Evaluation of Florida's Medicaid Prepaid Mental Health Plans: Year 6 Report

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June 2003

Louis de la Parte Florida Mental Health Institute
University of South Florida

Submitted to the Florida Agency for Health Care Administration as a deliverable under contract M0308.

Table of Contents

Cover Page i
Table of Contents ii
List of Tables iv
List of Figures iv

Executive Summary I

Introduction 1
The Context: Florida's Medicaid Managed Care Strategies 2
The Prepaid Mental Health Demonstrations 2
Evaluation Design and Methods 4
Sub-studies Comprising the Evaluation 5

Area 1: The Continuing Development of the Prepaid Mental Health Interventions 6
Background 6
Behavioral Health Market 6
Other Initiatives in Area 1 6
Implementation Analysis 7
Methods 7
Area 1 Structures 7
Findings 10
Child Case Study 12
Methods 12
Findings 13
Area 1 Implementation Summary 14
Characteristics of the Enrolled Population 16
Access to Services 18
Use of Mental Health Services 18
Access to Pharmaceuticals 19
Unmet Need for Services from the Population Based Mail Survey 19
Costs of Services 21
Outcomes of Care 23
Administrative Data: Measures for Children 24
Administrative Data: Measures for Adults 25
Mail Survey Data 26

Summary and Conclusions of Area 1 Evaluation Results 30
Recommendations for Area 1 32

Area Six: Year Six Evaluation of the Prepaid Mental Health Program..........33
Area 6 Implementation Analysis 33
Methods....................................33
Structures 34
Contractual Relationships....................................36
Utilization Management 36
Management Information Systems (MIS) 37
Quality of Care....................................37
Co-Occurring Disorders 39
New Services....................................39
Integration of Primary and Mental Health Care....................................40
Pharmacy 40
Consumers and Families 41
Fiscal Impact on Community Mental Health Centers....................................41
Privatization of Child Welfare Services 41
Area 6 Implementation Summary 42
Characteristics of the Enrolled Population....................................43
Access to Services: Penetration Rates 45
Access Summary....................................48
Costs 49
Summary of Cost Analyses 52
Outcomes....................................52
Administrative Data: Measures for Children 52
Administrative Data: Measures for Adults....................................56
Mail Survey Longitudinal Results....................................57
Summary of Outcome Findings 58
Summary and Conclusions of the Year Six Evaluation in Area 6 59
Recommendations 60

Overall Recommendations 61

References....................................63

Appendix 1. Implementation Analysis Surveys 65
Appendix 2. Technical Appendix for the Administrative Data Analyses 71
Appendix 3. Representativeness of Outcome Data....................................94

List of Tables

Table 1. Financial Risk Arrangements....4
Table 2. PMPM Standard Costs by Category – First Four Months of Managed Care: Areas 1, 2 & 4; Case Mix Adjusted 22
Table 3. Summary of Differences between the Financing Conditions in Area 1..30
Table 4. Area 6 Contractual Relationships....36
Table 5. PMPM Standard Costs by Category: Areas 6 & 4; Case Mix Adjusted .51

List of Figures

Figure 1. Area 1 Funding Streams as of 4/03....9
Figure 2. Average Monthly Enrollment: Areas 1, 2, & 4....16
Figure 3. Proportion of SSI Enrollment: Areas 1, 2, & 4 17
Figure 4. Penetration Rates for Carve Out, Specialty and All Mental Health Services: Areas 1, 2 & 4 18
Figure 5. Average Number of Days in School for Children Served in Areas 1, 2 & 4 Using a Matched Sample for Three Years....25
Figure 6. Area 6 Funding Streams as of 4/03....35
Figure 7. Average Monthly Enrollment: Areas 6 & 4 43
Figure 8. Proportion of SSI Enrollment: Areas 6 & 4 44
Figure 9. Annual Penetration for Carve-Out Services Only: Areas 6 & 4 45
Figure 10. Annual Penetration for All Mental Health Services: Areas 6 & 4 46
Figure 11. Atypical Anti-psychotic Penetration for Adults with a Schizophrenia Diagnosis: Areas 6 & 4....47
Figure 12. SSRI Penetration for Adults with a Depression Diagnosis: Areas 6 & 4 48
Figure 13. PMPM Costs to AHCA for Carve-Out Services: Areas 6 & 4 49
Figure 14. PMPM Costs to AHCA for All Mental Health Services: Areas 6 & 4 50
Figure 15. Comparison of CGAS Scores for Matched Samples Across Three Fiscal Years: Areas 6, 4 & 7....53
Figure 16. Comparison of Days in School for Matched Samples Across Three Fiscal Years: Areas 6, 4 & 7....54
Figure 17. Comparison of Days in the Community for Matched Samples Across Three Fiscal Years: Areas 6, 4 & 7....55
Figure 18. Change in GAF by Group for a Matched Sample of Individuals: Areas 6, 4 & 7 56

Executive Summary

Overview of Evaluation

Florida's Agency for Health Care Administration (AHCA) began implementing managed behavioral health care in March 1996. For the past six years, under contract with AHCA, we, at the Louis de la Parte Florida Mental Health Institute (FMHI), have been conducting a series of integrated, multi-method evaluation projects designed to assess the effects of the Prepaid Mental Health Plan (PMHP) demonstrations on access, cost, quality, and outcomes of services relative to alternative managed care arrangements, and to the traditional financing arrangements that are in use in the rest of the state. In this report we present the findings for the more recently implemented demonstration project in the Florida Panhandle region, AHCA 1, as well as findings from year 6 of our continuing evaluation of the Prepaid Plan operating in AHCA Area 6, the Tampa Bay region.

In the evaluation, we continue to contrast the PMHPs and HMOs with comparison sites, where services continue to be paid for on a fee-for-service basis. Medicaid participants enrolled in the PMHPs in Areas 1 and 6 have their mental health benefits provided through a specialty behavioral health managed care organization that provides or arranges for all their mental health services through a network of providers. In this behavioral health "carve out" plan, the managed care organization is paid by AHCA through a risk adjusted, fixed monthly fee per enrollee. In the HMO financing condition, HMOs receive an integrated risk-adjusted premium to provide health (including medications) and the same mental health benefits as the PMHP for their enrollees. In some instances, the HMOs subcontract on a capitated basis with behavioral health organizations (BHOs) for the provision of their mental health benefits. In both Areas 1 and 6, the PMHPs and the HMOs are at financial risk for the mental health service utilization of their enrollees.

Implementation of Managed Care in AHCA Area 1

Area 1 began its implementation of the Medicaid Prepaid Plan in November 2001. Access Behavioral Health (ABH), a component of Lakeview Center, is the managed care organization for the PMHP. ABH subcontracts with the other providers on a subcapitated, risk adjusted basis and, in the first year, subcontracted with Value Options (VO) for certain administrative services. ABH terminated its contractual relationship with VO on January 1, 2003 and assumed the functions they previously performed.

HealthEase, which was purchased in August 2002 by Wellcare Health Plans, Inc. is the only Medicaid HMO operating in Escambia and Santa Rosa Counties in Area 1. In November 2001, HealthEase subcontracted with CompCare, a behavioral health organization (BHO), to provide behavioral health benefits to their enrollees. HealthEase terminated that relationship on January 1, 2003 and subcontracted on a fee-for-service basis with the same provider network of private licensed professionals that had been under contract with CompCare.

