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**A Feasibility and Cost Effectiveness  
Analysis: Expanding Managed Care  
for Aged, Blind, and Disabled  
Populations to Rural and Urban  
Counties Without Managed Care**

**As Required By  
S.B 10, 80<sup>th</sup> Legislature,  
Regular Session, 2007**

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Health and Human Services Commission  
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## **Executive Summary**

The Texas Health and Human Services Commission (HHSC) submits this report pursuant to the requirement in S.B. 10, 80<sup>th</sup> Legislature, Regular Session, 2007 to conduct an analysis regarding the feasibility and cost effectiveness of developing an integrated Medicaid managed care model designed to improve the management of care to the aged, blind, and disabled (ABD) Medicaid population in rural areas of the state and in those urban areas that currently do not have a capitated managed care option. HHSC contracted with Bailit Health Purchasing, LLC (“Bailit”) to complete this analysis and draft this report.

Not only is the ABD population comparatively much more costly to serve than the population of women and children who represent the majority of the Medicaid population, it is also comparatively much more impaired and, therefore, in greater need of the types of care management and care coordination that managed care is intended to provide. In fact, some observers feel Medicaid managed care makes more sense for states to implement for the ABD population than for any other population. There are, however, several long-standing barriers to implementing managed care for this population. A primary barrier is that most of the aged population and many persons with disabilities are dually eligible for Medicare and Medicaid. Additionally, many advocates for persons with disabilities have traditionally opposed managed care.

Nationally, Texas is regarded as a leader in taking on the challenge of serving the aged, blind and disabled population in managed care in order to provide a coordinated system of care to improve health outcomes. The STAR+PLUS program is often held up as a national model for providing care to the ABD population through managed care. It is one of the few programs across the country that integrates acute and long-term care.

For our analysis of the feasibility and cost effectiveness of expanding managed care into rural areas and urban areas without managed care, we considered three specific managed care design models – STAR+PLUS, Enhanced PCCM, and Enhanced PCCM with Medical Home – and whether they can practically and cost effectively be implemented in potential expansion areas. Our analysis is based on HHSC’s own experience, stakeholder interviews and experience in other states. We considered a variety of factors in reviewing the cost effectiveness and feasibility of each model:

- Care coordination, management and integration.
- Stakeholder support (including providers, consumers, and managed care plans).
- Access to services.
- Difficulty of implementation.
- Potential for cost effectiveness.

## **Care Coordination**

A key function of capitated managed care plans often is assisting beneficiaries with care coordination. Providing assistance with navigating the health and long-term services and supports systems should help the ABD population to receive the right care and supports at the right time. Not only does this improve the quality of care for the beneficiary, but it also reduces costs to both Medicare and Medicaid by averting high-cost inpatient hospital and/or nursing facility care. Each of the three models considered provides the opportunity to closely manage and integrate service delivery, and at least in theory, to improve it. Of the three models, we believe STAR+PLUS has the most potential to closely manage and integrate care.

## **Access to Services/Stakeholder Support**

A large concern of any delivery system change is how a new model will impact access to services. Because physician participation in the Texas Medicaid program is low, access to services is a main concern across the state. Likewise, there is concern about access to long-term care services in rural areas. While these concerns exist today, there is fear that expanded use of managed care will exacerbate these provider shortages. Many long-term care providers are small and unfamiliar with managed care. They fear additional administrative burdens that managed care may bring. Despite STAR+PLUS' positive impact on the experience of care for beneficiaries, some Texas medical providers and consumer advocates have been generally opposed to capitated managed care. It is important to note, however, that HHSC reports that it did not see a reduction in provider participation as a result of the 2007 STAR+PLUS expansion.

Managed care plans have expressed eagerness to expand STAR+PLUS into additional geographic regions such as the Rio Grande Valley. It is unclear whether they would have the same enthusiasm for expanding into the most sparsely populated areas of the state. To do so, the state might need to link contracts in these areas to those in rural areas to get coverage in all remaining non-STAR+PLUS areas.

The Enhanced PCCM and Enhanced PCCM with Medical Home models may be more attractive to providers and consumers than an expansion of STAR+PLUS. Both groups are more accepting of models that retain fee-for-service features, but provide more options for care coordination to beneficiaries. The Medical Home model is being discussed in Texas and elsewhere as a means to improve care for consumers while containing cost growth. A focus group with Texas primary care physicians revealed them to possess a positive attitude towards the Medical Home model and HHSC's potential adoption of the approach.

## **Difficulty of Implementation**

Because HHSC already supports the STAR+PLUS model, expanding it to additional regions could be accommodated within existing operations, although some minor staffing additions may be required. To expand into three Rio Grande Valley Counties, a

legislative change is necessary. This model could be responsibly and effectively implemented within 18 months from the start of planning efforts.

Likewise, HHSC already supports a PCCM model. Enhancing the model to add more care management and care coordination support would require some additional administrative effort by the agency, but not a great deal given current experience with disease management and care management vendors. Texas has implemented Integrated Care Management (ICM), a fully integrated acute and long-term care services, PCCM-like model in the Dallas and Fort Worth Service Areas. Nationally, no comprehensive enhanced PCCM models that have integrated long-term services and supports have been fully implemented, although North Carolina is beginning to do so with a Medical Home model. There would likely be fewer challenges implementing the PCCM model in rural areas than there would be to implement STAR+PLUS in those areas. This model could be responsibly and effectively implemented within 12 to 18 months from the start of planning efforts.

Development of an Enhanced PCCM with Medical Home model would be much more labor intensive for HHSC than the other two alternatives, and would require significant outreach and work with primary care practices, as well as the development of new systems to share data with primary care networks to help them manage their patient populations, and to help them develop capacity to integrate medical care and long-term care services and supports. Implementation could begin within 18 months within a selected region, but would need additional time to evolve to attain the level of sophistication that the North Carolina networks have attained. Additional regions could be introduced in the following months. This strategy would require on-going commitment of time and resources from HHSC and providers.

### **Cost Effectiveness**

There is some evidence that STAR+PLUS is cost effective. The program has shown reductions of over 22 percent in hospital admissions. The program has also seen a reduction in ER visits for its enrollees. There is no basis for determining whether STAR+PLUS expansion in more rural areas would achieve the same results. In addition to potential savings from the model, the state also utilizes a 1.75 percent premium tax on gross premiums for its health maintenance organizations (HMOs). This premium tax results in significant net dollars to the state. Expanding STAR+PLUS will further expand the state's net revenue from this tax.

In contrast to STAR+PLUS, there is no evidence one way or another from HHSC's experience to date with the PCCM or ICM programs as to their cost effectiveness in urban or rural settings. This is not to say that an Enhanced PCCM with a managed long-term services and supports component could not be cost effective; we simply lack any evidence supporting cost effectiveness. Actuarial projections and experience in other states suggests the ability for PCCM programs are able to generate savings in the 2-4% range on medical care. These figures cannot be differentiated for urban vs. rural programs. It is unknown whether savings could be generated in long-term services and supports.

Because HHSC has not implemented an Enhanced PCCM with Medical Home model, there is no experience to draw upon to estimate cost savings. Among other states, as cited earlier, North Carolina is the one relevant example, but it only recently expanded to the ABD population with eight pilots two years ago. Based on that pilot experience, Mercer has projected a minimum of \$29 million in reduced state spending in fiscal year 2009 as the model is rolled out statewide. This equates to a 1.8 percent reduction in the Medicaid ABD budget, excluding nursing facility services. There is reason to believe that this model could be more cost effective than the Enhanced PCCM, once fully implemented. This is because organized networks of self-governing primary care physicians, organized as patient-centered Medical Homes and supported by care managers integrated into their practices, are more likely to have the resources and motivation to reduce hospitalizations, ER visits, and nursing home admissions than primary care providers operating in a more traditional PCCM program. This view is well reasoned and supported in part by research evidence, but still speculative. However, while North Carolina's model has been implemented statewide for the TANF population and will also be so for the ABD population, small independent practices that are present in many rural communities may find this model more challenging and find it harder to achieve savings than would larger practices.

## **Recommendations**

Considering the feasibility and cost effectiveness analyses, Bailit makes the following recommendations for the state's consideration.

### *1. Do Something*

Texas provides care to its ABD population through a number of different models across the continuum. While each program model has its strengths and weaknesses, Texas has an ability to improve quality and cost effectiveness in any of the models it offers today through tighter management of those models. For example, in STAR+PLUS, HHSC may be able to work more closely to enhance the program's value by facilitating discussions between participating HMOs on best practice models. In the PCCM plan, the state could increase its oversight and monitoring of participating primary care providers and how effectively they provide referral and case management services to PCCM beneficiaries. In part, the success of any of these models going forward in containing costs will depend on the state's ability to adequately resource its management of each model, manage its vendors, measure performance, and provide incentives for success.

Given the size of the state and the vast differences in counties across the state, we do not believe there is, or needs to be, a "one-size-fits-all" solution to the delivery of care for the ABD population in Texas. In fact, the state lacks sufficient information to credibly judge which strategy works best in any region. We recommend that the state consider the following actions:

- Expansion of STAR+PLUS to selected service areas where the potential for success appears good.

- Enhancement of the PCCM Model to allow for tighter management and more widespread care coordination.
- Piloting and evaluating the proposed Enhanced PCCM – Medical Home model with one to three interested regions.
- Retain the ICM model in Dallas and Tarrant Service Areas until its effectiveness can be evaluated, unless HHSC receives waiver approval that would allow inpatient care to be included in STAR+PLUS without penalty to the hospitals. If such a waiver is obtained, we recommend converting the ICM program to the STAR+PLUS model.

## *2. Develop and Implement Programs with Significant Community Participation and Input*

Time and again, within our interviews with stakeholders in Texas and our interviews with state officials in other states, we heard the importance of working within particular regions of the state to develop the design model that will work best for that community. In expanding or enhancing current programs, it is essential to work within regions to ensure that the model designs will, in fact, improve the system. Therefore, we recommend that, for each of the improvements described above, HHSC make a concerted effort to involve community participation and input from the start.

## *3. Understand the Care Coordination Needs of the Population*

Care coordination underlies each recommended model of care. Prior to implementing a care management initiative widely across any type of managed care model, we recommend HHSC conduct a detailed analysis of the care needs of the ABD population to determine the complexity of care being received and level of care coordination required. Based on analysis of potential levels of care needed for clients, HHSC should make a determination, based on experience in other areas of the state – including STAR+PLUS and ICM service areas – as to what the appropriate ratio of care coordinators are within a population based on the number of interactions per month with different levels of clients. Care coordination is the true hallmark of any managed care model, and for any of the suggested models to work optimally the client must receive sufficient levels of care management.

## *4. Evaluate, Learn and Act*

Texas operates a broad array of program models for serving its ABD population – too many, perhaps. The range of programs, growing steadily over time, taxes HHSC. We recommend against pruning the program offerings quite yet, since the diversity of approaches gives HHSC a unique opportunity to study its programs to understand what works best relative to access; quality and cost metrics; where it works best; and why. Like most state Medicaid agencies, HHSC has not had the luxury to focus on program evaluation while it faces significant program management challenges day to day. A relatively minor investment in formal evaluation activity, however, will permit the state to determine where it is making its best investment in models to serve the ABD

population. Armed with that knowledge, it will then be possible to determine whether certain models should be pursued in lieu of others.

## **Introduction**

Bailit gathered information from a variety of sources, including:

- Interviews with stakeholders within Texas, including HHSC and Department of Aging and Disability Services (DADS) staff, health plans, providers, consumer advocates, and other stakeholders.
- Previously published reports and evaluations of Texas Medicaid, including previous evaluations of the cost effectiveness of Medicaid managed care in Texas.
- National and state reports on the cost effectiveness of Medicaid managed care.
- Interviews with state officials in states with comparable populations and programs .
- HHSC data regarding historical eligibility, expenditures, and utilization for the ABD population, by county and program type.

Utilizing this information, Bailit conducted an analysis of the feasibility and cost effectiveness of a continuum of programs – ranging from fee-for-service to capitated managed care – for Texas’ ABD Medicaid population in rural areas of the state and in those urban areas that currently do not have a capitated managed care option.

## **Background Information: Managed Care for the ABD Population**

Like all other states across the country, Texas continuously grapples with how to contain cost growth within its Medicaid program. Over the past decade, almost every state<sup>1</sup> has moved at least a portion of its Medicaid population into some form of managed care program. In 2006, approximately 40 percent of Medicaid beneficiaries nationally were enrolled in a form of managed care.<sup>2</sup> States have been slower to adopt mandatory managed care for the ABD populations. Texas’ STAR+PLUS model is one of few Medicaid program models that provides capitated coverage for both acute and long-term care needs of a Medicaid beneficiary.

Coverage of the ABD populations through managed care may seem like a logical step for a Medicaid program that is looking to improve quality, contain costs, or both.

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<sup>1</sup> The three states without managed care are New Hampshire, Wyoming and Alaska. See “Texas Medicaid in Perspective”, 6-1. These states have shied away from managed care because of their overwhelmingly rural make-up.

<sup>2</sup> Reinke, Tom. “Insurers Rush to Fill States’ Medicaid Needs”, *Managed Care Magazine*, April 2008.



- In 2005, ABD recipients made up only 24 percent of Medicaid enrollment nationally, but their expenditures were 70 percent of the program's spending.<sup>3</sup>
- In fiscal year 2006, the ABD population made up 20 percent of the population, and 60 percent of Texas Medicaid spending.<sup>4</sup>

In addition, the per capita Medicaid costs for serving beneficiaries with disabilities have been growing faster in most states than for women and children, and for the elderly. In 2007, the estimated annual cost to Medicaid for covering elders and persons with disabilities topped \$14,000, while spending on children and adults was significantly lower, reflecting the differing health status of the populations.<sup>5</sup>

Not only is the ABD population comparatively much more costly to serve than the population of women and children, who represent the majority of the Medicaid population, it is also comparatively much more impaired and, therefore, in greater need of the types of care management and care coordination that managed care is intended to provide. In fact, some observers feel that it makes more sense for states to implement managed care for the ABD population than for the comparatively healthy population of women and children.

There are, however, many long-standing barriers that make it difficult nationally for a Medicaid program to successfully cover the aged, blind and disabled population through managed care.<sup>6</sup>

- The majority of the ABD population is “dually eligible” for both Medicare and Medicaid.<sup>7</sup> That means that Medicaid serves as the secondary payer to Medicare, complicating the coordination and care management, which is key to the potential improved quality through managed care. Being the secondary payer also reduces any return on investment to the Medicaid program, because much of the savings in managed care has been found in reduction of inpatient hospital days and use of the emergency room (ER). State Medicaid programs may bear the cost of care management introduced by a managed care program, but not accrue comparable benefit.
- It is technically difficult to develop accurate capitation payment rates for the heterogeneous ABD population with widely varying needs. Given its long experience, Texas has developed the capacity to generate capitation rates by utilizing encounter data.
- There are far fewer standardized quality measures for performance monitoring and management for the ABD population than for other populations, and less comparable groups for comparison.

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<sup>3</sup> “Headed for a Crunch: An Update on Medicaid Spending, Coverage and Policy Heading into an Economic Downturn”, Kaiser Commission on Medicaid and the Uninsured, September 2008.

<sup>4</sup> Health and Human Services System Strategic Plan 2009-12, Volume 1, Figure 5.1, July 2008.

<sup>5</sup> Actuarial Report on the Financial Outlook for Medicaid, CMS, October 2008.

<sup>6</sup> “Medicaid Managed Care: Serving the Disabled Challenges State Programs”, U.S. General Accounting Office, July 1996. See [www.gao.gov/archive/1996/he96136.pdf](http://www.gao.gov/archive/1996/he96136.pdf).

<sup>7</sup> In Texas, 55% of the ABD population is dually eligible for Medicare and Medicaid. Source: HHSC staff.

- For ABD beneficiaries who only are covered by Medicaid, there is often concern among beneficiaries, advocates, and providers that managed care could result in an inappropriate reduction in services for this vulnerable population.
- ABD beneficiaries make heavy use of community-based long-term services and supports. The providers of these services are often quite small and lack experience with managed care.
- Many Medicaid managed care plans lack experience with managing community-based long-term services and supports, and some observers believe plans will be tested to demonstrate effectiveness serving the ABD populations.<sup>8</sup>
- Many providers are resistant to managed care because of the greater service coverage restrictions and administrative barriers and, sometimes, lower payments introduced relative to traditional Medicaid. For these reasons they often opt to not participate. This can be particularly problematic in rural regions where there are few providers.
- Finally, in Texas, HHSC has been impeded by the potential loss of federal “Upper Payment Limit” (UPL) payments to public hospitals, since Medicaid laws prohibit hospitals from receiving UPL payments if they are paid by a capitated HMO. Those hospitals, therefore, have not been amenable to receiving their payments through capitation rates. However, the state’s pending Medicaid Reform waiver would allow hospitals to retain UPL payments even with a move to managed care.<sup>9</sup>

Despite these challenges, Texas and a slowly increasing numbers of other states have taken on the challenge of implementing Medicaid managed care for ABD Medicaid beneficiaries. Some states feel that they have no option but to find a way to make managed care work for the ABD population. While the challenges exist, HHSC and other state Medicaid agencies have shown that they can surmount them, although most capitated programs have been implemented in urban regions of the state. Several other states, as will be discussed later in this report, are pursuing non-capitated strategies for managing the ABD population.

