package	2007 Number of Unique Persons	2008 Number of Unique Persons	2009 Number of Unique Persons	2010 Number of Unique Persons	2011 Number of Unique Persons
A1	82,834	81,246	80,605	80,414	77,987
A2	1,905	5,853	6,198	6,037	5,848
A3	17,970	18,780	20,632	22,157	21,786
A4	2,992	2,725	2,287	2,404	2,471
C1.1	13,978	16,179	16,487	17,090	17,152
C1.2	4,466	4,003	3,576	3,396	3,254
C2.1	169	162	143	49	10
C2.2	3,000	3,018	3,156	3,713	3,843
C2.3	202	644	752	866	908
C2.4	506	316	303	249	201
C4	4,266	3,516	3,905	4,358	3,753
Total	**132,288**	**136,442**	**138,044**	**140,733**	**137,213**

Data Source: Department of State Health Services, Decision Support Unit.

The next table shows the percentage changes in the numbers of adults and children using each service package over the period 2008-2011.

Table AVII.2: Percentage Change in the Number of Unduplicated Persons using RDM Service Packages 2008-2011.

Service Package	2008 % Change from Previous Year	2009 % Change from Previous Year	2010 % Change from Previous Year	2011 % Change from Previous Year
A1	-1.92%	-0.79%	-0.24%	-3.02%
A2	207.24%	5.89%	-2.60%	-3.13%

Service Package	2008 % Change from Previous Year	2009 % Change from Previous Year	2010 % Change from Previous Year	2011 % Change from Previous Year
A3	4.51%	9.86%	7.39%	-1.67%
A4	-8.92%	-16.07%	5.12%	2.79%
C1.1	15.75%	1.90%	3.66%	0.36%
C1.2	-10.37%	-10.67%	-5.03%	-4.18%
C2.1	-4.14%	-11.73%	-65.73%	-79.59%
C2.2	0.60%	4.57%	17.65%	3.50%
C2.3	218.81%	16.77%	15.16%	4.85%
C2.4	-37.55%	-4.11%	-17.82%	-19.28%
C4	-17.58%	11.06%	11.60%	-13.88%
Total	**3.14%**	**1.17%**	**1.95%**	**-2.50%**

Data Source: Department of State Health Services, Decision Support Unit.

In general, the utilization changes were modest across the period. Small increases up to 2011 and then a 2.50% decrease. The second adult package (A2) increased significantly from 2007 to 2008. Other large percentage changes were in packages with smaller number of persons and shifts of small numbers of persons created large percentage changes.

Reported costs for the services packages are shown below.[132] The overall cost per person by service package positively correlates to the intensity of the services offered within each service package. Simply stated, the more intensive the service package the higher the cost per person is. For example, the medication and management services in service package 1 are less costly than the cognitive behavioral therapy approach used in service package 2. The team approach in service package 3 is more expensive than service packages 1 and 2 and the Assertive Community Treatment (ACT) approach in service package is understandably the most expensive of all. Similarly, costs for the children's service packages for more severe levels of impairment, 2.2, 2.3 and 2.4 run $3,000 to $4,000 per child contrasted with service packages 1.1 and 1.2 for children with less severe disorders which run from $2,000 to $2,400. The least expensive children's package is 4 which is a medication and case management package that had a per person cost of $897

[132] The costs do not include the ingredient costs of medications, charges from hospitals for emergency room or inpatient use, state mental health hospital costs, or Medicaid state plan services.

Table AVII.3: Unique Persons served and Cost per person by RDM Service Package, 2011.

Service Package	Number of Unique Persons	Number of Encounters	Estimated Cost	Cost per Person	Cost per Encounter
A1	77,987	1,169,666	$125,362,629	$1,607	$ 107.18
A2	5,848	123,997	$16,630,500	$2,844	$ 134.12
A3	21,786	921,371	$110,682,158	$5,080	$ 120.13
A4	2,471	249,531	$27,606,608	$11,172	$ 110.63
Adult Total	**108,092**	**2,464,565**	**280,281,894**	**$2,593**	**$ 113.72**
C1.1	17,152	393,875	$40,161,494	$2,342	$ 101.97
C1.2	3,254	59,656	$6,589,858	$2,025	$ 110.46
C2.1	10	287	$29,760	$2,976	$ 103.69
C2.2	3,843	123,257	$13,946,922	$3,629	$ 113.15
C2.3	908	28,190	$3,451,353	$3,801	$ 122.43
C2.4	201	5,735	$756,347	$3,763	$ 131.88
C4	3,753	36,438	$3,253,892	$867	$ 89.30
Children Total	**29,121**	**647,438**	**68,189,625**	**$2,342**	**$ 105.32**
Total of Both	**137,213**	**3,112,003**	**348,471,520**	**$2,540**	**$ 111.98**

Data Source: Department of State Health Services, Decision Support Unit.

Comments on Adult Service Package Utilization

The services actually provided do match the descriptions of the service packages. A look at the most frequently provided services shows that all packages frequently use three screening/diagnostic services, two medication-related services, and targeted case management. The packages show differences in the percentage of persons who receive this basic set of services.

Beyond this basic set, there are three main other outpatient services provided: skills training, psychosocial rehabilitation, and psychotherapy. The packages have distinct, substantive differences in the percentage of persons who use one of these three main treatment options. Almost 60 different billing codes are used in the billing of services in the adult packages and descriptions of the packages in the program Guidelines contain long lists of services. A look at actual utilization shows that utilization is concentrated in a small number of services and many services have low utilization rates. The program architecture is robust in that it encompasses less frequently used services and permits individualized targeting of services that are needed by only a few persons.

Comments on Children's Service Package Utilization

The two main packages for children with less severe disorders are strikingly different. Children who are diagnosed with a less severe externalized disorder get skills training and children diagnosed with a less severe internalized disorder get psychotherapy.

The two service packages for children with more severe disorders, 2.2 and 2.3 have high rates of targeted case management, psychiatric interview examinations, and similar rates of screening and medication related services. Both packages also use skill training and self help, peer support services. The two major differences in the packages for children with more severe disorders is that approximately 60% of the children with severe internalizing disorder had psychotherapy and 45% had skills training whereas children with severe externalizing disorders received a negligible amount of psychotherapy and approximately 87% received skills training.

Children's package 4 is similar in concept to adult package 1. Both are medication and case management packages with small amounts of other services.

Adult Resiliency Disease Management Service Packages

There were four adult service packages used in 2011 and 108,092 adults received services through them at an average per person cost of $2,593.