There have been benefits to the streamlining of the organizational structures in Area 1, including the sharing of resultant cost savings with ABH providers and the enhanced ability to integrate behavioral health and primary health care for HMO enrollees, now that the HMO administers both benefits. Also, while the Area 1 model of using a managing entity that is also a service provider could represent a potential conflict of interest, there has been no indication thus far, that ABH has been inequitable in its dealings with other providers. Nonetheless, this will be an area of continued focus in the evaluation.

This year a special study was conducted in Area 1 that focused on the impact of the implementation of the Medicaid waiver on children with severe emotional disturbance and their families. The first component focused on the degree to which services were culturally competent, child and family centered and community based. The second component examined treatment histories of children to determine if providers were following established treatment guidelines.

Services provided by the PMHP provider were found to be somewhat more culturally competent than those provided by the HMO network. They also had more individualized treatment plans that were based upon formal needs assessments than HMO provider treatment plans. Both provider networks provided case management services at convenient times and locations; however, other services offered in providers' offices made transportation to those services more of a problem for some families. Providers in both networks followed medication treatment guidelines, but family therapy, family education, or community support, as recommended, were the weakest outpatient treatment areas in both the PMHP and the HMO.

Access, Cost, and Outcomes

At this early stage of implementation, we found few discernable differences in the pre- and post implementation data, within financing conditions, related to enrollment, proportion of SSI enrollment, access to pharmaceuticals, enrollee self-reported indicators of access, health and mental health status, and outcomes. There are however, consistent pre and post implementation differences between the HMO and PMHP with the HMO having a lower average monthly enrollment, a lower proportion of SSI enrollees, lower rates of service penetration and lower service costs than the PMHP. Also, results of enrollee self-reports indicate a higher rate of satisfaction with the PMHP (and fee-for-service) than the HMO.

Area 1 Conclusions

An important feature of the Area 1 demonstration is that ABH and the HMO are using provider networks that are very different. ABH subcontracts with comprehensive centers while the HMO contracts with individual professionals. The different networks are likely using different clinical guidelines and procedures. This became especially apparent in the efforts to locate sufficient numbers of children and their families that

were receiving targeted case management from the HMO network for the child case study. In our evaluation, it will be important to continue assessing any differences in satisfaction or outcomes that are experienced by individuals, especially children with SED and their families, who are served by these dissimilar networks.

Area 6 Continuation Evaluation

Consistent with previous years' findings, there have been no changes in the organizational and financial relationships in the Prepaid Plan during 2002-2003. However, there were four changes in HMO relationships during that same time period with three HMOs being acquired by other HMOs and one HMO terminating their relationship with a BHO.

There are several features of the PMHP in Area 6 that are noteworthy, e.g., the Management Information Systems (MIS), implementation of clinical guidelines, and pharmacy management methods. However, while the Area 6 PMHP and HMO financing conditions have matured since 1996, there are still areas that have not advanced to their fullest potential. Some of the management information systems could be improved to more fully integrate information and new and creative services could be implemented.

Access to Services

For the first time, we see a convergence in the penetration rate for carve out services between the HMO and the PMHP. We also see convergence among the HMOs, the PMHP and MediPass in Area 4 regarding access to pharmaceuticals (i.e., SSRIs, Atypicals Antipsychotics) for people with depression and schizophrenia. The convergence in service use reflects the gradual increase in HMO rates over time, while rates have remained flat in the PMHP condition. Rates of service use for the managed care conditions remain substantially below those for the MediPass comparison area, however. The more comprehensive capitation premium associated with the HMO condition seems to depress utilization of services – even for those services outside of the capitation rate.

Costs of Services

Our cost analyses continue to indicate that the cost containment objectives of the intervention appear to have been met. Furthermore, the greater the service coverage for the capitated payment, the greater the costs are controlled – even for services outside of the payment. More comprehensive premiums result in greater overall cost control.

Outcomes of Services

Unlike last year, we do not see a strong and consistent pattern of differences across comparisons that would lead us to conclude that persons served in the managed care conditions have significantly different outcomes than persons served in the fee-for-

service condition. However, the outcome analyses this year are restricted to individuals for whom we have multiple years of data. These 'long stayers' might represent individuals who are relatively more engaged with the service system than persons who either responded to only one mail survey and/or did not have multiple clinic-based outcome assessments over time.

Area 6 Summary and Conclusions

The results of the sixth year evaluation document the continuing maturation of the managed care demonstrations. Perhaps the most persistent implementation theme is the nearly continuous change in the HMO business arrangements, which contrasts sharply with the stable configuration of the FHP. Another recurring theme involves the simplification of the HMO business arrangements and the increasing use of capitation at the provider level, giving providers greater predictability in their earnings and greater flexibility in planning their service array.

The ability of the providers to assume risk and manage utilization has come at a cost, however. They report having to add administrative staff and to incur MIS related costs to manage these functions. They also report developing a more flexible array of services for their Medicaid recipients, which was an original goal of capitated, managed care arrangements.

Differences in *overall costs* continue to characterize the conditions. We conclude that the managed care conditions have contained costs overall and that the greater the degree of management, the greater the overall cost savings to AHCA. Using a standard cost table (not what the plans actually paid) and data on service use and intensity, standard cost analyses show that the HMO enrollees' use about 38% fewer carve-out services than PMHP enrollees on a case mix adjusted and PMPM basis. Substantial overall differences in the intensity of services provided are clearly seen with PMHP enrollees receiving more services. Enrollees in both of the managed care conditions use significantly fewer services than persons served in the MediPass Area 4 comparison condition.

Although this year's outcomes analyses involved a somewhat different group of individuals than those included last year, we find that, with some minor exceptions, persons in the managed care conditions are doing as well, or better, than individuals in the comparison conditions in their health, mental health and functional status.

As these interventions have matured, therefore, we have seen a simplification of organizational arrangements, greater risk and autonomy at the provider level and a convergence of practice patterns for pharmacy across conditions. Within the restrictions of our outcome assessment tools, we have not seen a decrement in outcomes that are associated with the decrease in cost.

Recommendations

Clearly, the programs in Area 6 and Area 1 are at different stages of development and confront different challenges.

In Area 1 we recommend that AHCA

- Continue careful monitoring of the ABH arrangements to assure that any potential conflict of interest between its managing role and its role as a provider does not occur.

- Continue to evaluate the adequacy of the provider network that is available to HMO enrollees in Area 1.

- Provide oversight for the implementation of evidence based treatment protocols throughout both of the managed care conditions.

In Area 6 we have no specific recommendations for action by AHCA except to implement safeguards so that HMO/BHOs do not require enrollees to formally request services prior to an ongoing provider initiating a request for service. This was happening in Area 6 this past year for a period of time and it only further frustrates access to care.

Overall Recommendations

Our recommendations this year are couched in the understanding that Florida intends to implement prepaid behavioral health plans statewide by 2006, or earlier.

- It is essential that AHCA, in collaboration with DCF, maintain active oversight of the implementation. Knowledge gained from current implementations should be employed to avoid repeating common problems.

- Care should be exercised to assure that the managed care vendors have access to providers who are experienced with individuals who have severe and disabling behavioral health disorders.

- Cost containment objectives are best realized by including more types of services in the capitation payment. The more services or populations 'carved out' of the capitation, the greater the ability to shift costs from the managed care organizations to the state and the more fragmented the service system becomes. Aggressive monitoring of the most vulnerable populations should be used to assure access to care.