### **Medicaid Managed Care Program Models**

There are various and differing options that a state may consider in implementing a managed care plan to improve care for a portion of its members. This report considers five models along a continuum, including:

- Fee-for-Service
- PCCM
- Administrative Service Only
- Medical Home
- Capitated Managed Care

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<sup>8</sup> Hurley R., McCue M., Dyer MB and Bailit M. “Understanding the Influence of Publicly Traded Health Plans on Medicaid Managed Care”, Center for Health Care Strategies, Lawrenceville, NJ, July 2006.

<sup>9</sup> If HHSC is successful in getting the Medicaid Reform waiver approved, HHSC plans to include inpatient hospital spending as part of the capitation.

### *Fee-for-Service (FFS)*

State Medicaid programs, including Texas', have traditionally operated an FFS model. When care is provided through an FFS delivery system, Medicaid patients may receive services covered by the program from any participating Medicaid provider. Some services may require prior approval by the state Medicaid agency, but the care of the patient is otherwise not "managed." Providers submit claims to the Medicaid agency or its designated vendor and receive payment based on a fee schedule for approved claims. The state, under this model, operates primarily as a claims payer. Almost every state Medicaid program operates an FFS model for at least a subset of its Medicaid population.

In recent years, state Medicaid programs, including Texas, have implemented disease management programs to supplement their FFS programs.<sup>10</sup> HHSC implemented an opt-out disease management services component to its PCCM and FFS programs in November 2004. The program covers approximately 42,000 individuals who are identified as being good candidates for disease management through a claims review. Disease management services are provided through a team of nurses. Many program participants receive educational mailings while a limited number receive community-based or telephonic care coordination. Disease managers also provide assistance to providers, and a resource team assists with discharge planning and transition issues.

In Texas, the FFS model serves nursing facility residents, aged beneficiaries who live outside of STAR+PLUS or Integrated Care Management (ICM) service areas, disabled adults who are dually eligible, and disabled children who opt out of managed care. HHSC is responsible for developing reimbursement methodologies for services and setting rates based on those policies. HHSC consults with a number of advisory groups when developing reimbursement methodologies. In addition, HHSC must receive approval from the Centers for Medicare and Medicaid Services (CMS) through the Texas Medicaid state plan for changes to its reimbursement methodologies.

### *PCCM*

In PSSM programs, state Medicaid agencies require program participants to select a primary care provider. The primary care provider is assigned responsibility for authorizing, managing, and coordinating care for the beneficiaries who select or are assigned to the practice. The primary care provider typically serves as a "gatekeeper," in that the primary care provider is required to submit referrals for patients on their panel to see specialists. Providers continue to be paid on an FFS basis for the care they are providing. The primary care provider typically receives a small additional payment per assigned patient per month on top of his or her compensation for providing routine care to the beneficiary.<sup>11</sup> The payment is intended to cover the primary care provider's additional responsibilities, primarily providing referrals. Under the current program

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<sup>10</sup> The HHSC disease management program was implemented in 2005 per HB 727 of Texas' 78<sup>th</sup> regular legislative session (2003). See [www.cga.ct.gov/2005/rpt/2005-R-0676.htm](http://www.cga.ct.gov/2005/rpt/2005-R-0676.htm) for additional information regarding the creation of the HHSC disease management program.

<sup>11</sup> Currently, PCPs received an additional \$5.00 case management fee per client per month. Source: HHSC Staff.

model, however, providers are not held accountable for this or any other additional responsibilities.

PCCM programs are typically managed either directly by state agency personnel, or with the assistance of one or more contractors. Depending on the depth of resources devoted to the program, the PCCM may be tightly managed with supplemental care management for high-need beneficiaries and/or active measurement and management of primary care provider performance, or the PCCM program will more closely resemble the traditional FFS model.

In recent years, the trend has been to bolster state PCCM programs through the addition of care management programs for beneficiaries with chronic care or complex needs. Through these programs, beneficiaries are provided with assistance in the coordination of their care and in understanding their role in self-managing their condition(s).

In Texas, the PCCM model was first introduced in selected regions of the state and since September 2005 has been available in all counties without STAR+PLUS or ICM for blind and disabled members. Aged members are excluded from participating in the PCCM program. The agency administers the program with the assistance of a contractor, Affiliated Computer Services (ACS), as an add-on to the state's Medicaid Management Information System (MMIS) contract.

As described above, the PCCM program has utilized an opt-out<sup>12</sup> disease management program for selected beneficiaries since November 2004. In addition, in May 2008, HHSC implemented a care management pilot for a small number of PCCM beneficiaries, known as "PCCM Plus", which provides care coordination, including discharge planning assistance.

#### *Administrative Services Only (ASO)*

Potentially similar to a PCCM model depending on its design, an ASO model retains the basic FFS delivery system, but brings in a vendor that typically manages the program without any direct financial risk for service expenditures. The vendor's responsibilities can include one or more of the following: provider network contracting; provider network performance monitoring and management; utilization management; case management; disease management; claim processing and payment; tracking and reporting on beneficiary access and satisfaction; and quality assurance.

#### *Medical Home Model*

The Medical Home model places primary emphasis on the patient's chosen medical home, to coordinate a client's care and provide care management services. The Medical Home model goes beyond the PCCM model design by asking primary care practices to transform how they deliver care, placing added responsibilities on the practices and

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<sup>12</sup> "Opt-out" refers to the fact that targeted beneficiaries are enrolled unless they affirmative elect to not participate.

offering them additional resources in order to meet these responsibilities. Practices are offered supplemental compensation in return for undertaking these transformational changes.

In Texas, there is no Medical Home model operated by HHSC at the present time. The agency is currently developing a Medical Home incentive grant program in response to S.B. 10 and the requirement to tailor programs to provide improved services to children on Medicaid with special health-care needs.

Several other states are currently developing Medicaid Medical Home initiatives. North Carolina is consistently held up as the hallmark of successful medical home models. North Carolina has a mature model for the children and family population. The state initiated a statewide expansion in 2008 to include the ABD program. For more details, see the description of North Carolina's program beginning on page 17.

### *Capitated Managed Care*

In capitated managed care models, the state contracts with a vendor to manage the care of clients through a PMPM "capitation payment." That monthly premium is made for a specific group of services for which the managed care plan is financially responsible for covering. In addition, the contractor (typically a state-licensed HMO) is responsible for other administrative functions (e.g., quality assurance, provider credentialing, case management, etc.). Often managed care plans are partially capitated, meaning that not all services provided to a member are provided through the managed care vendor.

Pursuant to federal Medicaid law, capitated payments to managed care plans must be "actuarially sound."<sup>13</sup> That is, rates paid to managed care plans must be reasonable and consider the true cost of providing care. Rates are based on historical claims experience in a base period trended forward over time and are adjusted for operating expenses, including administrative expenses and profit.

In Texas, HHSC operates five distinct capitated managed care programs. The two largest programs include:

- **STAR:** This was the first Texas Medicaid capitated managed care program. While it primarily enrolls women and children covered by Medicaid, STAR also provides managed care on a voluntary basis to disabled children and adults. STAR is now available in eight urban areas across the state.<sup>14</sup> STAR HMOs provide acute care services, while long-term services and supports and pharmacy services are provided outside of the HMO. STAR enrollees receive more services than enrollees in the FFS program, including unlimited prescriptions and an annual adult well exam. Individual health plans may provide additional services to attract beneficiaries to their plan.
- **STAR+PLUS:** This is the partially capitated managed care program specifically for the Medicaid ABD population. Initially implemented in Harris County in 1998, per

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<sup>13</sup> 42 CFR 438.6(c)

<sup>14</sup> See Attachment B for listing of areas across Texas where STAR is offered.

Texas Senate Concurrent Resolution 55, 74th Legislature, Regular Session, 1995, which directed HHSC to create a cost-neutral model for the integrated delivery of acute and long-term services and supports for the ABD population, it was expanded in 2007 to five additional service areas and 29 additional counties including or surrounding urban areas.<sup>15</sup> Dually eligible beneficiaries only receive long-term services and supports through STAR+PLUS. STAR+PLUS members with complex needs are assigned a service coordinator who provides case management services on behalf of the enrollee by developing an individual plan of care and authorizing services. As part of their current contracts with the state, each STAR+PLUS HMO is required to reduce inpatient utilization by 22 percent even though inpatient services are paid for on an FFS basis outside of the capitation rate. Other significant services are also carved out of the STAR+PLUS capitation rate, including pharmacy and nursing facility services after the first four months.

Additional, HHSC managed care programs include:

- **CHIP:** This is the HHSC managed care program for Children’s Health Insurance Program (CHIP) enrollees (a non-Medicaid program).
- **North STAR:** This is the state’s capitated managed behavioral health pilot, operating since 1999. It operates only in the Dallas Service Area and serves all beneficiaries in the service area, regardless of the how they obtain their other Medicaid services, and integrates Medicaid and non-Medicaid indigent behavioral health care into a single system of service delivery.
- **STAR Health:** This is the capitated managed care program for foster care children. The program began in April 2008 and operates statewide with one vendor.

### **Medicaid Managed Care in Rural Areas**

There is no single definition of “rural.” In fact, the United States Census Bureau and the Office of Management and Budget utilize two different definitions of rural at the federal level. Typically the definition is tied to the number of persons residing in a county and the physical size of the county. For instance, a county in which towns have fewer than 2,500 residents would be considered rural. Overall, 17.5 percent of the Texas population resides in rural areas. Rural areas have more seniors than other areas; 25 percent of Texas’ senior population resides in a rural area.<sup>16</sup>

Texans residing in rural areas sometimes have few providers residing in close vicinity to their homes. Reportedly 23 counties in Texas have no physician, and 22 of these counties rank in the bottom 12.6 percent in population. There are 51,649 Texans without a primary care physician in their home county.<sup>17</sup>

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<sup>15</sup> See Attachment B for listing of areas across Texas where STAR+PLUS is offered.

<sup>16</sup> See [www.texasahead.org/map/rural\\_areas.html](http://www.texasahead.org/map/rural_areas.html).

<sup>17</sup> See [www.esri.com/mapmuseum/mapbook\\_gallery/volume19/health2.html](http://www.esri.com/mapmuseum/mapbook_gallery/volume19/health2.html).

Texas' rural areas are served by 150 of the state's 392 hospitals. Of those hospitals, 74 are considered "critical access hospitals." Rural Texas is also home to 327 rural health clinics and 49 federally qualified health centers.<sup>18</sup>

Across the country, state Medicaid programs have utilized a number of different strategies and models to cover rural areas. While most states have opted to utilize PCCM programs in rural areas, some states have utilized fully capitated managed care programs statewide, including for the ABD population.<sup>19</sup>

The results of utilizing various managed care models in rural areas differ greatly across states. Because rural counties have low population density and are likely to have fewer providers, they are not as conducive to capitated managed care programs.<sup>20</sup> States have had to adopt specific rural strategies – including paying higher provider rates in rural areas and accepting partial capitation – in order to help capitated Medicaid managed care to succeed in rural counties.<sup>21</sup> In addition, a number of states have needed to take steps to encourage managed care contractors to serve rural areas, such as linking contracts for urban areas to coverage in surrounding rural areas.<sup>22</sup>

### **Urban Areas Without Managed Care**

STAR and STAR+PLUS programs have been implemented in a number of urban areas across the state; however, while both El Paso and Lubbock participate in STAR, neither area has implemented STAR+PLUS. Additionally, in the Rio Grande Valley ("the Valley"), which is a mix of urban and rural areas, no capitated managed care programs have been implemented.

In the Valley, the lack of capitated managed care in these areas is due to historical provider opposition. Historically, opposition to managed care has been based on a number of factors, including the perceived cultural challenges of providing managed care to a predominantly Hispanic population,<sup>23</sup> provider distrust of managed care, and Medicaid advocates' fear of service reductions. Currently state statute prohibits capitated managed care in Maverick, Cameron, and Hidalgo.<sup>24</sup> The legislation only bans utilizing HMOs, leaving the state able to consider using PCCM or another non-capitated model in that area.

Given the vastness of Texas, each urban area is markedly different from the next. Those urban areas that border Mexico face more complicated cultural issues in that their populations move back and forth between Mexico and Texas and the cultures are

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<sup>18</sup> See [www.raconline.org/states/texas.php](http://www.raconline.org/states/texas.php).

<sup>19</sup> States with fully capitated managed care programs statewide include Arizona and Tennessee.

<sup>20</sup> Silberman et al; *Tracking Medicaid Managed Care in Rural Communities: A Fifty-State Follow-Up; Health Affairs*; 2001.

<sup>21</sup> *Ibid.*

<sup>22</sup> *Ibid.*

<sup>23</sup> It is important to note that STAR+PLUS has been implemented in predominantly Hispanic areas such as the Lubbock, Nueces and Bexar Service Areas.

<sup>24</sup> Section 2.29 of HB 2292 of 2003 states that HHSC "may not provide medical assistance using a health maintenance organization in Cameron County, Hidalgo County or Maverick County."

intertwined. Like all of Texas, these urban areas face a primary care provider shortage as well as a shortage of certain specialists.

## **Research Activities**

### **Texas' Experience to Date**

Texas has considerable experience to date with managed care models and more experience with managed care models for the ABD population than almost any other state. Going back to 1993, Texas has utilized a variety of managed care approaches across the state to provide services to over three million Medicaid beneficiaries. Historically, Texas has provided capitated managed care in its urban areas and utilized a PCCM or FFS model for its rural population. Over time, the Legislature has required a greater portion of the population to be provided services through managed care in various forms in order to manage costs and improve care.

As part of the federally required external review of the quality of care delivered through HMOs to Medicaid beneficiaries, HHSC contracts with the Institute for Child Health Policy (ICHP), affiliated with the University of Florida, as its external quality review organization (EQRO). Because of the lag time in compiling an annual quality review, the most recent report reviews the quality of STAR and STAR+PLUS in fiscal year 2006.<sup>25</sup> Therefore, the review of STAR+PLUS is limited to the program in Harris County. The 2006 report includes findings from the CAHPS Health Plan Survey that was used to assess STAR+PLUS adult enrollees' satisfaction with their health care. The survey's composite scores address the following key domains:

- Getting needed care.
- Getting care quickly.
- Doctor's communication.
- Doctor's office staff.
- Health plan customer service.

While the majority of respondents were satisfied with the care received through STAR+PLUS, the program's scores were lower than the national Medicaid mean on four out of the five domains. Of particular concern, only 62.4 percent of respondents rated that they were getting their care quickly.

An earlier ICHP report demonstrated that STAR+PLUS satisfaction levels have been higher than those of other Texas mandatory managed care programs that do not include long-term care or care coordination.<sup>26</sup>

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<sup>25</sup> See Texas External Quality Review Annual Report Fiscal Year 2006, Institute for Child Health Policy, January 2008. While the report provides data on STAR, it does not delineate on the program's performance for the blind and disabled population. Therefore, we have not discussed the finding here.

<sup>26</sup> Texas Department of Health. Comparing Medicaid Managed Care Plans in Texas, 2000. STAR+PLUS Dually Eligible Consumer Study Technical Report, November 28, 2001.



There are limited groups and measures with which to compare the STAR+PLUS program. We were unable to identify any states that use HEDIS or CAHPS measures for their mandatory managed care ABD population utilizing the same measurement methodology as used by HHSC. Given the lack of comparison data, it is not possible to provide an assessment of the STAR+PLUS program's quality relative to other similar programs.

### **Stakeholder Interviews**

To better understand the opportunities and challenges associated with implementing managed care in new areas of Texas, we interviewed 29 stakeholders. The stakeholders included staff from HHSC, DADS, HMOs, other state vendors, provider associations, and consumer advocates.<sup>27</sup>

While the interviewees differed on their opinions of whether implementing managed care was a good or bad idea, there was general consensus on the following issues:

- In developing a program for rural areas, it is essential to involve the community (including clients, consumer advocates, providers, and local government) in the planning and implementation process. The level of support in the community will make or break the success of any managed care model. Additionally, a “one-size-fits-all” approach is unlikely to work; managed care engagement strategies will need to differ from region to region.
- In many respects, HHSC can achieve the same goals and principles through any of the models. For success, all models require appropriate management, resources, and funding.
- It may be difficult for managed care plans to recruit appropriate provider networks in rural areas, based both on a lack of providers in rural areas and provider disinterest in joining plans' networks. Concern about provider networks included primary care providers and specialists, as well as capacity to provide long-term services and supports and transportation assistance.
- Likewise, it may be difficult for capitated managed care to work in rural areas because of a lack of volume of members to make economies of scale work and the pressure for plans to pay increased provider rates in order to obtain and maintain a sufficient network.
- It is important that the state closely monitor and oversee managed care contracts. Contracts should ensure that the plans appropriately manage health and put quality first. Conversely, contracts must ensure that plans do not manage solely based on cost.

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<sup>27</sup> A complete list of organizations interviewed is included as Attachment C. This report does not attribute any comment or response to a particular interviewee or organization.