Adult Service Package 1: Basic RDM Services

The written description of adult service package 1 is:

> "Services in this package are generally intended for individuals with major depressive disorder (MDD) (GAF≤ 50), bipolar disorder, or schizophrenia and related disorders who present with very little risk of harm and who have supports and a level of functioning that does not require higher levels of care.
>
> The general focus of this array of services is to reduce or stabilize symptoms, improve the level of functioning, and/or prevent deterioration of the person's condition. Natural and/or alternative supports are developed to help the person move out of the public mental health system. Services are most often provided in outpatient, office-based settings, and are primarily limited to medication, rehabilitative services, and education."[133]

DSHS staff and providers have described this service package as medication management of adults. Specifically, this service is for adults who can function in their environment, but need

[133] Texas Department of State Health Services, (2010, July), Resiliency and Disease Management (RDM) Utilization Management Guidelines Adult Service, Austin, TX. Retrieved on 3-28-2012 from http://www.dshs.state.tx.us/mhsa/umguidelines/ All descriptions of Adult service packages are taken from this Guideline. These service packages are described in great detail in the utilization guidelines are readers are referred to them for more information.

medications and some supports to do so. Depending on the provider, there are waiting lists for service package 1 because of the unavailability of physicians to prescribe medications for adults eligible for this service package. The total reported cost of service package 1 in 2011 was $125,362,629.

The table below shows adult service package 1 services that 1,300 adults or more received.[134] The cutoff point of 1,300 persons was arrived at by examining the utilization of each service and seeking a balance between presenting information on the main services used versus including a long table showing services that only a few persons used. Centers are reimbursed by contract, not on a fee-for-service data. The data below and in succeeding tables are self reported by the Centers and are not based on a claims reporting system. As noted above, approximately 77,987 adults received a service while in adult service package 1 at an average cost per adult of $1,607.

Consistent with comments by persons interviewed, the majority of adults, more than 60,000 out of 77,987 received medications and case management. Significant numbers of adults, more than 40%, received screening and diagnostic interview services, and about 30% received medication training and support. Another six or so services involved office visits codes, and 4,581 adults were part of a tele-health conference.

Outside of medications, case management and office visits, about 13,409 adults received modest amounts of skills training, about 1,485 received psychosocial rehabilitation, and 10,666 adults received about an hour of crisis intervention services. Approximately 2,729 adults in service package 1 had a residential stay. Thirty eight other services were reported including residential programs, professional costs of hospital stays, and recovery services such as supported housing and employment, but they were used by fewer than 1,000 adults each. The existence of 38 services used by approximately 1% of fewer of program participants indicates the program is successful in allowing a repertory of services that can be tailored to unique needs of participants.

[134] With this table and the analyses of succeeding tables, the choice of which services to include as the “most frequently” used services depends on the number of persons receiving services in the service package, and the frequency of use of services. PCG attempted to reach a balance between presenting sufficient services to show what services persons used but not present too many services with unnecessary detail.

Table AVII.4: Most Frequently Used Services in Adult RDM package 1, 2011.

Description of Code	Procedure Code	Count of Unique Persons	% of Persons Receiving this Service	Estimated Cost	Cost Per Adult
Pharmacological management, including prescription, use, and review	90862	64,327	82.48%	$31,868,172	$495
Targeted case management, each 15 minutes	T1017	62,535	80.19%	$21,858,949	$350
Screening to determine participation in a specified program, project or treatment protocol	T1023	34,356	44.05%	$4,355,046	$127
Psychiatric diagnostic interview examination	90801	32,313	41.43%	$13,096,413	$405
Medication training and support, per 15 minutes	H0034	23,069	29.58%	$4,431,724	$192
Behavioral health screening to determine eligibility for admission to treatment program	H0002	14,530	18.63%	$2,127,231	$146
Skills training and development, per 15 minutes	H2014	13,409	17.19%	$7,879,262	$588
Crisis intervention service, per 15 minutes	H2011	10,666	13.68%	$4,318,221	$405
Office or other outpatient visit for the evaluation and management, 5 minutes are spent performing or supervising these services	99211	7,968	10.22%	$1,879,952	$236
Brief office visit for the sole purpose of monitoring or changing drug prescriptions used in the treatment of mental psychoneurotic and personality disorders	M0064	5,894	7.56%	$1,940,178	$329
Telehealth originating site facility fee	Q3014	4,581	5.87%	$642,656	$140
Mental health service plan	H0032	3,579	4.59%	$804,665	$225

Description of Code	Procedure Code	Count of Unique Persons	% of Persons Receiving this Service	Estimated Cost	Cost Per Adult
development by non-physician					
Therapeutic, prophylactic, or diagnostic injection (specify substance or drug); subcutaneous or intramuscular	96372	3,529	4.53%	$1,971,226	$559
Community psychiatric supportive treatment, face-to-face, per 15 minutes	H0036	3,488	4.47%	$2,823,941	$810
Behavioral health; long-term care residential (non-acute care in a residential treatment program where stay is typically longer than 30 days), with room and board, per diem	T2048	2,729	3.50%	$9,622,805	$3,526
Office or other outpatient visit, 15 minutes face-to-face with the patient and/or family	99213	1,832	2.35%	$259,277	$142
Office or other outpatient visit Physicians typically spend 10 minutes face-to-face with the patient and/or family	99212	1,694	2.17%	$185,270	$109
Psychosocial rehabilitation services, per 15 minutes	H2017	1,485	1.90%	$928,486	$625
Behavioral health prevention education service	H0025	1,463	1.88%	$313,688	$214

Data Source: Department of State Health Services, Decision Support Unit.

Adult Service Package 2: Basic RDM Services with Counseling Services

The written description of adult service package 2 is:

> "Services in this package are intended for individuals with residual symptoms of MDD (GAF ≤ 50 at intake) who present very little risk of harm, who have supports, and a level

of functioning that does not require more intensive levels of care, and who can benefit from psychotherapy.

The general focus of services in this package is to improve level of functioning and/or prevent deterioration of the person's condition. Natural and/or alternative supports are developed to help the person move out of the public mental health system. Services are most often provided in outpatient, office-based settings and include psychotherapy services in addition to those offered in SP1."

DSHS staff and providers described this service package as cognitive behavioral therapy (CBT) for adults who are depressed but do not have psychosis. Providers indicated that there are additional training requirements for professionals in order to provide CBT and obtaining trained staff is a bottleneck in providing the service.[135] The reported cost of service package 2 in 2011 was $16,630,500.

The table below shows adult package 2 services that 1,000 adults or more received. The cutoff point of 1,000 persons was arrived at by examining the utilization of each service and seeking a balance between presenting information on the main services used versus including a long table showing services that only a few persons used. Approximately 5,840 adults received services in this service package in 2011 at an average cost per adult of $2,844. Forty three other services were reported. Of these 43, the most frequently used services included community psychiatric supportive treatment, individual psychotherapy, routine physician office visits, and office visits to monitor medication. As in service package 1, the existence of 43 services used by smaller percentages of program participants indicates the program has been successful in developing services that can be tailored to unique needs of participants.

Like adults in service package 1, high percentages of adults in service package 2 received medication and case management. There are clear differences in the services adults in package 2 received. Noticeably higher percentages of adults in package 2 received a psychiatric diagnostic interview and behavioral health screenings, individual psychotherapy, medication training, and skills training and development. Based on the data it appears that adults in package 2 received what adults in package one received plus more screening, diagnostic time, psychotherapy and skills training.