- The inclusion of substance abuse services in the proposed capitation arrangement is appealing since it holds the promise for better integration of

services. However, we have seen from our analysis of the HMO condition that integrating premiums does not automatically integrate services. Leadership in the adoption of integrated treatment models for persons with dual disorders should be an important state role.

- AHCA should reinforce the provision of flexible, consumer driven services within an evidence based framework. Strategies that emphasize the benefit of flexible, assured payment should be used to facilitate their development.

- Start-up costs for implementing managed care arrangements should not be underestimated. Without adequate capitalization and time, the initial years of managed care will likely result in service disruptions and confusion.

- Management information systems at the MCOs and providers are essential for the successful management of capitated programs. Any assistance in promoting their development will greatly enhance the quality and accountability of the managed care programs.

- Systematic program evaluation is essential for program development

- DCF should be actively engaged in the development of the pre-paid plans. All efforts should be made to coordinate existing ADM and Child Welfare services with the plans since they are intrinsically dependent upon one another for their success. Other aspects of state government (e.g., Juvenile Justice, Education, and Health) should also be considered when developing the programs.

- Capitating poorly funded programs is always a risky proposition. Efforts to assess the overall adequacy of the service continuum and the competency of service provision continue to be extremely important. Setting a service floor, below which we cannot venture, is an important component of developing a competent system.

It is, perhaps, this last point that is most important. Florida has a very leanly funded specialty behavioral health system – among the poorest in the nation. Management innovations like the pre-paid plans hold the promise of increasing the efficiency and effectiveness of services delivered. However, these management functions also require investments and oversight. Shifting the risk away from the state and onto private provider networks will contain costs within budget lines, but may simply shift costs onto families and communities. It is critical that all the key stakeholders in our behavioral health system be involved in the development and oversight of these plans and that we use novel regulatory strategies that focus on the performance of the managed care entities in access to services, quality of services and the outcomes that are ultimately obtained. Assuring adequate levels of payment is essential for the success of this endeavor.

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Introduction

Behavioral health expenditures are an important component of national health expenditures - comprising approximately 8% of all personal health expenditures in 1997 (Mark, Coffey, King, Harwood, McKusick, Genuardi, Dilonardo, & Buck, 2000). Public sector payers, with Medicaid primary among them, provide the majority of these resources.

Motivated by a complex set of concerns with the cost, quality and access of Medicaid services, states increasingly turned to managed care strategies in the 1990's in an attempt to address many of these issues. Hanson and Huskamp (2001) report that this move resulted in 56% of Medicaid beneficiaries enrolled in managed care plans by 1999. However, late in the decade, the growth of managed care enrollment began to falter with HMOs exiting the market (HMOs Show First Annual Decrease, 2001). In part, these changes may reflect purchaser dissatisfaction with these plans relative to the range of policy objectives that originally motivated the move to managed care (Brown, Wooldridge, Hoag & Moreno, 2001). Those policy objectives included the hope of improving information capacity to help manage health services, improving adherence to evidence based protocols, or net cost savings to states and communities (Sullivan, 2000; Chitayat & Lewis, 2001; Wooldridge & Hoag, 2000).

As noted in the year 4 report (Shern, et al., 2001), we have entered an era in which we must re-examine and clarify the objectives that originally motivated the use of at-risk, managed care strategies. Many of the problems that motivated the change in financing, continue to plague our health systems today. The need to better understand the relationships between expenditures, access to and quality of care, and consumer outcomes are no less real today than early in the 1990's. We have come to appreciate that changes in financing mechanisms, which promised flexibility in the provision of services, have had some advantages. We must capitalize on these advantages while continuing to explore new strategies to address the chronic problems that have plagued our public behavioral health care systems for decades.

It is in this context that we have been studying the implementation of managed care programs in Florida for the last six years. Focusing first on pre-paid mental health programs in the Tampa area, we expanded our analyses to include the implementation of a second prepaid demonstration initiated by the Agency for Healthcare Administration (AHCA) in AHCA Area 1, the Florida panhandle. In this year's report, we present the second year evaluation findings for this new demonstration project, as well as findings from our continuing evaluation of the Prepaid Mental Health Plan (PMHP) implemented in the Tampa Bay region six years ago. Results for Areas 1 and 6 will be presented separately, but we will return to the organizing themes regarding policy objectives following this exposition of findings for each area.

The Context: Florida's Medicaid Managed Care Strategies

While Florida began using managed care strategies for *comprehensive* mental health services in March of 1996 with the implementation of the Prepaid Mental Health Plan in Area 6, the Medicaid program has used managed care strategies for physical health services since 1984. At that time, Florida began contracting with HMOs to provide prepaid Medicaid health services, pharmacy, as well as limited mental health services (inpatient and physician services) to a defined population of enrolled beneficiaries. Since 1984 other variations of managed health care have been implemented. In 1991, the Medicaid Physician Access System, known as MediPass was initiated to ensure adequate access to primary care, reduce inappropriate utilization of services, and control program costs. In this program physicians are paid a $3 fee per member per month to provide primary care case management. They are paid on a fee-for-service basis for services rendered.

Other managed care strategies that have evolved over time include Provider Service Networks (PSNs), Children's Provider Networks, Minority Physician Networks, and Exclusive Provider Organizations (EPOs); all of which provide primary care services, care coordination, and authorization of specialty care for Medicaid beneficiaries. In addition to their fee-for-service billings for the direct services they deliver, they receive a per-member-per-month fee for care management. With the exception of the Exclusive Provider Organization, these managed care networks are currently operating only in southeast Florida (Broward, Dade and Palm Beach Counties). The EPO covers 20 primarily rural counties in north Florida. There has been steady growth in the enrollment in these plans over the past year. AHCA estimates that these alternative managed care strategies now represent nearly 6% of Medicaid managed care programming in Florida. The largest percentages of enrollees are still in Medicaid HMOs (almost 50%) and MediPass (almost 45%) (Agency for Health Care Administration, 2003, January 15).

In the 2003 regular legislative session, Senate Bill 2404, a bill relating to Florida's mental health and substance abuse programs, passed and is awaiting signature by the Governor at this time. That legislation directs AHCA to contract with a single managed care entity in each AHCA area through capitated prepaid arrangements for enrolled MediPass recipients by July 1, 2006. Under this new legislation, Medicaid substance abuse services will also be included with mental health services. This legislation will expand managed care for comprehensive behavioral health services statewide.

The Prepaid Mental Health Demonstrations

It is in this context of evolving managed care strategies in Florida that the pre-paid mental health programs were developed, first in the Tampa area and subsequently in the Florida panhandle. In these demonstration areas, Medicaid enrollees may have their mental health services financed through a fee-for-service system or through one of two managed care arrangements. The fee-for-service system is used by several groups of enrollees who are excluded from one or more parts of the demonstration, such as

those who are enrolled in both Medicaid and Medicare, those who are enrolled in the Medically Needy programs, and by newly certified Medicaid clients who have not yet selected or been assigned to a managed care condition. All other Medicaid clients are enrolled in one of two managed care conditions.

The first condition is a behavioral health care "carve out" plan in which a specialty behavioral health managed care organization provides or arranges for a specific range of mental health services for plan participants. In this arrangement, the managing entity is paid by AHCA through a risk-adjusted, fixed monthly fee per enrollee. We will discuss this condition as the pre-paid mental health plans or PMHP. In the second managed care condition that is operating in the demonstration areas, Health Maintenance Organizations (HMOs) receive a risk-adjusted premium that includes general health, pharmacy, and a range of mental health services identical to those in the carve out. Since HMOs receive an integrated premium for these three components of the benefit, these arrangements are often characterized as a 'carve in' purchasing arrangement. HMOs arrange health, mental health, and pharmacy services for their enrollees through sub-contractual agreements with providers or behavioral health managed care organizations (BHOs). Both the PMHPs and HMOs in the demonstration sites are at financial risk for the mental health service utilization of their enrollees for the services that are specified in their contractual arrangements, which we will call the Carve Out Services.