- Plans should not be able to commence operations without a full provider network, appropriate care coordination staff, and operations all prepared to start.
- There should be significant education in any expansion communities about managed care generally, the benefits of managed care to the enrollee, and how to access prevention and wellness services.

The following was heard during some of the interviews:

- A general perception that providers are resistant to managed care, and a specific perception that the Valley remains resistant to managed care.
- When developing managed care programs for the aged, blind and disabled population it is important to involve DADS in both the planning and development of the program. Similarly, it is important that a managed care plan have a deep understanding of the needs of the long-term care population and somehow take that into account in its medical model of care.
- A general perception that having too many different types of models to manage makes it difficult for HHSC to manage any models well.
- When providing care through a managed care organization, HHSC should include all services – including the big ones (pharmacy, nursing facility and inpatient services) that are currently carved out of STAR+PLUS to provide plans with an incentive to provide cost effective care in appropriate settings and to better coordinate overall care for an enrollee.
- A general perception that HMOs do not pay claims in a timely manner.
- Some plans enter the STAR+PLUS market for the purpose of marketing to potential Medicare Advantage members.
- If STAR+PLUS goes statewide, the state will be “hostage” to the plans and have difficulty negotiating reasonable capitation rates.
- It is important in implementation of managed care (or any program) to be cognizant of the cultural and linguistic needs of the population; a large percentage of managed care plan’s staff must speak Spanish fluently.

Whether an interviewee liked or disliked a form of coverage depended largely on what type of stakeholder the interviewee represented. Each type of program currently offered by HHSC has supporters and detractors. Additionally, interviewees varied tremendously on what they believed should or shouldn’t be included in managed care. Some believed that all coverage for the ABD population should be included, while others favored

continuing to carve out inpatient hospital, pharmacy, and nursing facility services, or a combination thereof.

## **A Review of Other State Medicaid Programs Experience with Managed Care**

Texas' STAR+PLUS experience is often held up nationally as an example of the successful use of managed care for the ABD population. In addition to Texas, several states have significant experience with providing services to the ABD population through managed care. In order to determine whether other states' integrated managed care programs for the ABD population have been feasible and effective, and how that varied based on urban and rural areas, we conducted extensive research of other state programs.

### *Capitated Managed Care*

While a number of states have implemented capitated managed care programs for their ABD populations, many of the programs limit the care provided through capitation to acute services only. Because we believe the state is interested in integrated designs, our report highlights only states with integrated programs – Arizona, Massachusetts, Minnesota and New Mexico. For each state, we describe the background information on the program, general feasibility and cost effectiveness, and whether there are any particular concerns in rural areas of the state.

**Arizona** has operated its program under its current model since 1986.<sup>28</sup> The state provides all services to its Medicaid program through capitated managed care. The state oversees three separate managed care procurements – acute, long-term care, and behavioral health.

### Feasibility and Cost Effectiveness

As the only delivery system available for the vast majority of Medicaid recipients in the state, capitated managed care has been quite successful. Arizona providers are paid favorably under the Medicaid program, and nearly 82 percent of providers statewide participate.<sup>29</sup> Arizona officials noted that the state did not achieve savings in the program's first few years, but savings are achieved by reduction in inpatient hospital length of stay and ER visits. Savings are not achieved through a reduction in primary care provider or specialty care rates. Based on Arizona's experience, it can take up to two years for the stabilization of a new area once capitated managed care is implemented.

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<sup>28</sup> Information on Arizona's managed care program was gathered during a telephone interview with Tony Rodgers, Arizona's Medicaid director. The state does cover services on a fee-for-service basis for Native Americans who are also served by the Indian Health Services and for Emergency Medicaid.

<sup>29</sup> In Arizona, health plans pay their physicians a percentage of Medicare's FFS for professional services; generally a plan's range is 95 percent to 105 percent. To ease capacity issues, some orthopedic specialists receive 150 percent of Medicare's FFS.

## The Rural Experience

Arizona has not seen a variation in participation on a rural vs. urban basis. However, state officials note that some HMOs struggle to design a network of providers in rural areas. In order to attract providers in rural areas, HMOs have needed to consider paying more than typical Medicaid rates for services and reducing the administrative burden of managed care on the provider. For example, HMOs have reduced prior authorization requirements to focus only on procedures or services that are most likely to result in disapproval of services. In addition, to bolster participation in their network, HMOs have needed to pay providers promptly and accurately. Where providers won't participate in an HMO network, the success of the program is dependent on the HMO's ability to design a care model that could include longer transportation rides and/or use of telemedicine.

State officials noted that it may be necessary to have different access performance requirements for HMOs in rural vs. urban areas of the state. As part of a successful design, Arizona has found it essential that the state provide HMOs with adequate time to develop networks and strengthen community resources, including long-term care services, transportation, telemedicine, and specialty care. Arizona has also found it important to ensure that federally qualified health centers and safety net providers are given the opportunity, and choose to be included within provider networks.

**Minnesota** began implementing its current integrated capitated managed care programs for the ABD population in 2003.<sup>30</sup> Minnesota pays its providers at close to Medicare rates. Currently, the state has three integrated capitated managed care options for its aged, blind and disabled populations:

- MN Senior Health Options (MSHO): a voluntary program available to seniors who are dually eligible for Medicare and Medicaid.
- MN Senior Care Plus: available to seniors who are eligible for home and community-based waiver services. The plan integrates state plan and waiver services and covers the first 180 days (6 months) of nursing facility services.
- MN Disability Health Options (MDHO): available to persons with disabilities who are eligible for Medicaid in the Twin Cities region, which includes seven counties. Current enrollment in the plan is minimal.

In addition to its capitated managed care programs, the state is also developing a PCCM and a High Utilizer program for FFS program to serve its disabled population.<sup>31</sup>

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<sup>30</sup> Information on Minnesota's capitated managed care programs for the ABD population was obtained through an interview with Pamela Parker, Director, Integrated Purchasing Demonstrations, Minnesota Department of Human Services. Bailit also interviewed officials from BCBSMN and Medica to get their perspectives on the differences in providing capitated managed care to Medicaid populations in rural vs. urban areas of Minnesota.

<sup>31</sup> Fifty percent of persons with disabilities who are enrolled in Minnesota's Medicaid program are dually eligible for Medicare and Medicaid.

## Feasibility and Cost Effectiveness

To date, Minnesota has not done a significant amount of analysis of its programs to determine whether they are cost effective and how they compare to each other. The state noted that it has struggled with setting appropriate long-term care capitation rates. An internal study in 2005 showed decreased nursing facility usage for participants in MN Senior Care Plus but did not do an in-depth analysis to determine whether there was an offset to savings based on increased utilization of home and community-based services.

## The Rural Experience

In order to develop sufficient provider networks in rural areas, Minnesota's plans have had to pay increased rates to physicians in these areas. In comparing the different performances of plans in urban vs. rural areas, the state has found that there are different patterns of nursing facility and assisted living use in rural areas and that it is harder to get individuals to change, particularly since there are fewer alternatives to nursing facility care in rural areas. There is a lesser availability of community services – including care managers – in rural areas of the state and, even where they exist, it is difficult to implement these services successfully, as there are transportation issues, lack of capacity to provide services on nights and weekends, and state oversight issues. In addition, Minnesota state officials believe there is also more pent-up demand for medical services in rural areas.

To help their programs succeed, plans have worked closely with counties and community organizations. Plans note that rural health systems and counties are generally more willing to pilot and experiment; their experience working with smaller resource levels makes them more innovative.

The plan representatives we spoke with emphasized that, in moving to capitated managed care, it is essential for states to have a clear, detailed transition plan tailored to the needs of the communities and populations. They also stressed that it is important to phase in implementation. Both plans and the state require sufficient time to identify and establish relationships and to determine what models will work in individual communities.

**New Mexico** has provided care to its ABD population through capitated managed care for over a decade.<sup>32</sup> It only recently integrated long-term care services into managed care, and in August 2008, the state began including dual eligibles in these programs. The implementation is scheduled to be phased in statewide by August 2009. Once the phase-in of dual eligibles is complete, all ABD members, except those in waiver populations and Native Americans, will be required to enroll in capitated managed care.<sup>33</sup>

New Mexico spends three percent of its total Medicaid budget on administrative expenses, even where managed care is virtually the only delivery system within the state.

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<sup>32</sup> Information on New Mexico's Medicaid managed care program was gathered through an interview with Carolyn Ingram, the state's Medicaid director.

<sup>33</sup> Native Americans may choose to enroll in capitated managed care and are doing so at increasing levels.

New Mexico caps its HMOs' profit and administrative expenses at 15 percent of the total capitation rate.

### Feasibility and Cost Effectiveness

A large benefit of capitated managed care in New Mexico is the ability to leverage the HMO model to build infrastructure and workforce capacity. Medicaid HMOs see provider participation issues in some areas of the state, but generally providers participate in the networks. HMOs do pay providers a higher rate to serve Medicaid members than is paid through the state's FFS program.

To ensure success, state officials suggest that all services be integrated into the capitated managed care and stress the need to work with stakeholders early in the process. State officials also suggest that it is important to require mandatory enrollment to increase covered lives and to limit the number of plans across the state, to allow for better state oversight and consistency. New Mexico does receive pushback from consumer advocates within the state who do not favor managed care. To ease the pressure, New Mexico works to build relationships with stakeholders and get them involved in solving particular issues. One particularly effective strategy in New Mexico has been to utilize stakeholders to provide outreach and education to beneficiaries and to pay them for their services.

### The Rural Experience

While there is greater access in urban areas of New Mexico, HMOs have helped to coordinate care and boost access to providers in rural areas. Of particular help has been the introduction of telemedicine. In addition, HMOs have contracted with providers in border areas (e.g., Texas and Colorado) to help offset the New Mexico providers that choose not to participate in a Medicaid HMO. New Mexico has found that HMOs are able to work in rural areas to deliver access, quality, and cost savings that have not materialized in FFS or PCCM programs.

One challenge faced by the state's HMOs are the cultural differences among New Mexicans. Many Native Americans do not see the value in insurance, while Hispanic beneficiaries, more often than other populations, have not sought out preventive care and have waited until they were sick to obtain services. HMOs need to consider these populations in their program design – particularly in the areas of outreach and education.

**Massachusetts**<sup>34</sup> administers a small but growing, voluntary, fully capitated managed care program, Senior Care Options (SCO), that was implemented in 2004 after several years of planning.<sup>35</sup> SCO was designed to integrate Medicare and Medicaid services to provide better coordinated care for dually eligible members through use a geriatric

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<sup>34</sup> While Massachusetts is geographically quite different from Texas and has much smaller challenges in its rural vs. urban areas, the Massachusetts SCO program is instructive as a fully capitated managed care program for seniors. Information on Massachusetts' SCO program was gathered in an interview with the program's manager, Diane Flanders.

<sup>35</sup> As of July 2008, 10,090 individuals were enrolled in SCO.

support model.<sup>36</sup> Historically, SCOs have contracted with both Medicare and Medicaid to provide services to dually eligible seniors.<sup>37</sup> Participating members receive all services through their SCO and remain within the SCO regardless of admission to a nursing facility. The majority of the caseload is made up of “community well” individuals, however 40 percent are at nursing facility level of care – with approximately 65 percent of those members being served in the community and the remaining 35 percent residing in nursing facilities. The remaining 5 percent of the population have Alzheimer’s or chronic mental illness

### Feasibility and Cost Effectiveness

In implementing SCO, Massachusetts specifically refrained from characterizing the initiative as a cost savings project. Instead, the program was touted as a way to increase the quality of life for participating members. Rates are developed based on FFS historical spending. Over the long term, the state expects to realize decreased utilization of nursing facilities for persons within SCO. A study completed for the state by JEN Associates does show a significant decrease in nursing facility utilization for SCO participants.

A key challenge for states in managing their seniors and persons with disabilities is to find a successful way for the state to invest resources for individuals dually covered by Medicare. Much of the savings to a program like SCO accumulates on the Medicare side of the ledger (inpatient hospitalization, physicians, and prescription drugs). This makes it very difficult for states to devote resources to undertake large initiatives to improve care for their dually eligible beneficiaries.

### The Rural Experience

Massachusetts does not have relevant experience implementing the SCO model in rural settings.

### **PCCM, ASO, and Medical Home Models**

States utilize and manage primary care case management programs in a number of different ways for ABD population. In general, variants on the PCCM program include the following characteristics:

- Providers are paid based on FFS rates;
- Members must select a primary care provider.
- Some level of case management is generally provided to beneficiaries.

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<sup>36</sup> Approximately 8% of SCO members are eligible only for Medicaid. In those cases, the SCOs provide acute services through their Medicaid contract. For all other members, SCOs provide acute services as SNPs.

<sup>37</sup> Each of Massachusetts’ three SCOs have converted to SNPs to continue participation through Medicare. From a contractual perspective, this requires the plans to have two separate contracts – one with Medicare and one with Medicaid, instead of a three-way contract with Medicare, Medicaid and the plans.

**North Carolina** is often held up as the most successful PCCM model in the nation, and is likened more to a medical home model than to a traditional PCCM model.<sup>38</sup> Since implementing its first PCCM program in 1991, North Carolina has worked closely with its physicians to improve the program. Today, the state has a mature PCCM program for its children and families that provides enhanced support to primary care practice capabilities through assistance with practice transformation and integration of care coordination into the practice. Medicaid pays physicians relatively well; reimbursement rates are generally at 95 percent of Medicare. Primary care providers are paid an enhanced fee to assist in the coordination of care of members assigned to its panel. In addition to paying a small Primary care provider enhancement, the state also provides an additional, slightly larger PMPM to 13 regional, provider-formed networks that are required to utilize the payments to develop shared regional care management and pharmaceutical consultation resources that support the primary care providers in the geographic area.<sup>39</sup>

The state is currently in the process of extending this model to its ABD population. Following earlier pilot programs, the state is pursuing statewide implementation in fiscal year 2009. Enrollment in the program will be mandatory for non-duals and voluntary for duals. The state is considering increasing the PMPM rates paid to both practices and networks to address the greater needs of the ABD population and to recognize the increased responsibilities on practices to provide coordinated care to the ABD population. Each regional network will have a “chronic care champion” to lead the practice in change to appropriately care for the ABD population and to understand the available long-term services within the community. The regional networks also assist in developing transitional care plans, developing new disease management initiatives, focusing on highest risk individuals and developing and implementing a mental health integration effort. For the ABD population, regional networks will be expanded to include additional internists, geriatricians, home health providers and other ancillary providers.

The state plays an important role in managing and overseeing the program. It facilitates a statewide clinical directors’ group that sets expectations regarding disease management strategies for the regional networks by developing disease-specific protocols for the networks’ use. In addition, the state conducts data analysis, which is provided to the regions to assist with management of cases. The state has four clinicians on staff to assist the regions and help to coordinate a number of groups that do joint problem solving and experience sharing.

### Feasibility and Cost Effectiveness

In essence, physicians work within their communities to develop their own provider networks to provide support – particularly care management/care coordination

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<sup>38</sup> Information on North Carolina’s PCCM program was gathered through interviews with two state Medicaid agency representatives, Denise Lewis and Jeffrey Simms.

<sup>39</sup> The state provides payment of \$5.50 per member per month (PMPM). Of that, \$3.00 pmpm is for care coordination and \$2.50 pmpm is for the PCP. In order to qualify for the \$2.50, a PCP must have a call system so that care is always available, send referrals to a specialist, appear in the state’s provider directory and agree to take Medicaid patients, and participate in the state’s Quality Improvement programs.



functions – to their Medicaid population. This promotes physician “ownership” of the model and of performance targets in a way not traditionally seen in PCCM programs or in capitated managed care. In addition, the model lends itself towards patient continuity with a provider. A recent North Carolina Medicaid study confirmed the health benefits of remaining with the same primary care physician over a long period of time.<sup>40</sup>

While the state has not yet fully implemented its enhanced PCCM program for the ABD population, it is counting on \$29 million in savings attributable to the ABD population in fiscal year 2009, mainly through its nine pilot networks.<sup>41</sup>

### The Rural Experience

Because North Carolina’s program was built from the ground up, it incorporated the needs of rural area providers and communities from the start. North Carolina could not have achieved its success without the support, cooperation, and involvement of its physicians. Because of their initial involvement in the program, physicians tend to feel a sense of ownership in the model and desire to keep improving on it.

The state has not seen differential impacts in rural areas vs. urban areas for the current PCCM program and does not expect to see them within the expanded ABD program. However, state officials do foresee a greater challenge in incorporating long-term care services into the program in rural areas.

**Pennsylvania** provides care to its ABD population through a combination of mandatory managed care, voluntary managed care, and enhanced PCCM (known as ACCESS Plus).<sup>42</sup> Pennsylvania’s enhanced PCCM program includes physical health services coordination through use of primary care providers, disease management, case management and enrollment assistance.

### Feasibility and Cost Effectiveness

Generally, mandatory managed care is provided in urban areas of the state and ACCESS Plus is available in rural areas. Voluntary regions are generally those not quite rural, not quite urban areas of the state where capitated managed care is provided as an option along with ACCESS Plus. Initially, the state was interested in providing mandatory managed care on a statewide basis, but found that, in the PCCM region, there were not an adequate number of providers for HMOs to contract with to allow for a viable network.