[135] CBT requires a licensed therapist and 32 hours of competency training for the model;
- To be a licensed therapist you have to go through 3,000 hours of practical training;
- First you have to get the licensed therapist, then they also need to be bilingual and then they have to have the 32 hours of CBT training;

Table AVII.5: Most Frequently Used Services in Adult RDM package 2, 2011.

Description of Code	Procedure Code	Count of Unique Persons	% of Persons Receiving this Service	Estimated Cost	Cost Per Adult
Targeted case management, each 15 minutes	T1017	4,834	82.66%	$1,920,419	$397
Pharmacological management, including prescription, use, and review	90862	4,430	75.75%	$2,562,585	$578
Psychiatric diagnostic interview examination	90801	3,620	61.90%	$1,570,998	$434
Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an office or outpatient facility, approximately 45 to 50 minutes face-to-face with the patient	90806	3,521	60.21%	$3,742,737	$1,063
Screening to determine participation in a specified program, project or treatment protocol	T1023	2,778	47.50%	$334,387	$120
Medication training and support, per 15 minutes	H0034	2,179	37.26%	$558,485	$256
Behavioral health screening to determine eligibility for admission to treatment program	H0002	1,726	29.51%	$245,875	$142
Skills training and development, per 15 minutes	H2014	1,708	29.21%	$883,259	$517
Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an office or outpatient facility, approximately 75 to 80 minutes face-to-face with the patient	90808	1,445	24.71%	$1,121,422	$776

Description of Code	Procedure Code	Count of Unique Persons	% of Persons Receiving this Service	Estimated Cost	Cost Per Adult
Crisis intervention service, per 15 minutes	H2011	1,176	20.11%	$505,066	$429

Data Source: Department of State Health Services, Decision Support Unit.

Adult Service Package 3: Intensive RDM Services with Team Approach

The written description of adult service package 3 is:

> "The general focus of services in this package is, through a team approach, to stabilize symptoms, improve functioning, develop skills in self-advocacy, and increase natural supports in the community and sustain improvements made in more intensive SPs.
>
> Services in this package are generally intended for individuals who enter the system of care with moderate to severe levels of need (or for those whose LOC-R has increased) who require intensive rehabilitation to increase community tenure, establish support networks, increase community awareness, and develop coping strategies in order to function effectively in their social environment (family, peers, school)."

When interviewed, providers and state staff typically described this as a team approach for adults who need more services, for example, adults who are chronically ill and cannot stay out of a hospital. The reported cost of service package 3 in 2011 was $110,682,158.

The table below shows adult service package 3 services that 1,200 adults or more received. Again, the cutoff point of 1,200 persons represents a balance between showing the major services versus including all services. Approximately 21,786 adults received services in this service package in 2011 at an average cost per person of $5,080. Unlike adults in service packages 1 and 2, approximately 93% of the adults received psychosocial rehabilitation services at cost of $2,930 per person. Whereas in service package 1, 1.90% of the adults received psychosocial services at an average cost of $625 person, and in service package 2, 1.40% of the adults received psychosocial services at an average cost of $416 person. The psychosocial rehabilitation cost is the staff costs of the team members that are assigned to work with the person.

The $58.9 million spent on psychosocial rehabilitation for adults in service package 3 is the most expensive single service provided in any service package and represents approximately 17% of all service package expenditures in 2011. Adults in service package 3 were not provided the psychotherapy which characterizes service package 2. A significant difference in the service

profile is also found in the rate of case management. Adults in service package 3 received half the case management services that adults in service package 1 and 2 received, probably because the intensity of the psychosocial service levels substitutes for a separate case management billing.

Pharmacological management, medication training and supports, screening and diagnostic interview services tend to have approximately similar utilization rates across service packages 1, 2 and 3. Reflecting their higher rate of behavioral health impairment, approximately 27% of adults in service package 3 received a crisis intervention service compared to approximately 14% in service package 1 and 20% in service package 32.

Table AVII.6: Most Frequently Used Services in Adult RDM package 3, 2011.

Description of Code	Procedure Code	Count of Unique Persons	% of Persons Receiving this Service	Estimated Cost	Cost Per Adult
Psychosocial rehabilitation services, per 15 minutes	H2017	20,228	92.85%	$58,925,975	$2,913
Pharmacological management, including prescription, use, and review	90862	17,387	79.81%	$10,752,304	$618
Psychiatric diagnostic interview examination	90801	11,868	54.48%	$5,849,152	$493
Screening to determine participation in a specified program, project or treatment protocol	T1023	11,100	50.95%	$1,692,438	$152
Targeted case management, each 15 minutes	T1017	8,400	38.56%	$3,403,019	$405
Medication training and support, per 15 minutes	H0034	8,088	37.12%	$2,696,291	$333
Behavioral health screening to determine eligibility for admission to treatment program	H0002	6,699	30.75%	$1,290,431	$193
Crisis intervention service, per 15 minutes	H2011	5,872	26.95%	$2,851,459	$486
Skills training and development, per 15 minutes	H2014	3,250	14.92%	$1,737,262	$535

Description of Code	Procedure Code	Count of Unique Persons	% of Persons Receiving this Service	Estimated Cost	Cost Per Adult
Brief office visit for the sole purpose of monitoring or changing drug prescriptions used in the treatment of mental psychoneurotic and personality disorders	M0064	2,285	10.49%	$505,337	$221
Community psychiatric supportive treatment, face-to-face, per 15 minutes	H0036	2,274	10.44%	$1,581,178	$695
Therapeutic, prophylactic, or diagnostic injection (specify substance or drug); subcutaneous or intramuscular	96372	2,127	9.76%	$1,141,930	$537
Mental health service plan development by non-physician	H0032	1,814	8.33%	$484,990	$267
Office or other outpatient visit for the evaluation and management, 5 minutes are spent performing or supervising these services	99211	1,773	8.14%	$501,301	$283
Behavioral health prevention education service	H0025	1,721	7.90%	$2,590,827	$1,505
Behavioral health; long-term care residential (non-acute care in a residential treatment program where stay is typically longer than 30 days), with room and board, per diem	T2048	1,230	5.65%	$5,373,289	$4,369

Data Source: Department of State Health Services, Decision Support Unit.

Adult Service Package 4: Assertive Community Treatment (ACT)

The written description of adult service package 4 is:

> "The purpose of ACT is to provide a self-contained program that serves as the fixed point of responsibility for providing treatment, rehabilitation and support services to identified consumers with severe and persistent mental illnesses. A typical ACT consumer has a diagnosis of schizophrenia or another serious mental illness such as bipolar disorder and has experienced multiple psychiatric hospital admissions either at the state or community level. Using an integrated services approach, the ACT team merges clinical and rehabilitation staff expertise, e.g., psychiatric, substance abuse, employment, and housing within one mobile service delivery system."