Table 1 summarizes the differential risk arrangements that characterize the three financing conditions that are contrasted in the evaluation. The financing conditions differ in their financial risk arrangements for medical care, mental health care, and pharmacy. The HMOs are fully at risk for all three categories of services, while the PMHPs and MediPass in Areas 2, 4 and 7 (the comparison sites for the evaluation) are not at risk for medical or pharmacy benefits. Of course, the PHMPs in Areas 1 and 6 are fully at risk for the Carve Out mental health services.

Table 1. Financial Risk Arrangements

Financing Condition	Health	Mental Health	Pharmacy
Areas 1 & 6 MediPass/PMHP	No Risk	At Risk	No Risk
Areas 1 & 6 HMOs	At Risk	At Risk	At Risk
Areas 2, 4, & 7 MediPass	No Risk	No Risk	No Risk

Outside of the demonstration areas, comprehensive mental health services for Medicaid recipients are reimbursed through a fee-for-service mechanism in which the state is at risk for mental health service utilization. With the exception of mental health services provided by the PMHPs and the HMOs in Areas 1 and 6, prior authorizations for inpatient admissions are managed statewide by First Health, a utilization management firm. This utilization management system was initiated in January 1997. Also, as of April 1, 2002, Medicaid has required prior authorization for three additional services - day treatment, intensive therapeutic onsite services and rehabilitation day treatment.

Evaluation Design and Methods

Under contract from AHCA, we at the Louis de la Parte Florida Mental Health Institute (FMHI) are conducting a series of integrated evaluation projects designed to assess the effects of the PMHP on access, cost, quality, and outcomes of services, relative to alternative managed care arrangements and to the fee for service reimbursement system used in other areas of the state.

In Areas 1 and 6 we are using a non-equivalent comparison group design to investigate the effects of the differing financing conditions. In this design we selected AHCA Area 2, (Tallahassee and surrounding counties) and Area 4 (Jacksonville and surrounding counties) as comparison sites for Area 1 since these two areas most closely resemble AHCA Area 1 in their demographic characteristics and in the composition of its health

and mental health care markets. Area 4 is used as the comparison area for Area 6. Additionally, Area 7 (Orlando and surrounding counties) is used as a comparison area for Area 6 in some analyses. Multiple comparison areas can be helpful in understanding the stability of secular trends that occur outside of the demonstration areas.

Sub-studies Comprising the Evaluation

In order to document the characteristics of the different financing conditions and understand their effects on access, cost, quality, and outcomes, we are completing a set of interrelated sub-studies.

Julienne Giard, Pat Robinson, and their colleagues continued the implementation analysis in the sixth year evaluation of Area 6 and conducted a similar analysis of the newly developed demonstration in Area 1. Chamain Moss and her colleagues conducted a special analysis in Area 1 focused on the quality of services received by children and youth with severe emotional disturbance (SED) who are enrolled in the different Area 1 managed care plans. Mary Rose Murrin and colleagues analyzed administrative data provided by AHCA, Florida Health Partners (FHP), Access Behavioral Health (ABH), and the HMOs.

In order to investigate the differences in service recipient outcomes associated with financing condition, David Thornton and colleagues analyzed data that were collected as part of ADM's statewide mental health outcome monitoring system. This year we focused on the Global Assessment of Functioning Scale (GAF), days at work, and days in community outcome measures for adults and the Children's Global Assessment Scale (CGAS), days in school, and days in community indicators for children and adolescents. In these analyses we examined the change in these outcome indicators for individuals on whom we have multiple measures across years.

Roger Boothroyd, Huey Chen, and their colleagues continued their analysis of the population-based outcome data for the general Medicaid enrolled population. This population-based component of the study in Areas 1, 4 and 6 involved a mail survey of Medicaid enrollees. In this year's analyses we present information about changes in the health and mental health status of individuals who have responded to the mail survey consistently over three administrations of the survey that have occurred in Areas 4 and 6 and compare the pre-managed care to early post managed care measures for Area 1.

Generally, the estimates that we calculate from the administrative, service recipient, and population-based outcomes components of the study are case mix adjusted to control for the demographic and eligibility group differences in the enrolled populations. Although the specific variables that are employed in the case mix adjustment differ slightly with each comparison, depending upon the characteristics of the sample, the comparisons may be adjusted for differences in gender, age, eligibility status (SSI, TANF), race/ethnicity, and service utilization status (service user vs. non-user).

Area 1 – The Continuing Development of the Prepaid Mental Health Interventions

Background
The 2000 Florida legislature authorized the expansion of the Medicaid Prepaid Plan demonstration that had been operating in Area 6. One of the authorized sites was AHCA Area 1, comprising Escambia, Santa Rosa, Okaloosa and Walton Counties in the Florida panhandle. Formal implementation of the PMHP in Area 1 began on 11/1/01. This Implementation Analysis describes the structures and activities during the second year post start-up (fiscal year 2002-2003).

Of the four counties, Escambia County has the largest population (294,410), but is the smallest geographically. Okaloosa and Santa Rosa Counties have similar population sizes (118,000 and 170,000, respectively) and geographical size, but are more rural than Escambia County. Walton County is the most rural, with a population density of only 38 persons per square mile (U.S. Census, 2000).

There are only modest differences in age distribution, racial makeup, and income among the four counties. Walton County has a slightly older population than the other three counties in Area 1. Escambia County is the most racially diverse, with more than one-fifth of its population reporting their race as Black or African-American. The other three counties have much smaller minority populations (4%-9% African American; 2%-4% Hispanic). In addition to being the most rural county and having the oldest population in the Area, Walton County also has the lowest per capita income ($17,159). Okaloosa County has the highest per capita income ($24,720) (Florida Research & Economic Database, 1999).

<u>Behavioral Health Market</u>

Escambia County has the largest number of public mental health and substance abuse providers in the area. One of the providers, Lakeview Center located in Pensacola, is the largest service provider in Area 1, and one of the largest in Florida, reporting a budget of almost $71 million from multiple sources. Bridgeway Center is Okaloosa County's largest public behavioral health provider (with a budget of $10 million) and is the primary source for adult mental health services. Lakeview Center and the West Florida Community Care Center, a state mental health treatment facility, are the major public providers of mental health services in Santa Rosa County. COPE Center, the smallest of the three major providers, with a budget of $3 million, is the only public mental health services provider in Walton County. All of these organizations have been longstanding providers in their respective communities.

<u>Other Initiatives in Area 1</u>

There are several major human service initiatives being implemented in Area 1. In addition to the expansion of the Medicaid Prepaid Plan, the Department of Children and

Families is privatizing its child welfare system through its Community Based Care Initiative and the DCF district is implementing the new financing strategies and contract methodologies for general revenue resources authorized by Senate Bill 1258. The Statewide Inpatient Psychiatric Program (SIPP) is also being implemented for children and youth with emotional disturbances and a new Florida Assertive Community Treatment (FACT) program for adults with serious mental illnesses has also been developed. All of these initiatives began at approximately the same time as the prepaid mental health demonstration. They involve and have impact on most providers within Area 1, but most especially Lakeview Center, which is the managing entity or lead agency responsible for all of them.