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<sup>40</sup> Dubard, Anne et. al., “Recommendation for and Recipient of Cancer Screening Among Medicaid Recipients 50 years and Older”, *Archives of Internal Medicine*, 2008; 168(18): 2014-2021. The study found that Medicaid beneficiaries remaining with the same PCP for over five years were two times as likely to have cancer screenings as those who had been with a PCP for less than two years.

<sup>41</sup> The nine networks are developing clinical protocols for the ABD population, developing an understanding of what is required to coordinate services that involve ancillary services, therapies, home health and pharmacy, determine how best to coordinate PCA services, and to determine what experience is most important for care coordinators for the ABD population.

<sup>42</sup> Information on Pennsylvania was gathered through interviews with Holly Alexander and Marlana Thieler of the Department of Public Welfare.

Although the state is not willing to make publicly available its internal analysis, Pennsylvania state officials believe that its enhanced PCCM delivery system is as effective as its mandatory HMO program.

**Oklahoma** has provided acute care to its non-dual eligible ABD population through the state's PCCM program since 2004; dually eligible beneficiaries receive any services not covered through Medicare on a FFS basis.<sup>43</sup> Likewise, non-dual eligible beneficiaries continue to receive their long-term care services on an FFS basis. Currently, Oklahoma's administrative budget is three percent of its total Medicaid budget. The state utilizes disease management in its FFS and PCCM programs, and also monitors its quality through the use of an EQRO. To ensure appropriate in-house management of its PCCM program, the state staff includes a large number of RNs on staff as well as five full-time physicians.

Oklahoma is moving towards a medical home concept, as described for North Carolina above, where providers will have the opportunity to align with a network based on expertise of practice. The state plans to pay tiered PMPM fees to the network to provide administrative support for electronic records, quality, and care management based on level of medical home attainment and population. These payments will range from \$3.06 PMPM (Level 1 medical home serving only children) to \$12.60 PMPM (Level 3 medical home serving only adults). Additional bonus funds are available based on performance. Providers will continue to be paid FFS for the care they provide. Oklahoma pays Medicare rates to its physicians.

### Feasibility and Cost Effectiveness

Oklahoma converted its capitated managed care program to a PCCM program in 2004, after an internal evaluation showed the quality of the capitated managed care provided in the state's urban counties was comparable to that provided through the state's internally managed PCCM plan provided in the state's rural counties. At the same time, the state's contracted managed care plans were demanding rate increases that went beyond what the state was paying on a FFS basis through their PCCM program. The state determined that it would not impede quality of care and would help the state to contain costs to move its entire population into PCCM.

### The Rural Experience

Oklahoma found that some of its rural areas do not have adequate provider access. Additionally, tools to increase access are not always practical in rural areas (e.g., 24/7 voice-to-voice access). Oklahoma officials stress the importance to work with rural communities and stakeholders to develop models that work for their unique situations.

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<sup>43</sup> Information on Oklahoma's delivery system for its ABD population was gathered during an interview with Lynn Mitchell, the Oklahoma Medicaid Director and from "A Medical Home for Every SoonerCare Choice Member", presentation by Deborah Ogles, NASHP Medical Home Summit, July 24, 2008, Washington, DC.

## **FFS with Disease Management**

Currently, three states – New Hampshire, Wyoming and Alaska – do not provide any care to Medicaid beneficiaries through a capitated managed care program.<sup>44</sup> Like all Medicaid programs, however, these states are looking for ways in which to contain the cost growth in their Medicaid programs. To that end, both New Hampshire and Wyoming have implemented disease management programs to provide some education and care management to certain populations.

**New Hampshire** implemented its disease management program in March, 2005.<sup>45</sup> Disease management services are provided to non-dual eligible ABD population members with at least one of the seven diseases managed by the vendor: asthma, diabetes, congestive heart failure (CHF), chronic obstructive pulmonary disease (COPD), chronic kidney disease, coronary artery disease (CAD), and end-stage renal disease (ESRD). New Hampshire tracks enrollment in its program by county; data shows that a high number of members in rural areas with multiple conditions and a higher overall stratification/disease level than in urban areas. Disease managers have found that transportation to services is the biggest issue in rural areas. The disease managers educate their caseload on available local transportation resources, the availability of a nurse advice line and, for those at highest cost, highest risk members, the availability of in-home nurse visits.

In addition to its disease management program, New Hampshire also implemented an enhanced care coordination (ECC) program in July 2007 to provide care coordination to high-cost members with disabilities that are not covered through the state's disease management program.<sup>46</sup> To be enrolled in the program, the member must fall within the top 10 percent of users or high-cost cases within the state. The state's vendor conducts health risk assessments via telephone on each enrollee and does additional assessments based on an individual's response. The vendor then utilizes a predictive modeling tool to stratify individuals into one of three risk levels. Those at the highest risk level are outreached on a monthly basis, and their utilization also is monitored monthly. As the risk level declines so too does the contact from the care coordinator. Education includes information on medication adherence, ER use, and the importance of a medical home.

**Wyoming** implemented a disease management program for its ABD population, called Healthy Together, in July 2004. According to reports from the state and its vendor, APS Healthcare, the program generated more than \$12 million in savings in its first year, realized in a nine percent savings off of projected costs.<sup>47</sup> The Wyoming program

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<sup>44</sup> New Hampshire previously had a voluntary capitated managed care program for children which was discontinued after an actuarial analysis showed that it was more costly than fee-for-service.

<sup>45</sup> Information on New Hampshire's disease management program was gathered during an interview with Tiffany Fuller, the program manager for New Hampshire Medicaid Health Management Program, which is the state's disease management program.

<sup>46</sup> Information on New Hampshire's Enhanced Care Coordination (ECC) program was gathered through an interview with Jane Hybsa, the state's ECC program manager.

<sup>47</sup> "Wyoming Medicaid Claims \$13M in Savings with DM Program", *Disease Management News*, Volume 11, Number 15, August 10, 2006.

provides disease management assistance to beneficiaries with asthma, CAD, COPD, CHF, depression, diabetes, and other potentially high-cost diseases. Through the program, the state reduced ER visits, and average lengths of stays and readmissions at inpatient hospitals. Key program design features that are credited with the model's success include:

- Strong partnerships with local providers and community resources.
- Combining focus on health and wellness and preventive measures with complex care management.
- Including participants with depression diagnosis

### **Feasibility Assessment**

Section 28a of S.B. 10 directed HHSC to analyze “the feasibility and cost effectiveness” of developing an integrated Medicaid managed care model in new areas of Texas. In this section of our report, we consider three specific managed care design models and whether they can practically be implemented in potential expansion areas. Our analysis is based on HHSC’s own experience, stakeholder interviews, and experience in other states.

#### **Model 1: STAR+PLUS**

STAR+PLUS is a partially capitated managed care program designed specifically for the ABD population. Beneficiaries receive both acute and long-term care services through the plan, with the exception of in-patient hospital and pharmacy services.<sup>48</sup> A beneficiary who remains in a nursing facility for longer than four months is disenrolled from the plan and placed in the FFS model.

Evaluations of STAR+PLUS are limited to now dated reports on experience in Harris County. Evaluation data are not available for the recent 2007 expansion of the program to four additional service areas. There is no external benchmark data from other states to which to compare STAR+PLUS.

A key function of capitated managed care plans is often assisting beneficiaries with care coordination. Providing assistance with navigating the health-care system should help the ABD population to receive the right care and supports at the right time. Not only does this improve the quality of care for the beneficiary, but it reduces costs to both Medicare and Medicaid by averting high-cost inpatient hospital or nursing facility care.

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<sup>48</sup> While Bailit believes that a fully integrated, fully capitated model without service carveouts provides more opportunity for improving quality and containing costs than one with key services such as inpatient hospital services and pharmacy carved out, we’ve chosen to consider STAR+PLUS as it exists today for the purposes of this analysis.

A large concern of any delivery system change is how a new model will impact access to services. Because physician participation in Texas Medicaid is low,<sup>49</sup> access to services is a main concern across the state. Likewise, there is concern about access to long-term care services in rural areas. While these concerns exist today, there is fear that managed care will exacerbate these provider shortages. Many long-term care providers are small and unfamiliar with managed care. They fear additional administrative burdens that managed care may bring.

Despite STAR+PLUS' positive impact on experience of care for beneficiaries, a potential hurdle is that some Texas medical providers have been and continue to be firmly against capitated managed care generally. For example, prior to the eventual 2007 expansion of STAR+PLUS, the Texas Medical Association (TMA) took a strong and vocal stand in opposition to the initiative. According to materials on its website, TMA and other provider organizations oppose capitated managed care as a threat to access and an inappropriate spending of money on paperwork and administration.<sup>50</sup> If the anti-managed care bias presented by provider associations translates into a lack of providers willing to participate in a managed care plan in areas of the state where there is already a paucity of providers, it may make it difficult for a managed care plan to develop a sufficiently robust network to serve its Medicaid clients. Providers' continued opposition to capitated managed care was a clear finding from our stakeholder interviews with provider groups. It should be noted, however, that our interviews focused on provider associations – which tend to be more vocal, aggressive and adversarial in their positions, than are individual providers. Moreover, it is important to note that HHSC reports that it did not see a reduction in provider participation as a result of the 2007 STAR+PLUS expansion.

Consumer advocates are also fearful of capitated managed care – though to a lesser extent than providers. The consumer advocates with whom we spoke as part of our interviews represented that consumers are concerned that a movement to managed care may impact their choice of provider and may eliminate services that had been previously approved or allowed under the FFS model.

Despite this opposition, managed care plans have expressed eagerness to expand STAR+PLUS into additional geographic regions such as the Rio Grande Valley. It is unclear whether they would have the same enthusiasm for expanding into the most sparsely populated areas of the state. Experience in other states has demonstrated that it is harder for capitated plans to implement their programs in truly rural regions. It is possible that HHSC might need to link contracts in more densely populated areas to contracts for less densely populated areas if it wished to expand STAR+PLUS broadly.

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<sup>49</sup> A 2004 Texas Medical Association physician survey showed that only 465 physicians accepted new Medicaid patients. See [www.texmed.org](http://www.texmed.org).

<sup>50</sup> Texas Medical Association "Make Some Noise on Medicaid HMOs", accessed October 12, 2008 at [www.texmed.org](http://www.texmed.org).

## *Summary*

- The STAR+PLUS model provides the opportunity to closely manage and integrate service delivery, and at least in theory, to improve it.
- HHSC already supports this model and expanding it to additional regions could be accommodated within existing operations, although some minor staffing additions may be required.
- HHSC would find managed care contractors ready to contract for a STAR+PLUS expansion, at least in more populous areas. The state might need to link contracts in these areas to those in rural areas to get coverage in all remaining non-STAR+PLUS areas.
- HHSC and the plans would face opposition from providers (especially physicians) and from consumer advocates to a STAR+PLUS expansion, and would need to obtain a legislative change to expand into three Rio Grande Valley counties. HHSC has faced provider opposition to prior capitated Medicaid managed care expansions as well.
- Access to providers is a concern statewide, primarily because of Medicaid payment rates, but also because of shortages in the overall provider population. Implementation of STAR+PLUS could possibly reduce provider participation. This concern is greatest with rural providers and providers who derive a small percentage of their income from Medicaid.
- While there are no good external benchmarks against which to judge past STAR+PLUS performance, the use of a managed care contractor provides the state with an accountable entity for measuring and improving quality of medical care and long-term services and supports.
- This model could be responsibly and effectively implemented within 18 months from the start of planning efforts.

## **Model 2: Enhanced PCCM**

This model consists of a PCCM program with the requirement for primary care provider selection and with certain performance requirements for primary care providers in return for a monthly care management payment. An ASO would augment the program with some type of disease management and/or high cost care management program and service coordination for those with high needs for community-based long-term care services.

While both the state's PCCM and ICM programs are relatively new and suffer from a lack of significant evaluative analysis, there are a number of factors that lead us to believe that an enhanced PCCM model is feasible across Texas.

First, and probably most importantly, while providers and consumers do not think highly of capitated managed care, both groups are more accepting of models that retain FFS features but provide more options for care coordination to beneficiaries. Many of those interviewed spoke highly of the state's existing PCCM program. In contrast to its opposition to capitated managed care, TMA is supportive of the PCCM plan, seeing it as a "sound patient care management system" that succeeds, in part, because it "promotes collaboration between the state and participating physicians."<sup>51</sup> Additionally, some interviewees spoke positively of the potential of the ICM program though acknowledging there had been little time to evaluate the program to date.

Care management is an important component of an enhanced PCCM program, as it is in capitated managed care. Depending on available resources, programs can be as targeted as necessary. For example, today HHSC provides disease management through a single vendor for targeted individuals. Similarly, HHSC could implement a focused care management program that targets the most expensive segments of the ABD population. Targeting the population of individuals anticipated to generate the top three to five percent in per person expenditures can allow the state to provide needed care management and coordination to beneficiaries who can most benefit from it due to their complex care needs while helping the state contain costs. HHSC implemented a care management pilot for the PCCM program in May 2008. The goal of the pilot is to improve quality of care provided to beneficiaries while reducing spending on care in the ER or unnecessary inpatient hospitalizations.

### *Summary*

- This model provides some ability to manage and integrate service delivery, although probably less than with the STAR+PLUS model.
- Providers view PCCM favorably, and while an enhanced PCCM program may have more administrative intrusions for providers than the current PCCM program, it will not have as many as capitated managed care, and some providers will view the ASO functions as helpful and adding value.
- Consumers appear to be comfortable with the PCCM model.
- HHSC already supports this model. Adding more care management and care coordination support would require some additional administrative effort by the agency, but not a great deal given current experience with disease management and care management vendors.
- Texas has implemented ICM, a fully integrated acute and long-term care services PCCM model in the Dallas and Fort Worth Service Areas. Nationally, no comprehensive enhanced PCCM models that have integrated long-term services and

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<sup>51</sup> Ibid.

supports have been fully implemented, though North Carolina is beginning to do so with a Medical Home model.

- There would likely be fewer challenges implementing this model in rural areas than there would be to implement STAR+PLUS in those areas.
- This model could be responsibly and effectively implemented within 12 to 18 months from the start of planning efforts.

### **Model 3: Enhanced PCCM – Medical Home**

This model is a variant of the Enhanced PCCM model, differing in a few significant ways. First, primary care practices would be encouraged to organize themselves for purposes of contracting with HHSC for enhanced payments. These associations, or networks, of practices would be provided with funding to hire their own care managers to support their practices. The practices would be required to work together to transform themselves into patient-centered medical homes, and to achieve specific HHSC performance goals to improve quality and reduce costs. There would be no ASO contractor under this approach, but HHSC would be required to support the provider networks with online practice data and clinical experts to help them manage care and achieve HHSC performance targets.

Like the ICM model, the Medical Home Model is predicated on care coordination. A key difference, however, is that the Medical Home Model ensures physician participation in care coordination by starting with the primary care provider as the focus of the program, rather than the care coordination entity, and thereby increasing care coordination at the physician practice level. In the current ICM model, questions exist about the ability of the vendor to work optimally with the primary care practice as an integrated member of the patient's care team and to utilize the primary care providers as a primary resource in developing a care plan.

As described earlier in this report, North Carolina is the only state with a truly developed PCCM medical home model. The state has implemented and improved on the model over almost two decades. It is just now rolling the model out to the ABD population. For long-term services and supports, coordination will be based at the network level, not within the primary care practices. The Medical Home models is being discussed in Texas and elsewhere as a means to improve care for consumers while containing cost growth. A recent HHSC focus group with primary care physicians revealed them to possess a positive attitude towards the medical home model and HHSC's potential adoption of the approach.

#### *Summary*

- Because the model places a higher degree of control and responsibility on primary care practices, and it requires them to pool practice support resources such as care management and work together towards performance targets, it is likely to produce



better care management and coordination than a more traditional Enhanced PCCM model. The model has not been demonstrated in wide application except in North Carolina, and they're only on a pilot basis with the ABD population.

- Primary care providers view the model very favorably. It is unknown whether hospitals, specialists, and LTSS providers would feel the same.
- Consumers tend to not be very knowledgeable about the medical home concept given its only recent emergence but are likely to be comfortable with it as a variation of the PCCM model.
- While North Carolina has a mature Medical Home model, it is just beginning to include LTSS and has no true experiences.
- Development of this model would be much more labor intensive for HHSC than the other two alternatives and would require significant outreach and work with primary care practices, as well as the development of new systems to share data with primary care networks to help them manage their patients populations, and help them develop capacity to integrate medical care and LTSS.
- Implementation could begin within 18 months within a selected region, but would need additional time to evolve to attain the level of sophistication that the North Carolina networks have attained. Additional regions could be introduced in the following months. This strategy would require on-going commitment of time and resources from HHSC and providers.

### **Cost-Effectiveness Assessment**

In this section of our report, we consider the likely cost effectiveness of different managed care strategies for the ABD population (a) residing in rural areas of the state and (b) in those urban areas that currently do not have a capitated managed care option.

### **Methodology Description**

In order to evaluate the cost effectiveness of managed care program models, a three-part analysis was employed.