When interviewed, providers and state staff typically described this as an "evidenced-based" team approach for adults who have not responded well to outpatient and other routine mental health services. Adults served in ACT programs tend to have multiple problems such as co-occurring substance abuse, lack of shelter and employment, and frequent use of inpatient resources such as hospital emergency rooms. This package is intended to provide significant levels of service to small numbers of adults that have substantial behavioral health impairments.

The reported cost of adult service package 4 in 2011 was $27,606,608.

Approximately 2,471 adults received services in service package 4 in 2011 at an average cost of $11,172 per person. The table below shows adult service package 4 services that 300 adults or more received. Again, the cutoff point of 300 persons represents a balance between showing the major services versus including all services. The Table below shows that almost everyone received significant levels of psychosocial rehabilitation. At $6,649 per person, the average per person cost of psychosocial rehabilitation is over twice as great than the $2,913 cost for similar services in service package 3. The cost per person for other services has a tendency to be higher as well. For example, pharmacology management per person costs were $1,172 compared to $495 in service package 1. Medication training and support per person costs were $777 compared to $350 in service package 1. With the exception of screening, psychiatric diagnostic costs individual psychotherapy and, skills training, in general, utilization in service package 4 tended to be higher and per person costs tended to be higher.

Adults in service package 4 have either higher utilization or higher cost per person of:

- Outpatient office visits;
- Subcutaneous or intramuscular injections;
- behavioral health residential use;
- Behavioral health prevention education service;
- Mental health service plan development by non-physician;

- Community psychiatric supportive treatment, face-to-face, per 15 minutes;
- Respite care services, not in the home, per diem, and
- Crisis intervention service, per 15 minutes.

Table AVII.7: Most Frequently Used Services in Adult RDM package 4, 2011.

Description of Code	Procedure Code	Count of Unique Persons	% of Persons Receiving this Service	Estimated Cost	Cost Per Adult
Psychosocial rehabilitation services, per 15 minutes	H2017	2,402	97.21%	$15,971,046	$6,649
Pharmacological management, including prescription, use, and review	90862	2,097	84.86%	$2,471,191	$1,178
Medication training and support, per 15 minutes	H0034	1,218	49.29%	$945,967	$777
Crisis intervention service, per 15 minutes	H2011	1,207	48.85%	$869,530	$720
Screening to determine participation in a specified program, project or treatment protocol	T1023	1,164	47.11%	$122,362	$105
Psychiatric diagnostic interview examination	90801	1,157	46.82%	$566,320	$489
Behavioral health screening to determine eligibility for admission to treatment program	H0002	795	32.17%	$168,622	$212
Therapeutic, prophylactic, or diagnostic injection (specify substance or drug); subcutaneous or intramuscular	96372	794	32.13%	$397,403	$501
Targeted case management, each 15 minutes	T1017	619	25.05%	$244,551	$395
Mental health service plan development by non-physician	H0032	546	22.10%	$195,102	$357
Behavioral health prevention	H0025	436	17.64%	$1,519,169	$3,484

Description of Code	Procedure Code	Count of Unique Persons	% of Persons Receiving this Service	Estimated Cost	Cost Per Adult
education service					
Community psychiatric supportive treatment, face-to-face, per 15 minutes	H0036	399	16.15%	$209,485	$525
Behavioral health; long-term care residential (non-acute care in a residential treatment program where stay is typically longer than 30 days), with room and board, per diem	T2048	320	12.95%	$2,052,463	$6,414
Brief office visit for the sole purpose of monitoring or changing drug prescriptions used in the treatment of mental psychoneurotic and personality disorders	M0064	313	12.67%	$180,174	$576

Data Source: Department of State Health Services, Decision Support Unit.

Children's Resiliency Disease management Service Packages

There were seven children's service packages used in 2011 and 29,121 children received services through them at an average per person cost of $2,342.

Children's Service Package 1.1: Externalizing Disorders

The written description of children's service package 1.1 is:

> "This service package is targeted to children/adolescents with externalizing disorders (e.g., ADD/ADHD, Conduct or Oppositional Defiant Disorder) and a moderate level of functional impairment. The focus of intervention is on psychosocial skills development in the child/adolescent and the enhancement of parenting skills, especially in child behavior management.

> This service package is generally considered short-term and time-limited. The general goal of services at this level of care is to reduce or stabilize symptoms, decrease functional impairment and build resiliency in the child/adolescent and family."[136]

Persons interviewed described the children's service packages as making distinctions between externalizing and internalizing at two levels of severity: moderate severity and heavier severity. Children's service package 1.1 deals with externalizing behavior at moderate levels of severity.

The reported cost of children's service package 1.1 in 2011 was $40,161,494.
The table below shows children's service package 1.1 services that 1,000 children or more received. Approximately 17,152 children received services in service package 1.1 in 2011 at an average cost of $2,342 per child.

Consistent with the description of the service package, as shown in the table below the most frequent services provided were skills training and case management. About 57% received a medication-related service. Approximately 89% of the children received skills training at a per person cost of $1,363. Approximately 58% of the children received a psychiatric diagnostic interview and approximately 32% received a screening service and 25% received a behavioral health screening.

Table AVII.8: Most Frequently Used Services in Children's RDM package 1.1, 2011.

Description of Code	Procedure Code	Count of Unique Persons	% of Adults Receiving this Service	Estimated Cost	Cost Per Child
Skills training and development, per 15 minutes	H2014	15,307	89.24%	$20,870,885	$1,363
Targeted case management, each 15 minutes	T1017	14,736	85.91%	$7,214,588	$490
Psychiatric diagnostic	90801	9,973	58.14%	$3,508,374	$352

[136] When interviewed in the Fall of 2011, DSHS staffs indicated that changes in composition of children's service packages were being introduced. For example, providing more "wrap-around" services. The descriptions of the children's service packages used in this utilization review are based on the January 2010 Guidelines currently found on the DSHS website. See, retrieved on 3-30-2012 from http://www.dshs.state.tx.us/mhsa/umguidelines/ .These service packages are described in great detail in the utilization guidelines are readers are referred to them for more information.

Description of Code	Procedure Code	Count of Unique Persons	% of Adults Receiving this Service	Estimated Cost	Cost Per Child
interview examination					
Pharmacological management, including prescription, use, and review	90862	9,776	57.00%	$3,157,722	$323
Medication training and support, per 15 minutes	H0034	6,358	37.07%	$2,037,295	$320
Screening to determine participation in a specified program, project or treatment protocol	T1023	5,458	31.82%	$386,552	$71
Behavioral health screening to determine eligibility for admission to treatment program	H0002	4,295	25.04%	$432,228	$101
Crisis intervention service, per 15 minutes	H2011	1,221	7.12%	$444,746	$364
Telehealth originating site facility fee	Q3014	1,205	7.03%	$150,362	$125

Data Source: Department of State Health Services, Decision Support Unit.