Implementation Analysis

The goals of the implementation analysis are to detail the financial, structural and clinical aspects of the managed care conditions and to describe the successes and challenges in implementing the Medicaid Prepaid Mental Health demonstrations, in order to provide a context for understanding the access, cost, quality and outcome data.

Methods

This year, implementation data in Area 1 were collected through a mail survey of the primary providers in the PMHP network, Lakeview Center, Bridgeway, and COPE Center, as well as the managing entity, Access Behavioral Health. A survey was also mailed to HealthEase, the only Medicaid HMO currently operating in Escambia and Santa Rosa Counties of Area 1. Specific protocols were developed for providers and managed care organizations. (Please see Appendix 1.) Agency representatives were asked to respond to a series of questions that addressed changes in organizational structures and relationships, the fiscal impact of the implementation on their organization, new services that have been implemented, indicators of access to services, clinical outcomes, measures of quality of care, consumer involvement, and services integration.

Area I Structures

As was reported in last year's implementation analysis, AHCA contracts with Access Behavioral Health located at Lakeview Center as the managed care organization for the PMHP. ABH in turn, contracts with a provider network for mental health services for the individuals enrolled in AHCA's MediPass program. The primary providers of mental health services in Area 1 are Lakeview Center, serving Escambia and Santa Rosa Counties, Bridgeway Center, serving Okaloosa County, and COPE Center providing services in Walton County.

ABH subcontracts with the Bridgeway and COPE centers through risk-adjusted capitation arrangements for the services to be provided by the Plan. ABH also continues to contract on a fee-for-service basis with affiliated providers such as the Children's Home Society, West Florida Hospital and West Florida Community Care Center (a state treatment facility) for specialty services and/or inpatient care. Life

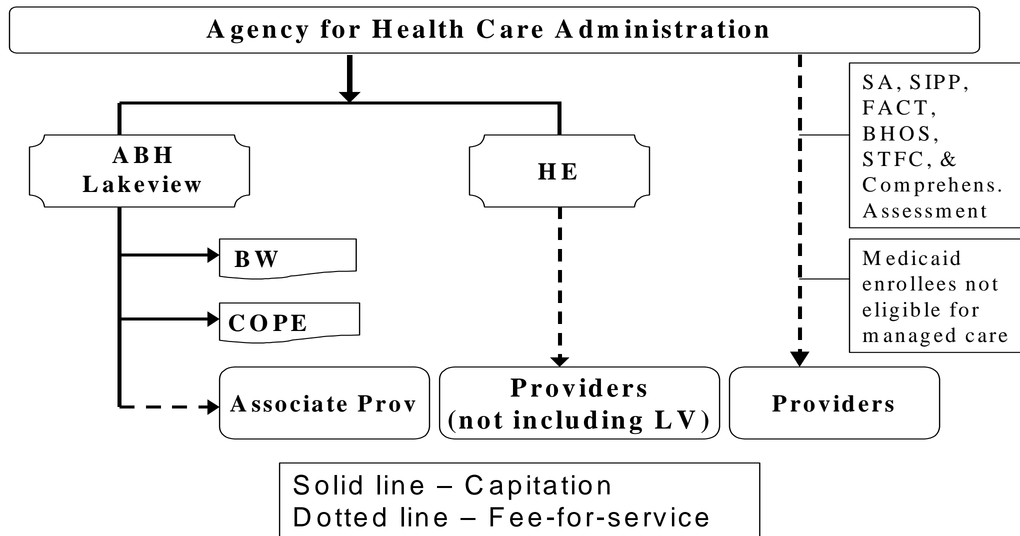
Management, located in Panama City (Area 2) and a previously contracted affiliated provider for Crisis Stabilization Services (CSU) services, are no longer in the ABH network since Bridgeway Center increased its CSU capacity from 12 to 16 beds.

In the first year of implementation of the PMHP, ABH contracted with ValueOptions (VO) for certain administrative services. As of January 1, 2003 ABH ended that contractual arrangement. The functions previously performed by VO were assumed by ABH, including utilization management/utilization review, call center activities, claims adjudication, complaint and grievance reporting, and plan reporting. ABH increased its staffing to accommodate some of these new responsibilities and arranged with Baptist Hospital's Healthsource (an affiliated corporation) for the call center and information and referral services. Assuming the administrative functions previously conducted by VO also required that ABH make significant changes to their management information systems. The costs associated with these changes were borne by ABH from some of the resources that had been used to purchase services from VO. Additional savings were re-distributed to the primary network providers effective April 1, 2003, affecting a 5% increase in their capitation rates.

HealthEase continues to be the only Medicaid HMO operating in Escambia and Santa Rosa counties in Area 1. (HealthEase was purchased in August 2002 by WellCare Health Plans, Inc.) In November 2001, when HealthEase began providing the same range of mental health services as the PMHP, they contracted on a capitated basis with CompCare, a behavioral health organization, to manage the Medicaid mental health benefits for their enrollees. However, as of January 1, 2003 HealthEase terminated its contract with CompCare and has been managing the mental health services for its enrollees directly through the Behavioral Health Department of Well Care HMO.

HealthEase contracted with the same network providers that had been under contract with CompCare, including the Pensacola Behavioral Health Office that employs a program manager, targeted case managers and a psychiatrist one day per week. Their provider network consists of 65 private licensed professionals as well as Baptist Hospital and West Florida Psychiatric Hospital for inpatient services. HealthEase continues to pay their network providers for behavioral health services on a fee-for-service basis and employs utilization management for all levels of services. Figure 1 presents the current financing relationships among the various entities providing Medicaid behavioral health services in Area 1.

Figure 1. Area 1 Funding Streams as of 4/03



Since no HMO is currently approved by AHCA to operate in Okaloosa and Walton Counties in Area 1, AHCA initially planned to establish an Exclusive Provider Network (EPO) in those two areas. Given the relatively small population enrolled in these counties, however, there was concern that establishing an EPO would further erode the enrollment base for the PMHP in those two counties. AHCA decided to exempt Area 1 from the implementation of the EPO at this time.

According to AHCA's April 2003 Enrollment Reports (Agency for Health Care Administration, 2003), there are currently 80,803 total Medicaid recipients in Area 1, 18,285 of which are enrolled in the Medicaid HMO and 34,457 are enrolled in MediPass. There is a large minority of Medicaid enrollees (28,061) who are not in managed care. Enrollment in the HMO has increased over the last year by almost 2000 enrollees while enrollment in the PMHP has grown only slightly. According to current policy, Medicaid assigns 50% of all eligible Medicaid enrollees who fail to choose a plan and who reside in Escambia or Santa Rosa Counties to the HMO. ABH estimates that

Lakeview Center still has approximately 65% of the Area 1 PMHP enrollees assigned to it for their services.

Not all Medicaid recipients are eligible to participate in the demonstration. Certain Medicaid enrollees, such as those who are enrolled in both Medicaid and Medicare, those enrolled in the Medically Needy programs, and those receiving hospice services, are excluded from one or more parts of the demonstration. In addition, there are certain Medicaid beneficiaries who are receiving services in other special programs who are disenrolled from the demonstration while they receive those other services (e.g., children in residential treatment, children and adolescents being served in the Statewide Inpatient Psychiatric Program [SIPP], people who receive Assertive Community Treatment Services, or children receiving behavioral health overlay services in residential programs).