#### **Review of Texas HHSC experience to date with Medicaid managed care programs.**

Because HHSC has more experience with Medicaid managed care for the ABD population than do most other states, we elected to focus considerable energy on the acquisition and analysis of historical program eligibility and expenditure data for the FFS, PCCM, STAR and STAR+PLUS programs. While there were identifiable limitations to doing so (e.g., STAR+PLUS has been implemented for a sustained period only in the Harris Service Area, and even the rural counties in this service area are in proximity to Harris County), we believed that there were still benefits to proceeding in

this manner, because of the paucity of cost effectiveness data that we knew would be available from other states. In doing so, we sought to answer the following questions:

- What has been the comparative experience of STAR+PLUS in urban vs. rural counties?
- What has been the cost experience for ABD beneficiaries in the rural counties within the Harris STAR+PLUS Service Area in comparison with that of ABD beneficiaries in rural counties surrounding non-STAR+PLUS urban regions?
- How have actual STAR+PLUS enrollee expenditures varied from those that were set as “actuarially sound” rates?
- How have STAR+PLUS enrollee hospital expenditures varied from the cost reduction target set forth in the most recent STAR+PLUS contract?

*Review of projections and evaluations performed by other entities regarding the Texas Medicaid managed care programs.*

Because HHSC, its prior contractors, and other external entities have developed projections and evaluations of the Texas Medicaid managed care programs, we deemed it wise to consider their projections and findings to complement our own analysis, and to provide a consistency check as well.

*Review of the cost experience of other states with integrated (acute and long-term care) Medicaid managed care programs.*

While only a subset of states operate Medicaid managed care for the ABD population, and an even smaller group do so in rural areas, we obtained as much quantitative and qualitative data on cost effectiveness as we could through a combination of literature review and interviews. From this research we sought to answer the following questions:

- What has been the cost effectiveness of varying models of Medicaid managed care for ABD beneficiaries?
- How has cost effectiveness varied between urban and rural areas?

### **Review of Texas HHSC Experience to Date with Medicaid Managed Care Programs**

To conduct the cost effectiveness analysis, we utilized demographic, expenditure, and utilization/encounter data for the ABD population within Texas Medicaid for fiscal years 2003 through 2007. We received information from HHSC on both eligible member months and costs for beneficiaries receiving services through FFS, PCCM, STAR, and STAR+PLUS..

Because of the recent launch of the Integrated Care Management (ICM) program in February 2008, we were unable to review data from that program. Because we believe this is an important model to consider, we will discuss it within the analysis, despite the fact that no significant data are yet available to evaluate its efficacy.

### *Data*

The complexity of HHSC's data made our analysis difficult. One issue that made it challenging to analyze the data was the categorization of claims for carved-out services for the STAR and STAR+PLUS populations. For example, inpatient claims are carved out of STAR+PLUS and are paid on an FFS basis. When those claims are entered into HHSC's systems, they are not categorized as a general managed care claim in the PCCM program. This made it difficult to analyze the inpatient hospitalization data for a particular program within a particular county. A second issue was the categorization of claims stemming from the STAR+PLUS expansion in fiscal year 2006. There, the claims data show PCCM claims, but the eligibility data do not show any corresponding member months for the PCCM program in the expansion counties. We reviewed the data, and, where possible, made adjustments to accommodate these anomalies. However, we did not audit the data, nor have we been able to resolve all of these anomalies to our complete satisfaction.

### *Analysis Introduction*

The first step in the assessment of the cost effectiveness methodology was to analyze the state's PMPM cost data for both clinical and administrative services. We utilized claims and HMO encounter data, as well as HHSC eligibility data for this analysis. (See Appendix D for a detailed look at the eligibility data used in the analysis.) For the STAR and STAR+PLUS programs we also utilized premium tax owed by the HMOs that contract to serve these programs.

### *Summary of Calculated Claims Cost PMPM by Model*

Our analysis of the PMPM cost data did not provide us with the ability to do a meaningful comparison of the programs. There are several reasons for this as described above.

### **Administrative Costs**

HHSC's overall administrative costs have averaged between three and four percent of total costs for the last several years. When examining administrative costs for the four types of programs (FFS, PCCM, STAR and STAR+PLUS), we find that there are some costs that are variable (i.e., they may be reduced by moving people into different programs), and others that will remain fixed regardless of program enrollment level.

Determining eligibility can be a considerable challenge for Medicaid programs. The ABD population is typically the most stable of the Medicaid-covered populations; however, the long-term applications are significantly more complicated and utilize

greater resources than other populations. Moreover, because Texas has a centralized eligibility function, the costs of determining eligibility are evenly spread across the entire population.

The HHSC operating budget for fiscally year 2008<sup>52</sup> breaks apart administrative expense by Medicaid sub-population.<sup>53</sup> For the Medicaid and SSI risk groups, the operating budget shows administrative costs for 2006 and 2007, and budgeted for 2008 as 3.4 percent, 4.7 percent, and 4.1 percent respectively. For the dual eligible (including the QMB/SLMB) population, the allocated administrative expenses are much lower, ranging from 0.3 percent in 2006 and 2007 to 1.1 percent budgeted in 2008. Likewise the STAR+PLUS administrative expenses show very low rates of 0.2 percent in 2006 and 2007 and 0.3 percent in 2008.

### **HHSC Administrative Costs for ABD Population**

	<b>2006</b>	<b>2007</b>	<b>2008</b>
Medicaid and SSI Risk Groups	3.4%	4.7%	4.1%
Dually Eligible including QMB/SMLB	0.3%	0.3%	1.1%
STAR+PLUS	0.2%	0.2%	0.3%

The administrative expenses attributed to STAR+PLUS reflect the amount of direct state costs to administer the managed care plans that operate this program, based on current patterns of oversight and management of the program. They do not account for the allocation for administrative expense that is included in the capitation rate that the state pays the HMOs to run this program. For example, when Deloitte Consulting<sup>54</sup> set the STAR+PLUS capitation rates for 2008 it included a \$50 PMPM provision to account for administrative expense, risk and contingency margin. This provision is to account for a premium tax of 1.75 percent of the capitation rate, a 1.6 percent provision for risk margin and 7.4 percent load for administrative expense. While HHSC's direct administrative expense may be lower in the STAR+PLUS program, it is paying higher indirect administrative expense to the HMOs.

In the PCCM program, the state has to pay a \$5.00 PMPM fee paid to primary care providers. The FFS and PCCM programs have a disease management program, called the Texas Medicaid Enhanced Care Program, which serves the FFS and PCCM populations and averages \$32 PMPM. In addition to these costs, HHSC pays a claims processing cost of \$1.96 PMPM for the non-managed care program, as well as an administrative fee to ACS to assist in the management of the PCCM program.

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<sup>52</sup> HHSC Summary of Budget by Object of Expense 80th Regular Session, FY 2008 Operating Budget (12/3/07).

<sup>53</sup> This analysis excludes DADS administrative expenses related to long-term services and supports.

<sup>54</sup> Deloitte Consulting LLP. State of Texas Health and Human Services Commission Medicaid Managed Care STAR+PLUS Program Rate Setting, State Fiscal Year 2008, September 17, 2007.

As described above, there are a wide variety of administrative costs attributed to this population. Regardless of the actual model in use, HHSC bears the eligibility costs and some level of processing costs. Expanding STAR+PLUS allows the majority of the administrative costs to be born by the vendor. In any model, HHSC requires staff to administer and actively manage the vendors or health plans. Further, any model change will result in increased administrative costs in the short run as new programs are implemented or populations are transitioned.

**What has been the comparative experience of STAR+PLUS in urban vs. rural counties?**

The first evaluation question when evaluating HHSC experience with managed care for the ABD population is “What has been the comparative experience of STAR+PLUS in urban vs. rural counties?” That is, did the introduction of STAR+PLUS have a differential impact on costs in urban and rural counties? In performing this comparison, there was one significant limiting factor: STAR+PLUS has only been in existence outside of Harris County since February 2007. As a result, the available data for the expansion counties was limited to seven months.

In addition, the expansion counties are predominately urban, with only six counties being classified as not urban. Four of these counties are in the Nueces Service Area and two are in the Travis Service Area.<sup>55</sup> Given that rural counties, by definition, have smaller populations than urban areas, we combined several rural areas to obtain a larger population for analytical purposes and thereby make comparisons that are more robust.

**Comparison of STAR+PLUS in Rural vs. Urban Areas, Fiscal Year 2007**

	<b>Rural Counties</b>		<b>Urban Counties</b>	
	<b>Nueces Service Area</b>	<b>Travis Service Area</b>	<b>Nueces Service Area</b>	<b>Travis Service Area</b>
	Bee	Burnet	Aransas	Bastrop
	Jim Wells	Lee	Calhoun	Caldwell
	Kleberg		Nueces	Hays
	Refugio		San Patricio	Travis
			Victoria	Williams
<b>Total Member Months</b>	<b>85,040</b>	<b>18,609</b>	<b>314,378</b>	<b>351,396</b>
<b>Total Estimated Members</b>	<b>8,637</b>		<b>55,481</b>	

Our analysis compared STAR+PLUS costs for members in these rural and urban areas to their expenses in the preceding years when they were not enrolled in STAR+PLUS.

<sup>55</sup> US Office of Management and Budget, 2003. Cited in The Status of Rural Texas, 2003. See [www.orca.state.tx.us/pdfs/001\\_Status\\_intro\\_final.pdf](http://www.orca.state.tx.us/pdfs/001_Status_intro_final.pdf).

As noted above, the data we received from these STAR+PLUS expansion counties are limited by the fact that we received PCCM claims for these counties, without corresponding member months. HHSC instructed Bailit to add the PCCM inpatient claims to the STAR+PLUS inpatient claims for 2007. As a result, we have presented these data below with and without the PCCM data incorporated into the STAR+PLUS data.

### *Claims Cost Trends, Urban vs. Rural*

Based on our data analysis we have identified the following trends:

- STAR+PLUS member expenses, for both the aged population and the blind and disabled population, were considerably higher in the rural areas than in the urban areas for the initial seven months of the program in these counties.
- As depicted in the table that follows, this experience is inconsistent with the pattern of spending in the preceding years in these counties, where expenses were lower in rural counties.<sup>56</sup>
- Other historical usage trends include:
  - Physician claims were higher in the rural counties.
  - Inpatient claims tended to be higher in the urban counties.
  - Prescription drug costs tended to be comparable across urban and rural counties.
  - Outpatient claims are tending to be more expensive in the urban counties.
- Aged claims are predictably smaller than blind and disabled claims because of the prevalence of Medicare coverage among aged beneficiaries.
- When we look at the fee-for-service LTSS data, the rural aged appear to be more costly than the urban aged, while the rural blind and disabled are less costly than the urban blind and disabled.

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<sup>56</sup> Past spending patterns in the PCCM and FFS models also indicate higher spending in urban regions. This is not surprising given that health care utilization tends to increase as provider supply increases (Fisher E. and Wennberg J. "Health Care Quality, Geographic Variations, and the Challenge of Supply-Sensitive Care" *Perspectives in Biology and Medicine*, Volume 46, Number 1, Winter 2003, pp. 69-79). See Appendix D for the analysis of past spending patterns in the PCCM and FFS models across urban and rural counties.

**STAR+PLUS Non-LTSS Claims Expense in Nueces and Travis  
Service Areas, Rural vs. Urban Counties, Fiscal Year 2007**

			<u>2007</u>	<u>2007</u>
			<b>STAR+PLUS and PCCM</b>	
			<b>STAR+PLUS Only</b>	<b>Combined</b>
<b>Inpatient Claims</b>				
STAR+PLUS <sup>57</sup>	Rural	Aged	\$0.00	12.82
STAR+PLUS	Urban	Aged	0.00	6.92
STAR+PLUS	Rural	Blind and Disabled	0.27	118.58
STAR+PLUS	Urban	Blind and Disabled	0.10	130.51
<b>Outpatient Claims</b>				
STAR+PLUS	Rural	Aged	2.05	2.05
STAR+PLUS	Urban	Aged	1.57	1.59
STAR+PLUS	Rural	Blind and Disabled	77.47	83.31
STAR+PLUS	Urban	Blind and Disabled	99.21	117.96
<b>Physician Claims</b>				
STAR+PLUS	Rural	Aged	575.64	686.33
STAR+PLUS	Urban	Aged	316.19	394.34
STAR+PLUS	Rural	Blind and Disabled	437.04	507.04
STAR+PLUS	Urban	Blind and Disabled	226.07	303.24

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<sup>57</sup> Inpatient and outpatient claims for the aged population represent approximately 3.5 percent of inpatient claims and 2 percent of outpatient claims for fiscal year 2007, as the majority of these beneficiaries' costs are covered by Medicare. The underlying data does include members 65 and older that do not qualify for Medicare.

			<u>2007</u>	<u>2007</u>
			<b>STAR+PLUS and PCCM</b>	
			<b>STAR+PLUS Only</b>	<b>Combined</b>
<b>Prescription Drugs</b>				
STAR+PLUS	Rural	Aged	7.54	7.54
STAR+PLUS	Urban	Aged	6.19	6.19
STAR+PLUS	Rural	Blind and Disabled	195.62	195.62
STAR+PLUS	Urban	Blind and Disabled	199.05	199.05
<b>Totals</b>				
<b>STAR+PLUS</b>	<b>Rural</b>	<b>Aged</b>	<b>585.23</b>	<b>708.74</b>
<b>STAR+PLUS</b>	<b>Urban</b>	<b>Aged</b>	<b>323.95</b>	<b>409.04</b>
<b>STAR+PLUS</b>	<b>Rural</b>	<b>Blind and Disabled</b>	<b>710.39</b>	<b>904.54</b>
<b>STAR+PLUS</b>	<b>Urban</b>	<b>Blind and Disabled</b>	<b>\$524.43</b>	<b>\$750.75</b>



**Pre-STAR+PLUS Claims Expense in Nueces and Travis Service Areas,  
Rural vs. Urban Counties, Fiscal Year 2007**

	<b>2007</b>	<b>2006</b>	<b>2005</b>	<b>2004</b>	<b>2003</b>
<b>Inpatient Claims</b>					
FFS Rural Aged	\$11.25	\$15.17	\$18.00	\$23.09	\$0.00
FFS Urban Aged	13.21	13.25	17.93	20.43	
FFS Rural Blind and Disabled	119.60	132.49	156.49	181.16	
FFS Urban Blind and Disabled	138.17	150.02	184.72	171.40	
<b>Outpatient Claims</b>					
FFS Rural Aged	0.36	0.18	0.08	0.23	
FFS Urban Aged	0.59	0.72	0.64	0.73	
FFS Rural Blind and Disabled	56.90	57.69	55.50	59.45	
FFS Urban Blind and Disabled	66.52	62.81	60.00	53.89	
<b>Physician Claims</b>					
FFS Rural Aged	90.05	101.58	91.71	82.97	
FFS Urban Aged	66.15	73.46	69.69	67.54	
FFS Rural Blind and Disabled	156.48	192.01	175.14	166.97	
FFS Urban Blind and Disabled	148.80	173.84	149.11	146.89	
<b>Prescription Drugs</b>					
FFS Rural Aged	7.48	90.19	214.26	200.73	
FFS Urban Aged	8.32	85.68	194.48	183.83	
FFS Rural Blind and Disabled	136.65	162.71	200.74	189.79	
FFS Urban Blind and Disabled	123.44	152.24	201.01	187.04	
<b>Long Term Services and Supports</b>					
FFS Rural Aged	700.05	743.05	708.88	720.91	
FFS Urban Aged	655.01	619.18	600.81	610.15	
FFS Rural Blind and Disabled	305.81	329.19	323.27	329.46	
FFS Urban Blind and Disabled	556.93	500.87	487.64	540.90	
<b>Total</b>					
<b>FFS Rural Aged</b>	<b>809.19</b>	<b>944.80</b>	<b>1,033.04</b>	<b>1,023.31</b>	
<b>FFS Urban Aged</b>	<b>743.28</b>	<b>784.17</b>	<b>881.26</b>	<b>984.88</b>	
<b>FFS Rural Blind and Disabled</b>	<b>775.44</b>	<b>874.09</b>	<b>918.49</b>	<b>920.21</b>	
<b>FFS Urban Blind and Disabled</b>	<b>\$1,033.86</b>	<b>\$1,039.78</b>	<b>\$1,073.70</b>	<b>\$1,258.39</b>	<b>\$0.00</b>

**What has been the cost experience for ABD beneficiaries in the rural counties within the Harris STAR+PLUS Service Area in comparison with that of ABD beneficiaries in rural counties surrounding non-STAR+PLUS urban regions?**

The lack of member months to attribute to the PCCM claims for the aforementioned counties in the period prior to the introduction of STAR+PLUS in the expansion areas prohibited an assessment of the impact of STAR+PLUS on service expenditures in the initial seven months, and how the impact compared to cost trends in like non-STAR+PLUS regions.

**How have actual STAR+PLUS enrollee expenditures varied from those that were set as “actuarially sound” rates?**

To address the question of how actual STAR+PLUS enrollee expenditures varied from the PMPM rates paid by HHSC to the plans, we examined the Health Plan Financial Statistical Report (FSR) that managed care programs in Texas are required to submit. The documents are submitted on a quarterly and annual basis and detail the capitation payments the managed care organizations receive from the state and the HMOs’ medical and administrative expenses. Over the years the STAR+PLUS program has changed, and the capitation rates have changed as such.