Children's Service Package 1.2: Internalizing Disorders

The written description of children's service package 1.2 is:

> "This service package is targeted to children/adolescents with internalizing disorders (depressive or anxiety disorders) and a moderate level of functional impairment. The focus of intervention is on child/adolescent and family counseling using Cognitive Behavioral Therapy (CBT) for ages 9 & above and CBT or other therapy approaches for children ages 3 through 8.
>
> The general goal of services at this LOC is to reduce or stabilize symptoms, decrease functional impairment and build resiliency in the child/adolescent and family."

Persons interviewed described service package 1.2 as being for children who internalized their disorder and instead of "acting out" the children became moody, or withdrawn or depressed. Children's service package 1.2 deals with internalizing behavior at moderate levels of impairment.

The reported cost of children's service package 1.2 in 2011 was $6,589,858.

The table below shows children's service package 1.2 services that 450 children or more received. Approximately 3,254 children received services in service package 1.2 in 2011 at an average cost of $2,025 per child. The service utilization picture of children who are diagnosed with an internalizing disorder is totally dissimilar from the services provided to children with externalizing disorders. High percentages of the children received some kind of psychiatric review and the other most frequent used services are psychotherapy.

Table AVII.9: Most Frequently Used Services in Children's RDM package 1.2, 2011.

Description of Code	Procedure Code	Count of Unique Persons	% of Persons Receiving this Service	Estimated Cost	Cost Per Child
Psychiatric diagnostic interview examination	T1017	2,607	80.12%	$1,118,817	$429
Interactive psychiatric diagnostic	90801	2,073	63.71%	$830,517	$401
Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an office or outpatient facility, approximately 20 to 30 minutes face-to-face with the patient	90806	1,980	60.85%	$1,576,803	$796
Individual psychotherapy, in an office or outpatient facility, approximately 20-30 minutes	90862	1,614	49.60%	$427,501	$265
Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an office or outpatient facility, approximately 45 to 50 minutes face-to-face with the patient	H0034	1,226	37.68%	$537,546	$438

Description of Code	Procedure Code	Count of Unique Persons	% of Persons Receiving this Service	Estimated Cost	Cost Per Child
Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an office or outpatient facility, approximately 45-50 minutes; with medical evaluation and management services	T1023	1,172	36.02%	$74,045	$63
Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an office or outpatient facility, approximately 75 to 80 minutes face-to-face with the patient	H2014	1,058	32.51%	$708,734	$670
Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an office or outpatient facility, approximately 75-80 minutes; with medical evaluation and management services	H0002	969	29.78%	$132,748	$137
Individual psychotherapy, interactive, using play equipment, physical devices, language interpreter, or other mechanisms of non-verbal communication, in an office or outpatient facility, approximately 75 to 80 minutes face to face with the patient	H2011	478	14.69%	$177,263	$371
Family Psychotherapy (without the patient present)	90847	475	14.60%	$237,782	$501
Family psychotherapy (conjoint psychotherapy) (with patient present)	90808	363	11.16%	$157,464	$434

Data Source: Department of State Health Services, Decision Support Unit.

Children's Service Package 2.1: Multi-systemic Therapy

The written description of children's service package 2.1 is:

> "Multi-systemic Therapy (MST) is a comprehensive in-home and community-based treatment model. Services are provided on an average of 8 hours per week. Extensive collaboration with juvenile justice professionals is required. This SP is targeted to children/adolescents with externalizing disorders and high levels of severe disruptive or aggressive behaviors, in the juvenile justice system and at high risk of out-of-home placement or further penetration in the juvenile justice system due to presenting behaviors.
>
> The general goal of services at this level of care is to reduce or stabilize symptoms, decrease functional impairment and build resiliency in the child/adolescent and family."

Only ten children received this service during 2011 at an average cost of $2,976 per person.

Children's Service Package 2.2: Externalizing Disorders

The written description of children's service package 2.2 is:

> "This service package is targeted to children/adolescents with externalizing disorders and moderate to high functional impairment at home, school or in the community. The need for intensive case management and significant parent support is indicated.
>
> The general goal of services at this level of care is to reduce or stabilize symptoms, decrease functional impairment and build resiliency in the child/adolescent and family."

Persons interviewed described service package 2.2 as being for children who "acted out", became aggressive, and "externalized" their disorder. Children's service package 2.2 deals with externalizing behavior at higher levels of impairment.

The reported cost of children's service package 2.2 in 2011 was $13,946,922.

The table below shows children's service package 2.2 services that 450 children or more received. Approximately 3,843 children received services in service package 2.2 in 2011 at an average cost of $3,629 per child.

Comparing the services provided to children in service package 1.1, children who also externalize but have lower levels of impairment shows:

- The same percentage of children in service package 2.2 received skills training and have similar amounts of skill training;
- Children in service package 2.2 received three times the case management;
- A higher percentage, approximately 70% vs. 58% had a psychiatric diagnostic interview examination and the costs per child were noticeably higher indicating a more intensive service provision;
- Medication related services were approximately similar although children in service package 2.2 received slightly higher rates of medication training at higher cost per child indicating more intensive medication training, and
- Almost 40% of the children in service package 2.2 had self help, peer supports whereas only approximately 4% of children in service package 1.1 received self help, peer support.

Table AVII.10: Most Frequently Used Services in Children's RDM package 2.2, 2011.

Description of Code	Procedure Code	Count of Unique Persons	% of Persons Receiving this Service	Estimated Cost	Cost Per Child
Targeted case management, each 15 minutes	T1017	3,509	91.31%	$3,649,652	$1,040
Skills training and development, per 15 minutes	H2014	3,344	87.02%	$4,887,318	$1,462
Psychiatric diagnostic interview examination	90801	2,714	70.62%	$1,302,159	$480
Pharmacological management, including prescription, use, and review	90862	2,098	54.59%	$673,535	$321
Medication training and support, per 15 minutes	H0034	1,689	43.95%	$691,993	$410
Self-help/peer services, per 15 minutes	H0038	1,523	39.63%	$1,287,067	$845

Description of Code	Procedure Code	Count of Unique Persons	% of Persons Receiving this Service	Estimated Cost	Cost Per Child
Screening to determine participation in a specified program, project or treatment protocol	T1023	1,309	34.06%	$111,480	$85
Behavioral health screening to determine eligibility for admission to treatment program	H0002	1,041	27.09%	$146,395	$141

Data Source: Department of State Health Services, Decision Support Unit.

Children's Service Package 2.3: Internalizing Disorders

The written description of children's service package 2.3 is:
This service package is targeted to children/adolescents with depressive or anxiety disorders and a moderate to high level of problem severity or functional impairment. The focus of intervention is on child/adolescent and family counseling using Cognitive Behavioral Therapy (CBT) for ages 9 & above and CBT or other therapy approaches for children ages 3 through 8.

The general goal of services at this level of care is to reduce or stabilize symptoms, decrease functional impairment and build resiliency in the child/adolescent and family.

Persons interviewed said children's 2.3 package was for more severe internalizing disorders.

The reported cost of children's service package 2.3 in 2011 was $3,451,353.