Capitation rates for the ABH subcontractors are based upon 80% of the cap rates paid by AHCA to ABH. An amount continues to be withheld from the agencies' capitation rates to pay for fee-for-service billings that may be incurred on behalf of a PMHP enrollee. The amount withheld is adjusted semi-annually based upon the fee-for-service billing history of the agency and represents approximately 10% of their cap rate. Inpatient and residential services continue to be paid on a fee-for-service basis. With a few exceptions, fee-for-service rates remained generally unchanged from the previous year. Given that not all Medicaid reimbursable services or all Medicaid beneficiaries are eligible to participate in the PMHP, provider agencies must maintain the capacity to operate under the traditional fee-for-service Medicaid systems at the same time they have had to accommodate and adjust to the new capitation arrangements for the majority of mental health services they provide through the managed care program.

Findings

- Organizational relationships have been simplified in Area 1 with HealthEase no longer using a behavioral health organization to manage its mental health benefits and ABH terminating its contract with VO and assuming its administrative responsibilities.

- While the model of having the managed care organization also serve as a provider (ABH/Lakeview) is a potential conflict of interest, there has been no indication that ABH has been inequitable in its dealings with the providers in the network. However, one provider has proposed that appeal mechanisms be implemented for addressing provider disagreements with the findings and recommendations made by ABH during on-site surveys. ABH has agreed to draft language for a conflict resolution procedure.

- Since the HMO and the PMHP are using different provider networks, this may offer individuals more choice of providers, at least in Escambia and Santa Rosa Counties. However, there are significant differences in the networks of the two plans and they are likely to be using different clinical guidelines for services. Upon termination of

their contract with VO January 1, 2003, ABH implemented new Clinical Care Criteria and Treatment Guidelines based upon the American Medical Association Practice Guidelines for the Treatment of Psychiatric Disorders and the American Academy of Child and Adolescent Psychiatry Practice Parameters. HealthEase reports the use of InterQual Behavioral Health Level of Care Criteria for determining medical necessity for all levels of care. However, the clinical guidelines for treatment that are used by their providers are not known at this time.

- Quality of care is assessed by the managed care organizations by measuring access to care (generally defined as geographical accessibility, and meeting the standards related to waiting time from request to appointment), consumer outcomes (generally measured by the state's mental health program outcome measures), consumer satisfaction, service utilization, utilization management and claims processing, as well as chart reviews and special quality improvement studies. Feedback is provided by ABH to their provider network through Quality Council meetings. ABH reports that it will be implementing a website for its providers that will include information regarding network issues, treatment guidelines and clinical care. HealthEase provides feedback to their providers through quarterly newsletters and an annual HealthEase Provider Satisfaction Survey.

- As stated in last year's report, some PMHP network providers reported having experienced financial losses as a result of the implementation of the Medicaid waiver. In this year's survey, one provider in the PMHP network reiterated that the fiscal impact of the waiver in their agency included a 20% reduction in Medicaid resources as well as the additional expenses associated with increased staffing to meet new standards for access and to increase service capacity. Another provider reported that the fiscal impact on their agency was as anticipated. ABH reported that the waiver has been profitable for them.

- Agencies report that social clubs/drop-in centers/respite services have been developed to serve as step-downs from more traditional services. Agencies have also implemented more stratified case management approaches. Providers report little impact on their ability to provide more integrated services for individuals with co-occurring disorders (mental health and substance abuse) through the implementation of the Medicaid demonstration because substance abuse services are still not included in the benefits required of the plans. However, each of the three major providers in the ABH network is a licensed substance abuse provider and can provide substance abuse services under their general revenue contracts or through fee-for-service Medicaid billings. We do not know if any of the providers in the HMO network are licensed substance abuse providers. No new major providers have been added to the networks.

Child Case Study

Methods

This year a special study was conducted in Area 1 that focused on the impact of the implementation of the Medicaid waiver on children with severe emotional disturbance (SED) and their families. The first component of this study involved case studies that focused on parent/caregiver and treatment team members' perceptions of the degree to which services were culturally competent, child and family centered, and community based. The System of Care Practice Review (SOCPR) (Hernandez & Gomez, 2000) was the instrument used to assess these domains.

The SOCPR is based on a case study methodology and the System of Care (SOC) core principles developed by Stroul and Friedman (1986). The SOCPR was developed to follow the generalizability criteria proposed by Yin (1994), Gordon & Shontz (1990) and Kohn (1997). The instrument was designed to collect data through interview and document review and has been shown to result in reliable and valid ratings of the quality of care provided to children with SED.

ABH and HealthEase were asked to identify children that were receiving targeted case management (TCM) services. Receipt of this service, which is restricted to children with SED, was used to define the SED population. For ABH, fifteen children were selected from the more than the100 individuals receiving targeted case management services.

The study team experienced difficulty in locating children enrolled with HealthEase who met the study criteria and were willing to participate in the child study. Of the 22 individuals initially identified by HealthEase, 4 were actually adults. Of the 18 children remaining, 7 families did not respond to telephone calls or letters, 6 families declined to participate. Ultimately, only 5 children met the criteria for inclusion in the study and their families agreed to participate.

Although HealthEase personnel were cooperative in providing names of children and the providers with whom they contract, we were not able to identify fifteen children who were diagnosed as SED and receiving targeted case management funded by HealthEase. In part, this may be explained by the timing of the study implementation. The interviews were conducted in spring of 2003, the same time that HealthEase was assuming direct responsibility for the behavioral health care of these children as they terminated their contract with their BHO. It may have been difficult for HealthEase to access complete child case information during this transition time.

Secondly, the difficulty in identifying children in TCM in the HealthEase condition is, in part, a reflection of the ways in which they have their services organized and managed. The HMO appears to provide less direct management oversight of the TCM programs than ABH, which is more closely affiliated with the providers, especially Lakeview Center of which they are a part. At ABH, case management and clinical services are generally located in the same buildings and access to files and children was easy.

HealthEase's relationship appears to be mostly administrative and no clinical services are provided on site, other than case management. The inability to find children who are eligible to receive this intensive, outreach-oriented service is a concern regarding the adequacy of care for children with SED in the HMO condition.

Because of our difficulty finding fifteen children in HealthEase for our case study component, we examined their encounter data they submitted for the first four months post implementation (November 2001 – February 2002) to see how many children were receiving targeted case management at that time. We found 39 children in those encounter data. Since we only had a list of eighteen children from HealthEase in the Spring 2003, we decided to examine current Medicaid eligibility files to see how many of those original 39 children were still in the HealthEase condition. In order to determine if changes in eligibility were consistent across conditions, we also randomly selected 39 children from the ABH encounter data from the same time frame who were using targeted case management. Our hypothesis was that many of those 39 children in HealthEase who were receiving targeted case management during 11/01 – 2/02 switched to the MediPass/ABH condition and that is why there was a smaller pool of children in the HealthEase condition from which to identify fifteen children for the study.

The second component of this study examined the treatment histories of the children/families who were participating in the case studies and were diagnosed with Attention Deficit/ Hyperactivity Disorder, Oppositional Defiant Disorder, or Major Depressive Disorder. In order to assess whether providers were following best practices, treatment histories of study participants were compared to diagnosis based treatment guidelines established by Florida Health Partners in Area 6 and adopted by the Area 1 PMHP.