With the STAR+PLUS expansion in February 2007, HHSC made a major change in the covered services definition when it elected to carve out inpatient hospital services from STAR+PLUS. The HMOs continue to be responsible for managing inpatient care; and are at risk for reducing inpatient utilization by 22 percent, earning a bonus if they exceed 22 percent, and paying a penalty if they fall below that amount.

With the STAR+PLUS expansion in February 2007 the reporting format of the FSR changed, and thus we are not able to report the same statistics for all of the HMOs across time periods.

*Harris County*

In analyzing the experience for Harris County from FY2003 – FY2006, the following trends can be observed:

- Amerigroup medical loss ratios decreased from 80 percent in 2004 to 77 percent in 2006. At the same time Amerigroup was able to hold administrative expenses to between 15-17 percent and earn positive net income for 2004 – 2006.
- Evercare had higher medical loss ratios that ranged from a low of 83 percent in 2004 to a high of 91 percent in 2005. At the same time Evercare was able to hold administrative expenses to between 13 percent and 15 percent. Evercare was only able to generate positive net income in 2004 and 2005.

Historically, the STAR+PLUS HMOs have been able to keep actual medical expenses in line with the capitated rates most years.

### *Expansion Service Areas*

During the STAR+PLUS expansion, a number of changes were made to what is covered in the capitation rate. There was also a change in how the data are reported. For the first seven months, the FSR has detailed information by eligibility group. The FSR for the following nine months is at a higher level. We have reported the data available in the FSRs for each service area for these two time periods, side by side. This detailed analysis of STAR+PLUS financial experience can be found in Appendix E.

Overall most of the HMOs have medical loss ratios between 80 percent and 90 percent, generally considered a healthy range. There are a few HMOs that have medical loss ratios below 80 percent, but this has to be considered in light of the start-up nature of these programs. In fact, most HMOs have declining medical loss ratios that can likely be attributed to their start-up period.

Given the small amount of HMO experience available, it is difficult to make any conclusive statements regarding financial performance, except to say that STAR+PLUS HMOs appear to be able to generate a net positive margin in most years when operating within an actuarially determined rate. Therefore, the capitation rates are a fair representation of health-care costs needed to care for the ABD population.

### **How have STAR+PLUS enrollee hospital expenditures varied from the cost reduction target set forth in the most recent STAR+PLUS contract?**

As mentioned earlier, the current HHSC STAR+PLUS contract requires HMOs to reduce inpatient hospital costs by 22 percent. If the HMO reaches or exceeds the 22 percent target, it earns a bonus; while if it does not achieve the required reduction, it is required to pay a penalty equal to a percentage of the anticipated savings. A preliminary internal study by HHSC shows that in total, HMOs have been able to reduce inpatient admissions by 30 percent.<sup>58</sup> This study, which only looked at one year of data, shows an additional saving to HHSC through the use of a managed care incentive program.

### **Review of Projections and Evaluations Performed by Other Entities Regarding the Texas Medicaid Managed Care Programs**

Over the years, HHSC performed and had others perform numerous studies and evaluations assessing its managed care programs for the ABD population. We summarize the key findings below.

#### *Institute for Child Health Policy report (2003)*<sup>59</sup>

- This study by the state's External Quality Review Organization (EQRO) found that adult Medicaid-only SSI beneficiaries in STAR+PLUS who were receiving Day

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<sup>58</sup> Preliminary HHSC analysis provided by HHSC staff.

<sup>59</sup> Aydede SK. "The Impact of Care Coordination on the Provision of Health Care Services to Disabled and Chronically Ill Medicaid Enrollees," University of Florida, Institute for Child Health Policy, November 2003.

Activity and Health Services or Personal Assistance Services generated significantly lower service costs (\$3,226 per month vs. \$13,160 per month) when compared with those in the PCCM program and receiving long-term services and supports.

- The study found the STAR+PLUS enrollees to have lower inpatient and ER use:
  - Enrollees used ERs 38 percent less often and were admitted to hospitals 22 percent less often.
  - Enrollees with the most significant savings were among those with the worst health status.

*Lewin Group report (2004)*<sup>60</sup>

- The report, titled “Actuarial Assessment of Medicaid Managed Care Expansion Options”, projected substantial savings for expanding the STAR+PLUS program to 51 counties in metropolitan areas of the state (e.g., including the Corpus Christi, Northeastern Texas, and Waco areas). Lewin’s report projected savings in larger metropolitan counties that ranged between 3.1 and 5.1 percent for non-dual eligibles with disabilities, with 60 percent of the savings achieved the first year, and an additional 10 percent reached each following year until reaching steady state in the fifth year post-implementation.
- In total, if all of the counties (with the exception of Harris County) moved their ABD population to managed care, Lewin projected 3.3 percent savings.
- The report also noted that capitated managed care would not be most cost effective in the most rural counties, and instead recommended that a 0.8 percent savings can be achieved through a PCCM model in those areas.
- The report also noted that capitated managed care would not be most cost effective in the most rural counties, and instead recommended that \$16 million in savings be achieved through a PCCM model.

*Deloitte Consulting Annual STAR+PLUS Rate Setting (2008)*

- HHSC contracts for annual actuarial reports to develop the rates for the STAR+PLUS program.<sup>61</sup> In its latest report, Deloitte projected the following savings when setting rates relative to FFS program experience: 22 percent for inpatient care, 15 percent in acute outpatient hospital care (both ER and non-ER), 15 percent in non-physician services, ambulatory care, home health, behavioral health, and 10 percent in long-term services and supports.

These studies show that capitated managed care is less costly than utilizing the current FFS or PCCM models.

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<sup>60</sup> The Lewin Group. “Actuarial Assessment of Medicaid Managed Care Expansion Options”, Texas HHSC, amended version, January 2004.

<sup>61</sup> Deloitte Consulting LLP. “State of Texas Health and Human Services Commission Medicaid Managed Care STAR+PLUS Program Rate Setting, State Fiscal Year 2008”, September 17, 2007.

## **Review of the cost effectiveness experience of other states with integrated (acute and long-term care) Medicaid managed care programs.**

As described in the earlier review of states with integrated Medicaid managed care programs for the ABD population, there are few programs with much operational history, and very little cost effectiveness data supporting them. A review of the literature reveals only the following:

- The Lewin Group released a report in November 2008 finding significant overall systems savings to enrolling dual eligible members in managed care programs. However, the vast majority of the savings overall – and all of the early year savings – result to Medicare, while substantially increasing Medicaid’s cost in the short term. In Texas, Lewin estimates a total one-year savings to Medicare and Medicaid, from moving dual eligibles to capitated HMOs, of \$584 million in calendar year 2010 and a total 15-year savings of \$22 billion the period 2010-2024. It should be noted that Lewin used data from CMS for 2005, so their estimates do not reflect the impact of the STAR+PLUS program. However, when looking at the Medicaid costs, Lewin projects Texas to lose \$161 million in calendar year 2010, decreasing to \$20 million in 2015, while finally showing savings of \$126 in 2020.<sup>62</sup>
- California’s five County Organized Health Systems (COHS) serve all of the Medicaid beneficiaries within a county, and are responsible for all Medicaid-covered services in those counties. The California Legislative Analyst’s Office (LAO) reported to the Legislature in February 2004 that the possible loss of COHS plans would cost the state \$150 million in savings to the state’s general fund. The same report found that California counties with mandatory managed care enrollment for people with disabilities experienced annual costs that were 13 percent lower than those counties with an FFS program for recipients with disabilities in 2002-2003.<sup>63</sup>

## **Assessment of Potential Cost Savings**

There is little information available from other states or from the research literature to inform an assessment of the comparative cost effectiveness of various integrated Medicaid managed care options for the ABD population, despite the growing currency of the model. This is not wholly the fault of state Medicaid agencies. Most of the programs are dynamic, and the heterogeneous composition of populations served make cost effectiveness analysis difficult without sophisticated adjustment for population differences.

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<sup>62</sup> “Increasing Use of the Capitated Model for Dual Eligibles: Cost Savings Estimates and Public Policy Opportunities” The Lewin Group. Report sponsored by the Association for Community Affiliated Health Plans and Medicaid Health Plans of America, November 2008.

<sup>63</sup> “Better Care Reduces Health Care Costs for Aged and Disabled Persons,” Legislative Analyst’s Office, March 4, 2004.

We believe that the best basis for projecting the cost effectiveness of managed care options for the ABD population not currently served by capitated managed care is HHSC's own experience, combined with some informed qualitative evaluation. Using this approach, we assess the models as follows.

### **Model 1: "STAR+PLUS"**

This is the model for which HHSC has the most experience, and the most evaluative information, albeit with limitation. The ICHIP 2003 study of STAR+PLUS in Harris County reported a 22.2 percent reduction in admission volume for SSI-only enrollees. It was based on this finding that HHSC placed its STAR+PLUS plans at risk for achieving the same reduction in inpatient hospital expense in 2007 when inpatient hospital services were carved out of the STAR+PLUS capitation.

The 2003 ICHIP study also found a 38.5 percent reduction in ER visit volume for SSI-only STAR+PLUS enrollees. However, Deloitte assumed a lesser 15 percent reduction in utilization of ER and in other hospital outpatient service in setting STAR+PLUS rates for the current fiscal year. No confirming data exists for a reduction in ER utilization in the expansion areas, although we believe it is a reasonable assumption that a reduction in ER visits would parallel the reduction in inpatient admissions.

In addition, the state utilizes a 1.75 percent premium tax on gross premiums for its HMOs. This premium tax results in significant net dollars to the state. Expanding STAR+PLUS will further expand the state's net revenue from this tax.

Looking at three major criteria, we can see that there is some evidence that STAR+PLUS has been cost effective.

- First the capitation rates set by Deloitte have built in savings factors that assume that the HMOs will achieve savings. HMOs have freely contracted at those rates and importantly have not indicated that they are inadequate.
- Over the long term, in Harris County, the STAR+PLUS plans have been able to manage their expenses under the capitation rates. In the expansion counties, the majority of the HMOs are able to show a positive net income over the relatively short time period.

### *Summary*

- There is some reason to believe that STAR+PLUS expansion will generate savings in the urban service areas such as Lubbock, El Paso, and other urban areas where it does not currently exist, despite the comparatively higher administrative costs and reserve and margin requirements carried by health plans.
- Using HHSC data, we forecast that a 30 percent reduction in inpatient admissions and a 15 percent reduction in ER visits would generate a reduction in ABD spending of 4.6 percent in total ABD spending – 3.8 percent from decreased inpatient utilization

and 0.7 percent from decreased ER utilization. Looking at just the blind and disabled population, the reduction would total 7 percent of total spending – 5.8 percent from decreased inpatient utilization and 1.2 percent from decreased ER utilization.<sup>64</sup> This is comparable to previous studies.

- There is no evidence that STAR+PLUS generates savings on long-term services and supports; given this, we do not know if STAR+PLUS is a cost-effective model for beneficiaries who are dually eligible. General research on managed long-term care finds that cost studies overall are inconclusive.<sup>65</sup>
- There is no basis for determining whether STAR+PLUS expansion in more rural areas will achieve the same results.
- There is an initial negative impact on cash flow when transitioning from an FFS payment structure to a prospective capitated rate payment. At least one state has required its managed care contractors to assume the cost that the state would otherwise bear when transitioning to capitated payment.<sup>66</sup>
- Any expansion of STAR+PLUS will increase net state revenue received from the premium tax.

### **Model Two: Enhanced PCCM**

This model consists of a PCCM program with the requirement for primary care provider selection and with certain performance requirements for primary care providers in return for a monthly care management payment. An ASO would augment the program with some type of disease management and/or high cost care management program, and service coordination for those with high needs for community-based long-term care services.

Neither the HHSC PCCM program nor the ASO-administered ICM program have been subject to the level of analysis applied to STAR+PLUS, and in the latter case, the program is simply too new to be evaluated, having been implemented in 2008.

Actuaries generally believe that a tightly managed capitated program generates greater savings than a loosely managed PCCM program for the ABD population, particularly in

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<sup>64</sup> The estimate of savings for inpatient and ER utilization was calculated by taking the claims data for the Dallas, El Paso, Lubbock, Tarrant and Southeast service areas and the urban counties in the PCCM expansion as defined in Appendix D. The FFS and PCCM claims data were used. The inpatient claims data come from the data we received from the state. The ER data are estimated based on the percent of outpatient claims attributed to ER. The percent of outpatient claims spending on ER for STAR and STAR+PLUS in SFY 2006 and SFY 2006. This was used because we did not have ER claims as a percent of outpatient claims for FFS or PCCM.

<sup>65</sup> Saucier P, Burwell B. and Gerst K. "The Past, Present and Future of Managed Long-Term Care", U.S. Department of Health and Human Services, Office of Disability, Aging and Long-Term Care Policy, April 2005. Available at <http://aspe.hhs.gov/daltcp/reports/mltc.htm>

<sup>66</sup> Personal conversation with Jim Hardy regarding Pennsylvania, December 3, 2008.

areas where STAR+PLUS first showed utilization reductions in Harris County – inpatient admissions and ER visits. Lewin’s estimate of 2.7 percent falls within the range that we have seen other actuaries publish (2-4 percent) for PCCM program savings, and that we have found in state’s PCCM program evaluations.

Since Lewin conducted its study, HHSC, like a number of other states, has implemented a disease management program to further enhance the PCCM program. An evaluation of the program’s first two years of operation show that it did not meet its cost savings goals. The research literature does not clearly demonstrate the cost effectiveness of such models in general use<sup>67</sup>, or specifically with Medicaid. HHSC also recently implemented a small care management pilot for a small number of PCCM beneficiaries, which provides care coordination, including discharge planning assistance. We are also unable to assess the financial impact of this program.

Lewin did project that PCCM program savings could approach 6.3 percent if the PCCM program became more HMO-like. Such a percentage would approach that which it projected for STAR+PLUS, but we lack any evidence from HHSC experience as to its attainability.

### *Summary*

- In contrast to STAR+PLUS, there is no evidence one way or another, from HHSC’s experience with the PCCM or ICM programs, as to their cost effectiveness in urban or rural settings. This is not to say that an enhanced PCCM program with a managed long-term services and supports component could not be cost effective; we simply lack any evidence supporting cost effectiveness.
- Actuarial projections and experience in other states suggests the ability for PCCM programs are able to generate savings in the 2-4 percent range on medical care. These figures cannot be differentiated for urban vs. rural programs. It is unknown whether savings could be generated in long-term services and supports.

### **Model Three: Enhanced PCCM – Medical Home**

This model is a variant of the Enhanced PCCM model, differing in a few significant ways. First, primary care practices would be encouraged to organize themselves for purposes of contracting with HHSC for enhanced payments. These associations, or networks, of practices would be provided with funding to hire their own care managers to support their practices. The practices would be required to work together to transform themselves into patient-centered medical home models, and to achieve specific HHSC performance goals to improve quality and reduce costs. There would be no ASO contractor under this approach, but HHSC would be required to support the provider networks with online practice data and clinical experts to help them manage care and achieve HHSC performance targets.

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<sup>67</sup> “An Analysis of the Literature on Disease Management Programs,” Congressional Budget Office, October 13, 2004.



Because HHSC has not implemented this form of a PCCM program, there is no experience to draw upon to estimate cost savings. Among other states, as cited earlier, North Carolina is the one relevant example (Oklahoma is seeking to convert its PCCM program to this model, but has only just undertaken the effort).

North Carolina's program has been formally evaluated by Mercer and found to generate savings for the Temporary Assistance for Needy Families (TANF) population. Implementation with the ABD population began with eight pilots two years ago. Based on that pilot experience, Mercer has projected a minimum of \$29 million in reduced state spending in fiscal year 2009 as the model is rolled out statewide.<sup>68</sup> This equates to a 1.8 percent reduction in the Medicaid ABD budget, excluding nursing facility services.

### *Summary*

- There is even less available evidence for this model than for the more traditional Enhanced PCCM model. Only North Carolina's experience is suggestive of possible cost effectiveness.
- There is reason to believe that this model could be more cost effective than the Enhanced PCCM, once fully implemented. This is because organized networks of self-governing primary care physicians organized as patient-centered medical homes and supported by care managers integrated into their practices are more likely to have the resources and motivation to reduce hospitalizations, ER visits and nursing home admissions than primary care providers operating in a more traditional PCCM program. This view is well reasoned and supported in part by research<sup>69</sup> evidence, but still speculative.
- While North Carolina's model has been implemented statewide for the TANF population and will also be so for the ABD population, there is good reason to believe that the small independent practices that are present in many rural communities may find this model more challenging and harder to achieve savings than would larger practices working in closer proximity to peer practices. This, too, is uncertain

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<sup>68</sup> Based on conversations with North Carolina Medicaid staff.

<sup>69</sup> Tasi et. al. A Meta-Analysis of Interventions to Improve Chronic Illness Care. *American Journal of Managed Care*, 2005 11 478-88. Abstract available at: [www.rand.org/health/projects/icice/tsai.html](http://www.rand.org/health/projects/icice/tsai.html).

## **Recommendations**

Considering the feasibility and cost effectiveness analyses in this report, we make the following recommendations for the state's consideration.