The table below shows children's service package 2.3 services that 150 children or more received. Approximately 908 children received services in service package 2.3 in 2011 at an average cost of $3,801 per child. The $3,801 service package 2.3 cost per child was the highest cost per child of the children's service packages.

The services in service package 2.3 are intended to be for children with more severe internalizing disorders. Comparing 2.3 services to those in service package 1.2, services for children with less severe internalizing disorders showed a very different service package. In fact, the service package for children with severe internalizing disorders was more similar to the service package for children with severe externalizing disorders.

Both service packages for children with more severe disorders had high rates of targeted case management, psychiatric interview examinations, and similar rates of screening and medication related services. Both packages also used skill training and self help, peer support services. The two major differences in the packages for children with more severe disorders were that approximately 60% of the children with severe internalizing disorder had psychotherapy and 45% had skills training whereas children with severe externalizing disorders received a negligible amount of psychotherapy and approximately 87% received skills training.

Table AVII.11: Most Frequently Used Services in Children's RDM package 2.3, 2011.

Description of Code	Procedure Code	Count of Unique Persons	% of Persons Receiving this Service	Estimated Cost	Cost Per Child
Targeted case management, each 15 minutes	T1017	822	90.53%	$836,871.6	$1,018
Psychiatric diagnostic interview examination	90801	648	71.37%	$308,570.2	$476
Pharmacological management, including prescription, use, and review	90862	570	62.78%	$175,082.0	$307
Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an office or outpatient facility, approximately 45 to 50 minutes face-to-face with the patient	90806	547	60.24%	$517,786.4	$947
Skills training and development, per 15 minutes	H2014	410	45.15%	$393,890.7	$961
Medication training and support, per 15 minutes	H0034	382	42.07%	$168,375.7	$441
Screening to determine participation in a specified program, project or treatment protocol	T1023	382	42.07%	$31,261.5	$82
Crisis intervention service, per 15 minutes	H2011	321	35.35%	$161,793.9	$504
Self-help/peer services, per 15 minutes	H0038	315	34.69%	$231,329.5	$734

Description of Code	Procedure Code	Count of Unique Persons	% of Persons Receiving this Service	Estimated Cost	Cost Per Child
Behavioral health screening to determine eligibility for admission to treatment program	H0002	304	33.48%	$45,098.5	$148

Data Source: Department of State Health Services, Decision Support Unit.

Children's Service Package 2.4: Major Disorders

The written description of children's service package 2.4 is:

> "This level of care is targeted to children/adolescents who are diagnosed with Bipolar Disorder, Schizophrenia, Major Depression with Psychosis, or other psychotic disorders and are not yet stable on medication. The general goal of services at this level of care is stabilizing the child/adolescent and providing information and support to the family."

Persons interviewed said children's 2.4 package was for really serious mental health problems.

The reported cost of children's service package 2.4 in 2011 was $756,347.

The table below shows children's service package 2.4 services that 25 children or more received. Approximately 201 children received services in service package 2.4 in 2011 at an average cost of $3,763 per child. The $3,763 service package 2.4 cost per child was the second highest cost per child of the children's service packages.

Children in this package comprise less six tenths of one percent of all children receiving services. The data below show that a high percentage received targeted case management and psychiatric examination services. Substantial percentages received medication related services, skills training, and self help peer support. A higher percentage of children in this service package received crisis intervention services than in any other service package.

Table AVII.12: Most Frequently Used Services in Children's RDM package 2.4, 2011.

Description of Code	Procedure Code	Count of Unique Persons	% of Persons Receiving this Service	Estimated Cost	Cost Per Child
Targeted case management, each 15 minutes	T1017	185	92.04%	$214,049	$1,157
Psychiatric diagnostic interview examination	90801	140	69.65%	$53,471	$382
Pharmacological management, including prescription, use, and review	90862	134	66.67%	$62,534	$467
Skills training and development, per 15 minutes	H2014	131	65.17%	$166,187	$1,269
Self-help/peer services, per 15 minutes	H0038	107	53.23%	$102,688	$960
Crisis intervention service, per 15 minutes	H2011	78	38.81%	$53,974	$692
Behavioral health screening to determine eligibility for admission to treatment program	H0002	71	35.32%	$10,517	$148
Medication training and support, per 15 minutes	H0034	65	32.34%	$15,301	$235
Screening to determine participation in a specified program, project or treatment protocol	T1023	65	32.34%	$6,594	$101
Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an office or outpatient facility, approximately 45 to 50 minutes face-to-face with the patient	90806	35	17.41%	$17,974	$514

Data Source: Department of State Health Services, Decision Support Unit.

Children's Service Package 4: Aftercare Services

The written description of children's service package 4 is:

This service package is targeted to children/adolescents who have stabilized in terms of problem severity and functioning and require only medication and medication management to maintain their stability…The general goal of this level of service is maintain treatment gains made by the child/adolescent and family and to provide them with medication monitoring services until the family can be adequately linked to natural and community resources.

Persons interviewed said children's 4 package was for families that really didn't want services. If the family is not Medicaid eligible and you do not have the resources to put them on another service package then you put them on service package 4. In its emphasis on medication and case management, service package 4 for children is like service package 1 for adults.

The reported cost of children's service package 4 in 2011 was $3,253,892.

The table below shows children's service package 4 services that 500 children or more received. Approximately 3,753 children received services in service package 4 in 2011 at an average cost of $867 per child.

The $867 was the lowest cost per person of any children's service package. A look at the services shows that it is primarily a case management and medication service package, similar to adult service package 1. The most frequently used services were various screening services, case management, and medication related codes.

Table AVII.13: Most Frequently Used Services in Children's RDM package 4, 2011.

Description of Code	Procedure Code	Count of Unique Persons	% of Persons Receiving this Service	Estimated Cost	Cost Per Child
Targeted case management, each 15 minutes	T1017	3,082	82.12%	$971,929	$315
Pharmacological management, including prescription, use, and review	90862	2,836	75.57%	$946,300	$334

Description of Code	Procedure Code	Count of Unique Persons	% of Persons Receiving this Service	Estimated Cost	Cost Per Child
Screening to determine the appropriateness of consideration of an individual for participation in a specified program, project or treatment protocol, per encounter	T1023	1,648	43.91%	$76,798	$47
Psychiatric diagnostic interview examination	90801	1,261	33.60%	$309,814	$246
Medication training and support, per 15 minutes	H0034	664	17.69%	$255,341	$385
Office or other outpatient visit. Physicians typically spend 25 minutes face-to-face with the patient and/or family	99214	570	15.19%	$82,382	$145
Brief office visit for the sole purpose of monitoring or changing drug prescriptions used in the treatment of mental psychoneurotic and personality disorders	M0064	539	14.36%	$93,767	$174

Data Source: Department of State Health Services, Decision Support Unit.