Findings

- We examined the current eligibility for the 78 children (39 from HealthEase and 39 from the PMHP) using targeted case management during the first four months of implementation. We found that sixteen of the 39 HealthEase children were in MediPass a year later (41% had switched to ABH) and that two of the 39 ABH children were in HealthEase a year later (5% had switched to HealthEase). There were also children who were in each of the conditions in early 2002 that were found to be in the Medicaid fee-for-service system (neither HealthEase or ABH) or not enrolled in Medicaid at all a year later. From these results, we concluded there was differential "switching" from HealthEase to ABH during the first year of implementation; however, we do not know the reason for the switching (e.g., dissatisfaction with HealthEase's mental health benefit; preferred to have their health care managed by MediPass rather than an HMO; lost eligibility during the year and then mandatorily assigned to MediPass/ABH when they were re-enrolled).

- In the first component of the child/family sub-study we assessed the perceptions of the families and caregivers about services being culturally competent, child and family centered, and community based. With regard to culturally competent

services, we found little evidence that case management financed by either plan utilized informal or natural supports within communities, which is an important element of cultural competency within the SOCPR. However, the PMHP case managers were able to acknowledge the families' lifestyles and beliefs and use that knowledge to help make decisions about services. With respect to the services being child and family centered, the PMHP service plans were individualized and developed from a formal needs assessment; whereas, the HMO case plans goals were not as individualized, and did not appear to be developed from formal assessments. Family strengths were not considered in the development of the HMO treatment plans. Finally, with regard to services being community based, case management services within the PMHP and the HMO were provided at convenient times and locations for the families as well as in least restrictive environments. Other services such as counseling and psychiatric services were generally provided within the providers' offices. Transportation to those services was identified as a problem for some families.

- In the second component of the sub-study regarding the treatment histories and their congruence with recommended treatment guidelines for specific diagnoses, it was determined that when medication was recommended by the guidelines, it was prescribed by providers for both plans. Recommended individual therapies were consistently provided in the ABH cases, but not provided as consistently in the HealthEase cases. In the HMO, individual therapy was not provided in three of the five cases where it was recommended. Family therapy, family education and community support efforts, as recommended, are the weakest outpatient treatment areas in both the PMHP and the HMO.

Area 1 Implementation Summary

The structures in the Area 1 managed care demonstration have been simplified during the course of this second year with HealthEase's termination of the contract with CompCare and ABH's termination of the VO contract. Similar simplifications occurred in Area 6 over time. The most direct benefit of streamlining these structures was ABH's redistribution of some of the resources to the PMHP provider network. Also, HealthEase reports that there is better opportunity to integrate health, behavioral health and pharmacy services for their enrollees now that they are managing all three services directly. It will be important to assess the effects of these changes in organizational structures upon providers in both networks as well as the beneficiaries of both plans.

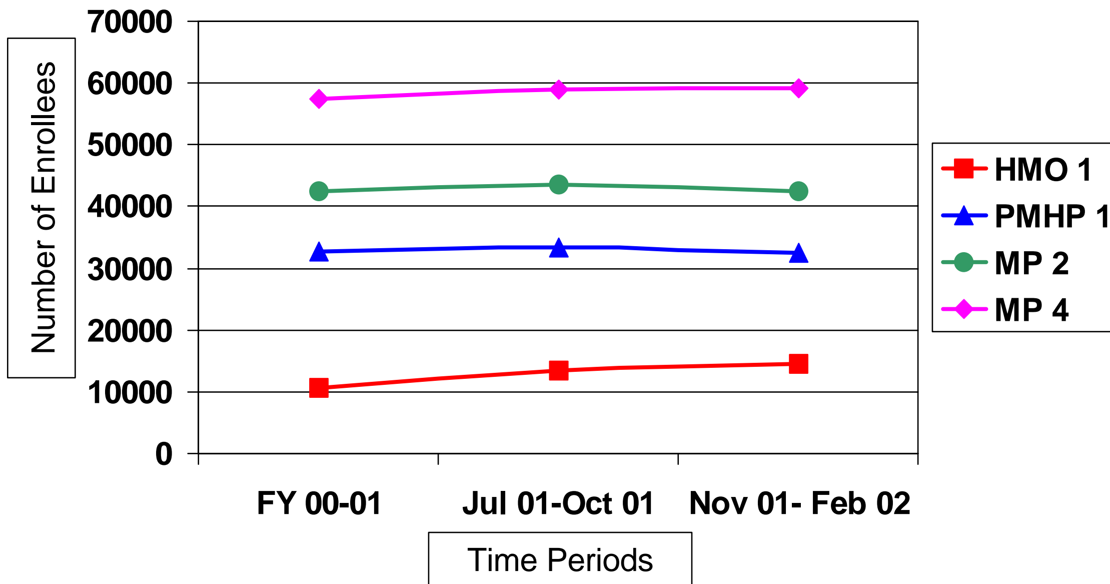
There are differences in the ways in which the ABH and HMO networks have addressed the needs of children. With respect to providing services that are community-based, culturally competent and child and family centered, it is apparent that the provider within the PMHP has developed more individualized treatment plans that include assessments of family strengths. They were also more likely to acknowledge the families' lifestyles and beliefs and use that knowledge to help make decisions about services.

Both provider networks delivered services to children and their families, especially case management services, at convenient times and locations. However, other services were not as easily accessed by families enrolled in either the PMHP or the HMO if they lived some distance from the provider's location. Both plans provided medication and psychiatric services as recommended by treatment guidelines for specific child disorders; however, neither plan did particularly well in offering family therapy, family education, or other support services recommended by the guidelines.

Because of the significant differences in the networks of the two plans and the fact that they are likely using different clinical guidelines, it will be important to continue assessing any differences in satisfaction or outcomes that are experienced by individuals who are served by the different networks. This is particularly important for children with SED and their families. It will also be important to incorporate the providers of the HMO network in the data collection for the implementation analysis in the coming year to gain a better understanding of their roles and how they deliver services.

Characteristics of the Enrolled Population

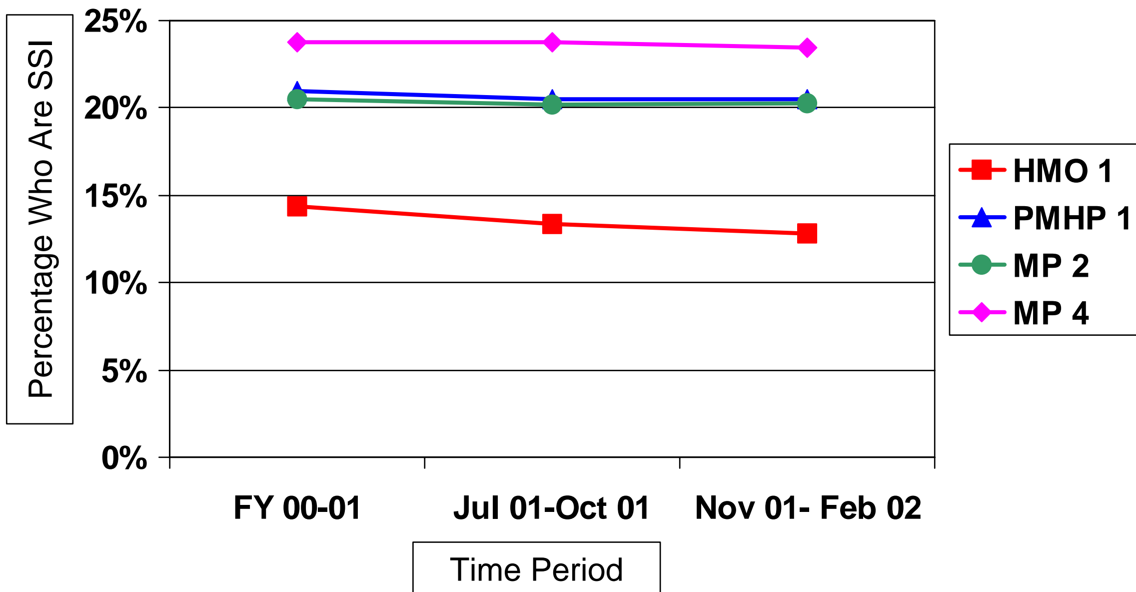
In Figure 2 we present the average monthly enrollment in both of the managed care conditions in Area 1 as well as the MediPass enrollees in Areas 2 and 4, the Area 1 comparison sites. Three enrollment estimates are presented for each condition. The first is the average monthly enrollment for FY 00-01 while the last two present enrollment estimates for only four months. The first of these are for enrollment in the four months immediately preceding the implementation of the demonstration (July through October) while the last point presents enrollment in the first four months after implementation of