### *1. Do Something*

As we've described in this report, Texas provides care to its ABD population through a number of different models across the continuum. While each program model has its strengths and weaknesses, Texas has an ability to improve quality and cost effectiveness in any of the models it offers today through tighter management of those models. For example, in STAR+PLUS, HHSC may be able to work more closely to enhance the program's value by facilitating discussions between participating HMOs on best practice models while in the PCCM plan, the state could increase its oversight and monitoring of participating PCPs and how effectively they provide referral and case management services to PCCM beneficiaries. In part, the success of any of these models going forward in containing costs will depend on the state's ability to adequately resource its management of each model, manage its vendors, measure performance, and provide incentives for success.

Given the size of the state and the vast differences in counties across the state, we do not believe there is, or needs to be, a "one-size-fits-all" solution to the delivery of care for the ABD population in Texas. In fact, the state lacks sufficient information to credibly judge which strategy works best in any region. We recommend that the state consider the following actions:

- Expansion of STAR+PLUS to selected service areas where the potential for success appears good.
- Enhancement of the PCCM Model to allow for tighter management and more widespread care coordination.
- Piloting and evaluating the proposed Enhanced PCCM – Medical Home model with one to three interested regions.
- Retain the ICM model in Dallas and Tarrant Service Areas until its effectiveness can be evaluated, unless HHSC receives waiver approval that would allow inpatient care to be included in STAR+PLUS without penalty to the hospitals. If such a waiver is obtained, we recommend converting the ICM program to the STAR+PLUS model.

### **Expansion of STAR+PLUS**

In integrating medical and long-term services and supports for the ABD population, STAR+PLUS has been an important evolution in care. Quality reports are generally positive – if not raving – about the care provided through the program. To date, plans have been able to meet their contractual requirements to reduce inpatient utilization by at

least 22 percent. It remains to be seen whether this level of savings can be sustained over time. Early success, however, suggests that similar health plan incentives for reduced nursing home utilization might be worthy of consideration. The state should be careful to balance these incentives for cost reduction with balancing incentives linked to access and quality.

If HHSC is successful in obtaining its pending waiver application that will allow it to retain UPL dollars but place inpatient services within the STAR+PLUS program, we strongly urge the state to carve hospital inpatient services back into STAR+PLUS.

Both providers and consumers continue to be wary of capitated managed care, however, and generally opposed the program's recent expansion. Given the level of opposition, particularly from the provider community, we do not believe it is advisable to undertake a universal expansion of the STAR+PLUS program. We suggest instead that HHSC individually assess additional services areas for the likely cost effectiveness and feasibility of STAR+PLUS implementation. This may bring more counties and lives within STAR+PLUS while allowing plans to build on their current infrastructure and provider networks.

#### Enhancement of the PCCM Plan

In contrast to their opposition to capitated managed care, providers and consumers have a favorable opinion of the PCCM model. While it does not provide for as integrated of a care model as capitated managed care, or as rigorous management of utilization and cost, an enhanced PCCM model does carry lower administrative costs and provide each beneficiary with a primary care provider responsible for providing care. Targeted use of a) care management tools focused on high need and high cost beneficiaries; b) disease management where shown to be effective; and c) greater application in coverage policy based on medical evidence could improve both the quality of care provided and the cost effectiveness of the program. We recommend that, as part of the enhancement, the state contract with an experienced ASO to assist with the implementation and management of these strategies.

#### Pilot an Enhanced PCCM – Medical Home

Given the promise and current popularity of the concept of a Medical Home, we recommend that the state, at a minimum, undertake to pilot the Enhanced PCCM – Medical Home model in one to three willing regions of the state that do not currently participate in STAR+PLUS or the ICM Model. The Enhanced PCCM – Medical Home model should integrate and coordinate both acute and long-term care for participating beneficiaries. In doing so, HHSC could test whether utilizing the Medical Home approach can come close to the capitated managed care plans' benchmark of reducing inpatient utilization by 22 percent. As part of the model, we further recommend that the state build in incentives, such as a "gain-sharing" model<sup>70</sup> to providers to reduce other

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<sup>70</sup> A gain-sharing model allows providers and the state to share in any savings to the program. It is a popular concept with physicians, and has been tested by some managed care plans in the U.S. See Greene

utilization as well, in particular, nursing-facility usage. For this effort to be successful, it will be necessary for HHSC to find one or more willing and innovative regions that are committed to working with this model as a long-term strategy.

### Retain the ICM Model

While we generally would not recommend that the state support individualized models in areas across the state, we do believe that the ICM program is an important model to continue to pilot for the time being. This is particularly true given the opposition of providers to capitated managed care and the fear of the impact of such a model on the state's ability to maximize UPL dollars. As the ICM Model has only been implemented for a short period of time, and there have been considerable start-up issues, we recommend that HHSC continue to support the model and look for ways to improve it based on early indications and evaluations. We would not recommend rolling the model out to further communities unless and until the program proves its ability to both improve quality and contain costs for the program.

Our recommendation would change, however, if HHSC obtained a waiver allowing it to retain UPL dollars if inpatient care was carved back into STAR+PLUS without a negative impact on hospitals in the Dallas and Fort Worth Service Areas. Under this scenario, we recommend that the state cease the ICM model and instead implement STAR+PLUS in the Dallas and Fort Worth Service Areas.

### *2. Develop and Implement Programs with Significant Community Participation and Input.*

Time and again during our interviews with stakeholders in Texas and our interviews with state officials in other states, we heard the importance of working within particular regions of the state to develop the design model that will work best for that community. In expanding or enhancing current programs, it is essential to work within regions to ensure that the model designs will in fact improve the system. Therefore, we recommend that for each of the improvements described above, HHSC make a concerted effort to involve community participation and input from the start.

### *3. Understand the Care Coordination Needs of the Population*

Care coordination underlies each recommended model of care. Prior to implementing a care management initiative widely across any type of managed care model, we recommend HHSC conduct a detailed analysis of the care needs of the ABD population to determine the complexity of care being received and level of care coordination

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RA, Beckman HB and Mahoney T. "Beyond the Efficiency Index: Finding a Better Way to Reduce Overuse and Increase Efficiency in Physician Care", *Health Affairs* Web Exclusive, 27, no. 4 (2008): w250-w259 (Published online 20 May 2008).

required. Based on analysis of potential levels of care needed for clients, HHSC should make a determination, based on experience in other areas of the state – including STAR+PLUS and ICM areas – as to what the appropriate ratio of care coordinators are within a population based on the number of interactions per month with different levels of clients. Care coordination is the true hallmark of any managed care model and for any of the suggested models to work optimally, the client must receive sufficient levels of care management.

#### *4. Evaluate, Learn and Act*

Texas operates a broad array of program models for serving its ABD population – too many, perhaps. The range of programs, growing steadily over time, taxes HHSC. We recommend against pruning the program offerings quite yet, however, as the diversity of approaches gives HHSC a unique opportunity to study its programs to understand what works best relative to access, quality and cost metrics, where it works best, and why. Like most state Medicaid agencies, HHSC has not had the luxury to focus on program evaluation while it faces significant program management challenges day to day. A relatively minor investment in formal evaluation activity, however, will permit the state to determine where it is making its best investment in models to serve the ABD population. Armed with that knowledge, it will then be possible to determine whether certain models should be pursued in lieu of others.

#### **Conclusion**

As the state grapples with yet another budget crisis, it is increasingly important for HHSC to implement achievable models that improve care while containing cost growth. We recommend that HHSC move forward with a multi-pronged approach and improve on current managed care models. While there is reason to believe that providing improved managed care options in rural and urban areas currently lacking these program options today will improve both cost management and quality. None of the improvements are easy or quick; all will require a long-term commitment to improving the health system and working with regions across the state to implement the most advantageous care model.

**Appendix A**  
**Section 28A of S.B 10, 80<sup>th</sup> Legislature, Regular Session, 2007**

SECTION 28. (a) The Health and Human Services Commission shall conduct a study regarding the feasibility and cost-effectiveness of developing and implementing an integrated Medicaid managed care model designed to improve the management of care provided to Medicaid recipients who are aging, blind, or disabled or have chronic health care needs and are not enrolled in a managed care plan offered under a capitated Medicaid managed care model, including recipients who reside in:

(1) rural areas of this state; or

(2) urban or surrounding areas in which the Medicaid Star + Plus program or another capitated Medicaid managed care model is not available.

(b) Not later than September 1, 2008, the Health and Human Services Commission shall submit a report regarding the results of the study to the standing committees of the senate and house of representatives having primary jurisdiction over the Medicaid program.

**Appendix B**  
**Areas Participating in STAR and STAR+PLUS**

<b>STAR Service Area</b>	<b>Counties</b>
El Paso	El Paso, Hudspeth, Culberson
Lubbock	Lubbock, Lamb, Hale, Floyd, Crosby, Garza, Lynn , Terry, Hockley
San Antonio	Bexar, Kendall, Comal, Medina, Atacosa, Wilson, Guadalupe
Dallas	Dallas, Ellis ,Kaufman, Rockwall, Hunt, Collin, Navarro,
Fort Worth	Tarrant, Wise, Denton, Parker, Hood, Johnson
Houston	Harris, Fort Bend, Montgomery, Waller, Brazoria, Galveston
Austin	Travis, Burnet, Blanco, Hays, Caldwell, Bastrop, Lee, Williamson
Southeast Region of Texas	Chambers, Hardin, Jefferson, Liberty, Orange

<b>STAR + PLUS Service Area</b>	<b>Counties</b>
Nueces	Aransas, Bee, Calhoun, Jim Wells, Kleberg, Nueces, Refugio, San Patricio, Victoria
Bexar	Bexar, Kendall, Comal, Medina, Atascosa, Wilson, Guadalupe
Harris/Harris Expansion	Harris, Fort Bend, Montgomery, Waller, Brazoria, Galveston
Travis	Travis, Burnet, Hays, Caldwell, Bastrop, Lee, Williamson

**Appendix C**  
**Stakeholder Interview List**

State Staff: Health and Human Services Commission  
Department of Aging and Disability Services  
Legislative staff

Health Plans: Amerigroup  
Evercare  
Superior

Other State Vendors: TMHP  
Schaller Anderson  
McKesson

Providers: Hendricks Health System, Abilene, TX  
Texas Medical Association  
Texas Hospital Association  
Texas Organization of Rural Community Hospitals  
Texas Association of Home Care  
Texas Health Care Association  
Texas Assisted Living Association  
Texas Council Community MHMR  
Texas Association of Community Health Centers  
Texas Association of Public Nonprofit Hospitals

Advocates: Coalition of Texans with Disabilities  
Advocacy, Inc  
Texas Council on Developmental Disabilities  
Texas Mental Health Consumers  
AARP  
Center for Public Policy Priorities  
Texas Conservative Coalition



**Appendix D**  
**Eligibility Data Used in the Analysis of the Cost Effectiveness of Existing HHSC**  
**Programs Serving the ABD Population**

**Understanding the Eligibility Data**

*FFS*

We had to make some adjustments to the eligibility data to ensure that they aligned with the claims data. When analyzing the FFS eligibility data, we removed the QMB/SLMB population that is not dual eligible from the total member months, because Medicaid only pays the Medicare premiums for these individuals. In addition, we identified the illegal aliens, so we could remove them from projections of the population that could be moved into managed care. We identified those beneficiaries residing in nursing homes, as STAR+PLUS is not available to individuals residing in long-term institutional care.

	<b>Summary of FFS Eligibility Data</b>				
	<b>Fee for Service Member Months (MM)</b>				
	<b>2007</b>	<b>2006</b>	<b>2005</b>	<b>2004</b>	<b>2003</b>
Total FFS MM	7,112,547	7,186,664	7,373,955	7,053,707	6,779,723
Non-dual QMB/SLMB	22,611	29,600	22,154	10,244	21,826
Illegal Aliens	12,617	10,969	9,352	7,658	6,619
Total FFS MM non-dual QMB/SLM removed and illegal aliens removed	7,077,319	7,146,095	7,342,449	7,035,805	6,751,278
FFS Aged	3,607,630	3,711,201	3,607,431	3,544,446	3,475,641
FFS Blind and Disabled	3,469,689	3,445,863	3,744,370	3,499,017	3,282,256
FFS Aged Dual	3,607,621	3,705,772	3,602,494	3,540,343	3,472,159
FFS Blind and Disabled Dual	1,599,285	1,576,913	1,455,940	1,346,866	1,227,931
FFS Aged Dual – percent	100%	100%	100%	100%	100%
FFS Blind and Disabled Dual – percent	46%	46%	39%	39%	37%
Total Nursing Home FFS with non-dual QMB/SBL removed	847,781	843,260	853,674	850,356	855,632
FSS Nursing Home Aged	701,588	704,205	716,134	721,165	728,874
FFS Nursing Home Blind and Disabled	146,193	139,055	137,540	129,191	126,758

*PCCM*

There are many fewer member months in the historical PCCM data (only 842,031 in 2007) than in FFS. This is due to the fact that the PCCM program only covers the blind and disabled populations. Additionally, it was not expanded statewide until September 2005. Currently, the PCCM program only operates in areas in which STAR+PLUS or ICM does not operate.

**Summary of PCCM Eligibility Data**

	<b>2007</b>	<b>2006</b>	<b>2005</b>	<b>2004</b>	<b>2003</b>
Total PCCM MM	842,031	968,503	327,919	286,890	249,857
PCCM Nursing Home	2,132	1,765	439	315	299
Non-Nursing Home PCCM	836,959	962,906	324,862	283,943	247,470
Other PCCM	2,940	3,832	2,618	2,632	2,088
Dual	4,656	8,178	971	918	868
Percent Dual	0.6%	0.8%	0.3%	0.3%	0.3%

*STAR+PLUS*

STAR+PLUS was operable only in Harris County until 2007. In January 2007 the STAR+PLUS Service Areas expanded to include the following Service Areas and counties.

**STAR+PLUS Service Areas**

**Bexar Service Area**

Atascosa, Bexar, Comal, Guadalupe, Kendall, Medina and Wilson

**Harris/Harris Expansion Service Area**

Brazoria, Fort Bend, Galveston, Harris, Montgomery and Waller

**Nueces Service Area**

Aransas, Bee, Calhoun, Jim Wells, Kleberg, Nueces, Refugio, San Patricio and Victoria

**Travis Service Area**

Bastrop, Burnet, Caldwell, Hays, Lee, Travis and Williamson

With the expansion, the STAR+PLUS annual member months doubled from 687,350 in 2006 to 1,298,082 in 2007. It should be noted that, because the Texas state fiscal year begins in September, the fiscal year 2007 data below includes only seven months of experience for the expansion areas. As such, the data for fiscal year 2007 should be viewed with this in mind.

**Summary of STAR+PLUS Eligibility Data**

	<b>2007</b>	<b>2006</b>	<b>2005</b>	<b>2004</b>	<b>2003</b>
STAR+PLUS	1,298,082	687,350	648,264	626,464	608,002
STAR+PLUS Nursing Home	2,995	1,405	1,299	1,122	1,047
Non-Nursing Home					
STAR+PLUS	1,293,859	685,475	646,437	624,813	606,624
Other STAR+PLUS	1,228	470	528	529	331
STAR+PLUS Aged	475,445	271,099	262,735	257,390	254,057
STAR+PLUS Blind and Disabled	822,637	416,251	385,529	369,074	353,945
STAR+PLUS Aged Duals	462,125	263,329	254,790	249,585	244,667
STAR+PLUS Blind and Disabled Duals	226,736	107,978	101,759	96,852	90,308
STAR+PLUS Percent Aged Duals	97%	97%	97%	97%	96%
STAR+PLUS Percent Blind and Disabled Duals	28%	26%	26%	26%	26%
STAR+PLUS Aged Nursing Home	1,869	783	815	698	653
STAR+PLUS Nursing Home Blind and Disabled	1,126	622	484	424	394

*STAR*

The STAR program is available to blind and disabled members on a voluntary basis.