Appendix VIII: DSHS Allocation of Funds Descriptions

This appendix contains the detailed processes for calculating the funding allocations described in *Section IV.B. Overview of the Allocation of Funds from DSHS*. The allocations are first described for the mental health funds and then for the substance abuse funds as identified in the list below.

Mental Health Funding Allocations

- Allocations of Community Mental Health Service Funds
  - GR Allocations – Adult
  - GR Allocations – Child
  - MHBG Allocations – Adult
  - MHBG Allocations – Child
- NorthSTAR Allocation
  - GR Allocation
  - MHBG Allocation
- Crisis Services Allocation
- Equity Distribution
- Community Hospitals Allocation

Substance Abuse Allocations

- Regional Target Formula

Allocations of Community Mental Health Service Funds

GR Allocations – Adult

1) Calculate the Current Year GR Reduction
   a. Compare current year GR vs. Prior Year GR
   b. If the Current Year GR is greater than the Prior Year GR, the Current Year GR Reduction would be $0
   c. If the Current Year GR is less than the Prior Year GR, the Current Year GR Reduction would be calculated as:
      i. Percent change in GR (Current Year – Prior Year) * Prior Year Adjusted GR
2) Calculate Total GR Reduction
   a. Calculate the Sum of the Current Year GR Reduction (calculated in Step 1) plus the Current Year Medicaid Reduction plus the Hospitality House plus the Current Year GR Adjustment
3) Calculate Current Year GR
   a. Calculate the Sum of the Current Year Total GR Reduction (calculated in Step 2) plus the Prior Year GR General & Authority Admin plus the Prior Year GR plus the Prior Year Medicaid Add Back

4) Calculate Current Year GR General & Authority Admin
    a. Calculate the Sum of the Current Year GR (calculated in Step 3) plus the Prior Year Community Hospitals Outpatient plus the Prior Year New Generation Medications plus the Prior Year OBRA plus the Prior Year Hospitality House plus the Prior Year Hospitality House MHBG plus the Prior Year Community Center Infrastructure plus the CFDA MHBG plus the Hospitality House MHBG
    b. Multiply the amount calculated above by ten percent
5) Calculate Current Year Adjusted GR
    a. Current Year GR (calculated in Step 3) less the Current Year General & Authority Admin (calculated in Step 4)

Following the computation of the GR General & Authority Admin and the Adjusted GR amounts, the Total GR Base would be calculated by adding these two amounts plus the prior year amounts for Community Hospital Outpatient, New Generation Medications, OBRA, Hospitality House, and Community Center Infrastructure. The Current Year GR General & Admin Authority and the Adjusted GR amounts would, along with the Prior Year Community Hospital Outpatient, the Prior Year New Generation Medications, and the Prior Year Community Infrastructure be included as part of the Total Base Allocation for each LMHA.

GR Allocations – Child

1) Calculate the Current Year GR Reduction
    a. Compare current year GR vs. Prior Year GR
    b. If the Current Year GR is greater than the Prior Year GR, the Current Year GR Reduction would be $0
    c. If the Current Year GR is less than the Prior Year GR, the Current Year GR Reduction would be calculated as:
        i. Percent change in GR (Current Year – Prior Year) * Prior Year Adjusted GR
2) Calculate Total GR Reduction – *The Child Allocation does not include any amounts for the Hospitality House.*
    a. Calculate the Sum of the Current Year GR Reduction (calculated in Step 1) plus the Current Year Medicaid Reduction plus the Current Year GR Adjustment
3) Calculate Current Year GR – *The Child Allocation includes an additional amount for Waiting List GR*
    a. Calculate the Sum of the Current Year Total GR Reduction (calculated in Step 2) plus the Prior Year GR General & Authority Admin plus the Prior Year GR plus the Wait List GR plus the Prior Year Medicaid Add Back
4) Calculate Current Year GR General & Authority Admin
    a. Calculate the Sum of the Current Year GR (calculated in Step 3) plus the Prior Year New Generation Medications plus the CFDA MHBG plus the MHBG

General & Authority Admin plus the TANF to Title XX Block Grant plus the Base Title XX Block Grant
   b. Multiply the amount calculated above by ten percent
5) Calculate Current Year Adjusted GR
   a. Current Year GR (calculated in Step 3) less the Current Year General & Authority Admin (calculated in Step 4)

As was the case with the Adult Mental Health Funds allocation, a Total GR Base is calculated based on the sum of the GR General & Authority Admin, the Adjusted GR, and the Prior Year New Generation Medications. Each of these amounts becomes part of the Total Base Allocation for each LMHA along with those amounts included from the Adult Mental Health Funds GR.

MHBG Allocations – Adult

The allocation first identifies the General & Authority Admin amount and then the MHBG amount as described in the following steps.

1) Calculate the Current Year MHBG General & Authority Admin
   a. Calculate the Sum of the Prior Year MHBG General & Authority Admin plus the Prior Year MHBG plus the Prior Year Hospitality House Admin MHBG
   b. Multiple the result of the calculation completed in Step ‘a” times five percent
2) Calculate the Current Year MHBG
   a. Calculate the Sum of the Prior Year MHBG General & Authority Admin plus the Prior Year MHBG
   b. Subtract the Current Year MHBG General & Authority Admin (calculated in Step 1) from the amount calculated in Step “a”

The Total Federal Funding is then calculated by adding the Prior Year Hospitality House Admin MHBG amount to the Current Year MHBG General & Authority Admin and the Current Year MHBG amounts calculated in Steps 1 and 2 above. The sum of the Adult General Fund and MHBG allocations results in the Total Adult Base Funding for each LMHA.

MHBG Allocations - Child

1) Calculate the Current Year MHBG General & Authority Admin
   a. Calculate the Sum of the Prior Year MHBG General & Authority Admin plus the Prior Year MHBG plus the Prior Year Hospitality House Admin MHBG
   b. Multiply the result of the calculation completed in Step ‘a” time five percent
2) Calculate the Current Year MHBG
   a. Calculate the Sum of the Prior Year MHBG General & Authority Admin plus the Prior Year MHBG
   b. Subtract the Current Year MHBG General & Authority Admin (calculated in Step 1) from the amount calculated in Step “a”

The Total Federal Funding is then calculated by adding the Prior Year TANF to Title XX Block Grant and the Prior Year Base Title XX Block Grant amounts to the Current Year MHBG General & Authority Admin and the Current Year MHBG amounts calculated in Steps 1 and 2 above. The sum of the Child GR and MHBG allocations results in the Total Child Base Funding for each LMHA.

Allocation to the NorthSTAR Program

GR Allocation

1) Calculate Current Year GR Reduction
    a. Compare current year GR vs. Prior Year GR
    b. If the Current Year GR is greater than the Prior Year GR, the Current Year GR Reduction would be $0
    c. If the Current Year GR is less than the Prior Year GR, the Current Year GR Reduction would be calculated as:
        i. Percent change in GR (Current Year – Prior Year) * Prior Year Adjusted GR
2) Calculate Current Year GR
    a. Add the Current Year GR Reduction (calculated in Step 1) to the Prior Year GR

The Total Base GR for the NorthSTAR program would then be calculated as the sum of the Current Year GR and the amount for New Generation Medications, which is tied to the prior year amount.