**Summary of STAR Eligibility Data**

	<b>2007</b>	<b>2006</b>	<b>2005</b>	<b>2004</b>	<b>2003</b>
STAR MM	373,287	338,608	292,555	243,804	207,750
STAR Nursing Home	790	611	471	518	524
Non-Nursing Home STAR	370,649	335,860	289,745	241,299	205,782
Other STAR	1,848	2,137	2,339	1,987	1,444
STAR Dual	1416	2499	1638	1555	1040
STAR Percentage Dual	0.4%	0.7%	0.6%	0.6%	0.5%

**Appendix E**  
**STAR+PLUS MCO Financial Experience**

<b>AMERIGROUP Texas, Inc.</b>	<b>Fiscal Year 2003</b>	<b>Fiscal Year 2004</b>	<b>Fiscal Year 2005</b>	<b>Fiscal Year 2006</b>
Harris County (\$PMPM)				
Medicaid Only:				
Acute Care Premiums	\$569.72	\$672.08	\$726.54	\$780.21
Acute Care Medical Expenses	\$586.75	\$587.63	\$606.36	\$602.77
Premiums > Medical Expenses	(\$17.03)	\$84.45	\$120.18	\$177.44
Acute Care MLR	103%	87%	83%	77%
Long-Term Care Premiums	\$115.82	\$145.00	\$150.32	\$121.17
Long-Term Care Medical Expenses	\$100.20	\$92.98	\$100.99	\$100.55
Premiums > Medical Expenses	\$15.62	\$52.02	\$49.33	\$20.62
Long-Term Care MLR	87%	64%	67%	83%
Dual Eligibility:				
Long-Term Care Premiums	\$209.57	\$264.77	\$280.08	\$259.84
Long-Term Care Medical Expenses	\$184.56	\$188.93	\$196.36	\$190.27
Premiums > Medical Expenses	\$25.01	\$75.84	\$83.72	\$69.57
Long-Term Care MLR	88%	71%	70%	73%
Investment Income	\$0.95	\$0.68	\$1.58	\$2.49
Administrative Expenses	\$67.61	\$90.47	\$90.89	\$99.09
Net Income Before Taxes	(\$54.61)	\$16.37	\$37.87	\$39.45
Overall Medical Loss Ratio	97%	80%	78%	77%
Administrative Expenses to total Premiums	15%	17%	16%	17%
Total Member Months	255,941	265,089	281,622	303,299
Medicaid Only	125,516	132,545	142,667	156,951
Dual Eligibility	130,425	132,544	138,955	146,348

<b>EVERCARE</b>	<b>Fiscal Year 2003</b>	<b>Fiscal Year 2004</b>	<b>Fiscal Year 2005</b>	<b>Fiscal Year 2006</b>
Harris County (\$PMPM)				
Medicaid Only:				
Acute Care Premiums	\$550.42	\$624.28	\$660.19	\$724.94
Acute Care Medical Expenses	\$541.66	\$608.83	\$659.26	\$741.53
Premiums > Medical Expenses	\$8.76	\$15.45	\$0.92	(\$16.59)
Acute Care MLR	98%	98%	100%	102%
Long-Term Care MLR	95%	76%	85%	101%
Dual Eligibility:				
Long-Term Care Premiums	\$193.34	\$247.28	\$243.38	\$239.72
Long-Term Care Medical Expenses	\$157.59	\$152.78	\$147.44	\$156.40
Premiums > Medical Expenses	\$35.75	\$94.50	\$95.94	\$83.32
Long-Term Care MLR	82%	62%	61%	65%
Investment Income	\$0.45	\$0.00	\$0.00	\$0.00
Administrative Expenses	\$49.94	\$65.78	\$61.33	\$62.12
Net Income Before Taxes	(\$22.48)	\$9.55	\$4.73	(\$19.94)
Overall MLR	93%	83%	86%	91%
Administrative Expenses to Total Premiums	13%	15%	13%	13%
Member Months				
Medicaid Only	140,085	144,503	145,093	156,814
Dual Eligibility	212,201	216,634	221,384	227,190

**Harris Service Delivery Area**

	<b>AMERIGROUP Texas, Inc.</b>		<b>EVERCARE OF TEXAS STAR+PLUS</b>		<b>Molina Healthcare of Texas</b>	
	<b>Feb 2007</b>	<b>Sept 2007</b>	<b>Feb 2007</b>	<b>Sept 2007</b>	<b>Feb 2007</b>	<b>Sept 2007</b>
	<b>Aug 2007</b>	<b>May 008</b>	<b>Aug 2007</b>	<b>May 2008</b>	<b>Aug 2007</b>	<b>May 2008</b>
Premium \$PMPM (HHSC Capitation):						
Medicaid Only	\$482.35		\$482.28		\$486.02	
Medicaid Only 1915(c) Nursing Facility Waiver	\$2,475.63		\$2,476.21		\$2,477.81	
Nursing Facility - Medicaid Only	\$480.98		\$479.80		\$484.64	
Dual Eligible	\$193.09		\$193.09		\$193.09	
Dual Eligible 1915(c) Nursing Facility Waiver	\$1,448.88		\$1,448.88		\$1,448.88	
Nursing Facility - Dual Eligible	\$193.09		\$193.09		\$193.09	
<b>Total Premium \$PMPM</b>	<b>\$417.69</b>	<b>\$459.63</b>	<b>\$385.32</b>	<b>\$435.46</b>	<b>\$389.52</b>	<b>\$442.97</b>
Member Months:						
Medicaid Only						
Medicaid Only 1915(c) Nursing Facility Waiver	3,067		2,997		58	
Nursing Facility - Medicaid Only						
Dual Eligible						
Dual Eligible 1915(c) Nursing Facility						
Nursing Facility - Dual Eligible						
<b>Total Member Months</b>						
Total Medical Expense \$PMPM:						
Medicaid Only	\$337.06		\$521.52		\$414.50	
Medicaid Only 1915(c) Nursing Facility Waiver	\$2,221.28		\$2,193.30		\$1,359.01	
Nursing Facility - Medicaid Only	\$258.49		\$803.91		\$418.03	
Dual Eligible	\$214.44		\$127.65		\$123.48	
Dual Eligible 1915(c) Nursing Facility Waiver	\$0.79		\$1,138.91		\$1,201.64	
Nursing Facility - Dual Eligible	\$0.00		\$96.20		\$51.60	
<b>Total Medical Exp. \$PMPM</b>	<b>\$301.45</b>	<b>\$330.58</b>	<b>\$352.36</b>	<b>\$388.50</b>	<b>\$314.47</b>	<b>\$292.01</b>
Medical Loss Ratios:						
Medicaid Only	70%		108%		85%	
Medicaid Only 1915(c) Nursing Facility	90%		89%		55%	

**Harris Service Delivery Area**

	<b>AMERIGROUP Texas, Inc.</b>		<b>EVERCARE OF TEXAS STAR+PLUS</b>		<b>Molina Healthcare of Texas</b>	
	<b>Feb 2007</b>	<b>Sept 2007</b>	<b>Feb 2007</b>	<b>Sept 2007</b>	<b>Feb 2007</b>	<b>Sept 2007</b>
	-	-	-	-	-	-
	<b>Aug 2007</b>	<b>May 008</b>	<b>Aug 2007</b>	<b>May 2008</b>	<b>Aug 2007</b>	<b>May 2008</b>
Waiver						
Nursing Facility - Medicaid Only	54%		168%		86%	
Dual Eligible	111%		66%		64%	
Dual Eligible 1915(c) Nursing Facility Waiver	0%		79%		83%	
Nursing Facility - Dual Eligible	0%		50%		27%	
<b>Total Medical Loss Ratio</b>	<b>72%</b>	<b>72%</b>	<b>91%</b>	<b>89%</b>	<b>81%</b>	<b>66%</b>
Administrative Expense to Premiums	18%	12%	11%	11%	14%	15%
<b>Net Income to Total Revenues</b>	<b>11%</b>	<b>17%</b>	<b>-3%</b>	<b>-0.5%</b>	<b>6%</b>	<b>20%</b>

**Bexar Service Delivery Area**

	<b>AMERIGROUP Texas, Inc.</b>		<b>Molina Healthcare of Texas</b>		<b>Superior HealthPlan, Inc</b>	
	<b>Feb 2007</b>	<b>Sept 2007</b>	<b>Feb 2007</b>	<b>Sept 2007</b>	<b>Feb 2007</b>	<b>Sept 2007</b>
	-	-	-	-	-	-
	<b>Aug 2007</b>	<b>May 008</b>	<b>Aug 2007</b>	<b>May 2008</b>	<b>Aug 2007</b>	<b>May 2008</b>
Premium \$PMPM (HHSC Capitation):						
Medicaid Only	\$388.93		\$388.93		\$388.93	
Medicaid Only 1915(c) Nursing Facility Waiver	\$2,755.92		\$2,755.92		\$2,755.92	
Nursing Facility - Medicaid Only	\$388.93		\$388.93		\$388.93	
Dual Eligible	\$251.00		\$251.00		\$251.00	
Dual Eligible 1915(c) Nursing Facility Waiver	\$1,704.75		\$1,704.75		\$1,704.75	
Nursing Facility - Dual Eligible	\$251.00		\$251.00		\$251.00	
<b>Total Premium \$PMPM</b>	<b>\$397.97</b>	<b>\$434.48</b>	<b>\$379.55</b>	<b>\$414.90</b>	<b>\$423.47</b>	<b>\$471.63</b>
Member Months:						
Medicaid Only	19,928		15,512		75,187	
Medicaid Only 1915(c) Nursing Facility Waiver	353		297		1,848	
Nursing Facility - Medicaid Only	50		31		110	
Dual Eligible	32,975		40,124		54,793	

**Bexar Service Delivery Area**

	<b>AMERIGROUP Texas, Inc.</b>		<b>Molina Healthcare of Texas</b>		<b>Superior HealthPlan, Inc</b>	
	<b>Feb 2007</b>	<b>Sept 2007</b>	<b>Feb 2007</b>	<b>Sept 2007</b>	<b>Feb 2007</b>	<b>Sept 2007</b>
	-	-	-	-	-	-
	<b>Aug 2007</b>	<b>May 008</b>	<b>Aug 2007</b>	<b>May 2008</b>	<b>Aug 2007</b>	<b>May 2008</b>
Dual Eligible 1915(c) Nursing Facility Waiver	3,251		3,273		6,085	
Nursing Facility - Dual Eligible	367		243		328	
<b>Total Member Months</b>	<b>56,924</b>	<b>75,838</b>	<b>59,480</b>	<b>81,361</b>	<b>138,351</b>	
<b>Total Medical Expense \$PMPM</b>						
Medicaid Only	\$480.31		\$318.81		\$371.18	
Medicaid Only 1915(c) Nursing Facility Waiver	\$1,717.78		\$1,520.91		\$1,906.20	
Nursing Facility - Medicaid Only	\$187.70		\$422.64		\$999.55	
Dual Eligible	\$238.66		\$192.08		\$214.55	
Dual Eligible 1915(c) Nursing Facility Waiver	\$1.03		\$1,249.91		\$1,418.48	
Nursing Facility - Dual Eligible	\$0.00		\$116.10		\$126.25	
<b>Total Medical Expense \$PMPM</b>	<b>\$317.27</b>	<b>\$316.89</b>	<b>\$289.79</b>	<b>\$287.34</b>	<b>\$375.63</b>	<b>\$422.81</b>
Medical Loss Ratios:						
Medicaid Only	124%		82%		95%	
Medicaid Only 1915(c) Nursing Facility Waiver	62%		55%		69%	
Nursing Facility - Medicaid Only	48%		109%		257%	
Dual Eligible	95%		77%		86%	
Dual Eligible 1915(c) Nursing Facility Waiver	0%		73%		83%	
Nursing Facility - Dual Eligible	0%		46%		50%	
<b>Total Medical Loss Ratio</b>	<b>80%</b>	<b>73%</b>	<b>76%</b>	<b>69%</b>	<b>89%</b>	<b>89.6%</b>
Administrative Expense to Premiums	17%	14.1%	15%	16%	10%	11%
<b>Net Income to Total Revenues</b>	<b>4%</b>	<b>13.4%</b>	<b>9%</b>	<b>16%</b>	<b>1%</b>	<b>-0.6%</b>



**Nueces Service Delivery Area**  
**EVERCARE OF Superior HealthPlan,**  
**TEXAS STAR+PLUS Inc.**

	<u>Feb 2007</u>	<u>Sept 2007</u>	<u>Feb 2007</u>	<u>Sept 2007</u>
	-	-	-	-
	<u>Aug 2007</u>	<u>May 2008</u>	<u>Aug 2007</u>	<u>May 2008</u>
Premium \$PMPM (HHSC Capitation):				
Medicaid Only	\$453.61		\$453.61	
Medicaid Only 1915(c) Nursing Facility Waiver	\$2,689.23		\$2,689.23	
Nursing Facility - Medicaid Only	\$453.61		\$453.61	
Dual Eligible	\$311.35		\$311.35	
Dual Eligible 1915(c) Nursing Facility Waiver	\$1,666.27		\$1,666.27	
Nursing Facility - Dual Eligible	\$311.35		\$311.35	
<b>Total Premium \$PMPM</b>	<b>\$484.10</b>	<b>\$549.44</b>	<b>\$515.37</b>	<b>\$579.36</b>
Member Months:				
Medicaid Only	15,810			
Medicaid Only 1915(c) Nursing Facility Waiver	465			
Nursing Facility - Medicaid Only	60			
Dual Eligible	27,030			
Dual Eligible 1915(c) Nursing Facility Waiver	3,525			
Nursing Facility - Dual Eligible	228			
<b>Total Member Months</b>	<b>47,118</b>	<b>63,948</b>		
<b>Total Medical Expense \$PMPM</b>				
Medicaid Only	\$442.28		\$482.69	
Medicaid Only 1915(c) Nursing Facility Waiver	\$2,164.84		\$1,766.58	
Nursing Facility - Medicaid Only	\$1,037.26		\$711.43	
Dual Eligible	\$240.59		\$301.77	
Dual Eligible 1915(c) Nursing Facility Waiver	\$1,350.77		\$1,321.07	
Nursing Facility - Dual Eligible	\$36.82		\$119.44	
<b>Total Medical Expense \$PMPM</b>	<b>\$410.34</b>	<b>\$455.25</b>	<b>\$483.55</b>	<b>\$533.92</b>
Medical Loss Ratios:				
Medicaid Only	98%		106%	
Medicaid Only 1915(c) Nursing Facility Waiver	81%		66%	

**Nueces Service Delivery Area**  
**EVERCARE OF Superior HealthPlan,**  
**TEXAS STAR+PLUS Inc.**

	<b>Feb 2007</b>	<b>Sept 2007</b>	<b>Feb 2007</b>	<b>Sept 2007</b>
	-	-	-	-
	<b>Aug 2007</b>	<b>May 2008</b>	<b>Aug 2007</b>	<b>May 2008</b>
Nursing Facility - Medicaid Only	229%		157%	
Dual Eligible	77%		97%	
Dual Eligible 1915(c) Nursing Facility Waiver	81%		79%	
Nursing Facility - Dual Eligible	12%		38%	
<b>Total Medical Loss Ratio</b>	<b>85%</b>	<b>83%</b>	<b>94%</b>	<b>92%</b>
Administrative Expense to Premiums	13%	11%	11%	12%
<b>Net Income to Total Revenues</b>	<b>2%</b>	<b>6%</b>	<b>-5%</b>	<b>-4%</b>

**Travis Service Delivery Area**

	<b>AMERIGROUP</b>		<b>EVERCARE STAR+PLUS</b>	
	<b>Feb 2007</b>	<b>Sept 2007</b>	<b>Feb 2007</b>	<b>Sept 2007</b>
	-	-	-	-
	<b>Aug 2007</b>	<b>May 2008</b>	<b>Aug 2007</b>	<b>May 2008</b>
Premium \$PMPM (HHSC Capitation):				
Medicaid Only	\$350.21		\$350.21	
Medicaid Only 1915(c) Nursing Facility Waiver	\$2,773.48		\$2,773.48	
Nursing Facility - Medicaid Only	\$350.21		\$350.21	
Dual Eligible	\$222.32		\$222.32	
Dual Eligible 1915(c) Nursing Facility Waiver	\$1,714.77		\$1,714.77	
Nursing Facility - Dual Eligible	\$222.32		\$222.32	
<b>Total Premium \$PMPM</b>	<b>\$415.09</b>	<b>\$443.39</b>	<b>\$398.89</b>	<b>\$429.37</b>
Member Months:				
Medicaid Only				
Medicaid Only 1915(c) Nursing Facility - Medicaid Only				
Dual Eligible				
Dual Eligible 1915(c) Nursing Facility - Dual Eligible				

**Travis Service Delivery Area**

<b>AMERIGROUP</b>		<b>EVERCARE STAR+PLUS</b>	
<b>Feb 2007</b>	<b>Sept 2007</b>	<b>Feb 2007</b>	<b>Sept 2007</b>
-	-	-	-
<b>Aug 2007</b>	<b>May 2008</b>	<b>Aug 2007</b>	<b>May 2008</b>

**Total Member Months**

**Total Medical Expense \$PMPM:**

Medicaid Only	\$363.86		\$296.95	
Medicaid Only 1915(c) Nursing Facility Waiver	\$2,513.57		\$2,321.21	
Nursing Facility - Medicaid Only	\$103.69		\$490.10	
Dual Eligible	\$294.15		\$117.87	
Dual Eligible 1915(c) Nursing Facility Waiver	\$0.63		\$1,522.45	
Nursing Facility – Dual Eligible	\$0.00		\$46.75	
<b>Total Medical Expense \$PMPM</b>	<b>\$336.92</b>	<b>\$391.29</b>	<b>\$298.07</b>	<b>\$287.03</b>
Medical Loss Ratios:				
Medicaid Only	104%		85%	
Medicaid Only 1915(c) Nursing Facility Waiver	91%		84%	
Nursing Facility - Medicaid Only	30%		140%	
Dual Eligible	132%		53%	
Dual Eligible 1915(c) Nursing Facility Waiver	0%		89%	
Nursing Facility – Dual Eligible	0%		21%	
<b>Total Medical Loss Ratio</b>	<b>81%</b>	<b>88%</b>	<b>75%</b>	<b>67%</b>
Administrative Expense to Premiums	11%	9%	12%	13%
<b>Net Income to Total Revenues</b>	<b>8%</b>	<b>3%</b>	<b>13%</b>	<b>21%</b>