MHBG Allocation

1) Calculate the Current Year MHBG Reduction
    a. Compare current year MHBG vs. Prior Year MHBG
    b. Subtract the Prior Year MHBG from the Current Year MHBG
    c. Divide the Variance calculated in Step “b” by the Prior Year MHBG
    d. Multiply the Prior Year MHBG times the Percent Change calculated in Step “c”
2) Calculate the Current Year MHBG
    a. Add the Current Year MHBG Reduction to the Prior Year MHBG

The TANF to Title XX Block Grant and the Base Title XX Block Grant are based on the prior year amounts for these items. The Total Federal Base for NorthSTAR is determined based on the sum of the Current Year amounts for the TANF to Title XX Block Grant, the Base Title XX Block Grant, the MHBG Reduction, and the MHBG.

As the following description illustrates, there are some variations to the process specific to the crisis funding.

Crisis Services Allocation

1) Calculate Current Year GR Reduction
    a. Compare current year GR vs. Prior Year GR
    b. If the Current Year GR is greater than the Prior Year GR, the Current Year GR Reduction would be $0
    c. If the Current Year GR is less than the Prior Year GR, the Current Year GR Reduction would be calculated as:
        i. Percent change in GR (Current Year – Prior Year) * Prior Year Adjusted GR
2) Calculate Total Current Year GR Reduction
    a. Add the Current Year GR Adjustment to the Current Year GR Reduction (calculated in Step 1)
3) Calculate Current Year GR
    a. Add the Total Current Year GR Reduction (calculated in Step 2) plus the Prior Year Crisis Redesign Services plus the Prior Year GR General & Authority Admin – Crisis plus the Prior Year New Crisis Redesign Transitional plus the Prior Year New Crisis Redesign Ongoing plus the Prior Year New Crisis Redesign Deputy
4) Calculate Current Year GR General & Authority Admin
    a. Multiply the Current Year GR (calculated in Step 3) by ten percent (10%)
5) Calculate Current Year Crisis Redesign Services
    a. This amount is equal to the Prior Year New Crisis Redesign Services
6) Calculate Current Year New Crisis Redesign – Transitional
    a. Calculate the product of the Prior Year New Crisis – Transitional divided by the Total New Crisis Funds multiplied by the General & Authority Admin reduced from the New Crisis funds
        i. Calculate the General & Authority Admin reduced from the New Crisis funds by subtracting the Prior Year Total General & Authority Admin – Crisis from the Current Year GR General & Authority Admin (calculated in Step 4)
    b. Subtract the amount calculated in Step “a” from the Prior Year New Crisis – Transitional
7) Calculate Current Year New Crisis Redesign – Ongoing
    a. Calculate the product of the Prior Year New Crisis – Ongoing divided by the Total New Crisis Funds multiplied by the General & Authority Admin reduced from the New Crisis funds
        i. Calculate the General & Authority Admin reduced from the New Crisis funds by subtracting the Prior Year Total General & Authority Admin – Crisis from the Current Year GR General & Authority Admin (calculated in Step 4)

   b. Subtract the amount calculated in Step "a" from the Prior Year New Crisis – Ongoing
8) Calculate Current Year New Crisis Redesign – Deputy
   a. Calculate the product of the Prior Year New Crisis – Deputy divided by the Total New Crisis Funds multiplied by the General & Authority Admin reduced from the New Crisis funds
      i. Calculate the General & Authority Admin reduced from the New Crisis funds by subtracting the Prior Year Total General & Authority Admin – Crisis from the Current Year GR General & Authority Admin (calculated in Step 4)
   b. Subtract the amount calculated in Step "a" from the Prior Year New Crisis – Deputy

Equity Distribution

1. Calculate the Equity Rate
   a. Total Base Allocation divided by the Total Service Area Population
2. Calculate the Level of Need
   a. Multiply the Equity Rate (calculated in Step 1) by the LMHA population
   b. Subtract the Based Allocation funding from the amount calculated in Step "a"
3. Calculate the Equity Funding Proportion
   a. The LMHA's level of need divided by the Total Need among all LMHAs

Determination of Local Match Requirement for LMHAs

The calculation of the Local Match Requirement for the LMHAs and the NorthSTAR program is described in the following steps.

1) Calculate the Population Distribution Percentage for each County within a LMHA
   a. Divide the County populations by the total population for the LMHA
2) Calculate the Weighted Per Capita Income for each County within a LMHA
   a. Multiply the Population Distribution Percentage (calculated in Step 1) for each County by the County's Per Capita Income
3) Calculate the Required Local Match Percentage
   a. Sum the Weighted Per Capita Income amounts for each County within the LMHA
   b. Divide the Total Weighted Per Capita Income for the LMHA by the State Per Capita Income

Community Hospital Allocation

1) Calculate Current Year GR Reduction
   a. Compare current year GR vs. Prior Year GR
   b. If the Current Year GR is greater than the Prior Year GR, the Current Year GR Reduction would be $0

   c. If the Current Year GR is less than the Prior Year GR, the Current Year GR Reduction would be calculated as:
      i. Percent change in GR (Current Year – Prior Year) * Prior Year Adjusted GR
2) Calculate Total Current Year GR Reduction
   a. Add the Current Year GR Adjustment to the Current Year GR Reduction (calculated in Step 1)
3) Calculate Current Year GR
   a. Add the Total Current Year GR Reduction (calculated in Step 2) plus the Prior Year Community Hospitals Inpatient plus the Prior Year Community Hospitals Exceptional Item
4) Calculate Current Year Community Hospital Base Revenue
   a. This amount is set equal to the Current Year GR (calculated in Step 3)
5) Calculate Current Year Total Other / Equity Funding
   a. This amount is set equal to the Current Year Community Hospitals Exceptional Item
6) Calculate Current Year Total Mental Health Funding for Community Hospitals Inpatient
   a. Add the Current Year Community Hospital Base Revenue (calculated in Step 4) plus the Current Year Total Other / Equity Funding

Substance Abuse Contract Allocations

Regional Target Formula
The calculation is completed as described below.

1) Calculate each region's population as a percent of the total statewide population
2) Calculate each region's indigent population as a percent of the total statewide indigent population
   a. The data for the indigent population is based on number of persons in poverty as identified in the US Census Bureau's Small Area Income and Poverty Estimates, with poverty defined income below 100% Federal Poverty Level (FPL).
3) Calculate each region's need for services as a percent of the total statewide need for services
   a. The data for the need for services is based on the National Survey on Drug Use and Health for Texas from SAMHSA, with people in need of treatment defined as those with a substance abuse problem.
4) Apply the weights for each of the three categories to the regional percentages calculated in Steps 1 through 3.
   a. Population is weighted at 75%
   b. Indigence is weighted at 20%
   c. Need for Services is weighted at 5%