the demonstration. We restrict our evaluation to enrollees between the ages of 1-64, so our analyses do not reflect the entire enrolled population in these conditions. As can be seen from the figure, enrollment has grown from about 11,000 to about 14,500 in the HMO condition while it has remained quite stable at about 32,000 enrollees in the PMHP condition. Both of the comparison areas have remained relatively stable with some modest growth in Area 4 and very little change in Area 2 MediPass population.

In terms of the demographic structure of the population of Medicaid enrollees about 75% of enrollees in both plans are children. The plans differ in their racial composition with the HMO serving a larger African American population (50%) than the PMHP (33%). Females represent 57% of enrollees in both plans.

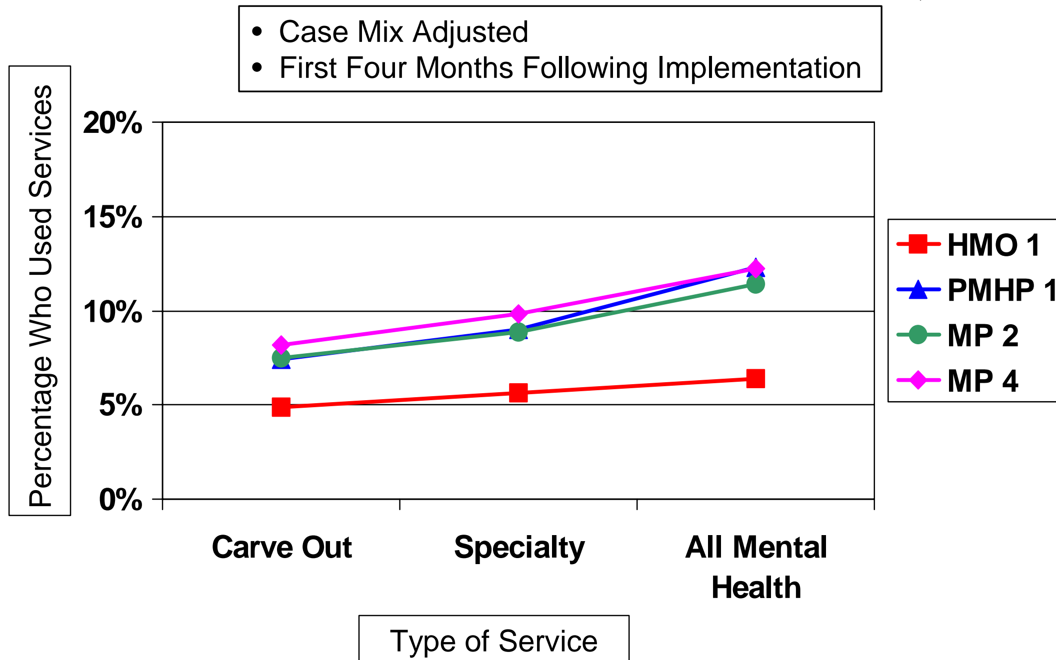
In Figure 3 we present the composition of the Areas 1, 2 and 4 enrolled populations with regard to the proportion of SSI enrollees. Consistent with earlier analysis of Medicaid data for Area 6, SSI enrollees are relatively underrepresented in the HMO condition. The proportion of SSI enrollees also declines over time, likely due to the enrollment growth that is principally made up of TANF enrollees. The PMHP and MediPass in Area 2 have nearly identical proportions of SSI enrollment (20%) while MediPass in Area 4 has the largest proportion of SSI enrollees at approximately 23%.



Access to Services

Use of Mental Health Services

The use of mental health services during the four months following the demonstration is portrayed in Figure 4. In this figure we present cumulative rates at which enrolled individuals used any carve out, any specialty (including carve out) and any mental health service. These results are case mix adjusted. We present only the post implementation rates since very little difference was observed between conditions for the four months immediately preceding and those immediately following implementation. The interesting differences between conditions relate to the differences in utilization rates. Perhaps the most notable differences are between the conditions with regard to their utilization rates. MediPass in Area 2, MediPass in Area 4, and the PMHP have nearly identical utilization rates for carve out, specialty, and all mental health services while the Area 1 HMO rates are substantially below those plans.



When we consider specialty and all mental health service utilization, the differences between the HMO condition and the other three conditions becomes more pronounced. While approximately 6.4 % of HMO enrollees used any mental health service in the four months following implementation, the comparable rate for the PMHP is 12.3%. While the two conditions differed by only about 2.5% in their post implementation utilization of carve out services (4.9% for the HMO and 7.4% for the PMHP), this difference expands

to nearly 6% for any mental health service utilization. HMO enrollees, who have a lower base rate utilization of the carved out services, use other mental health services less frequently than persons in the PMHP or MediPass comparison conditions.

Access to Pharmaceuticals

We conducted a series of analyses contrasting the access to SSRI and atypical anti-psychotic agents for individuals diagnosed with depression or schizophrenia respectively. In these analyses we contrasted utilization rates for these pharmaceutical agents in the four months prior to implementation with the four immediately following implementation. It is important to recall that most individuals receiving mental health services in the first four months after implementation received them from Lakeview Center, regardless of their financing condition (HMO vs. PMHP). Unlike the results of our analyses in Areas 4 and 6, we found no differences between the financing conditions with regard to access to these drug classes.

Unmet Need for Services from the Population Based Mail Survey

We utilized data from the mail surveys that we conducted in 2001 and 2002 within Area 1 to estimate the degree to which persons reported unmet need for medical and mental health services. While details of the Area 1 mail surveys may be found in Boothroyd (2003), some components are included in this report. The mail survey involved a sample of Medicaid enrollees obtained from Medicaid eligibility data provided to the Louis de la Parte Florida Mental Health Institute by the Florida Agency for Health Care Administration in 2001. A random sample of 3,000 Medicaid enrollees was selected that was stratified on three variables: *Age* (2 strata; children [5-21], adults [over 21]), *Plan* (2 strata; PMHP, HMO), and *Eligibility Status* (2 strata; SSI, TANF). We randomly selected 375 enrollees from each cell in the stratified sampling matrix. Separate questionnaires were developed for adults and children using standardized scales appropriate for each age group.

Surveys were mailed in February 2001 and 2002 with the 2002 mailing following implementation of the managed care demonstration by about 4 months. This first post measure, therefore, is quite early in the demonstration at a time when most behavioral health services were still being provided by Lakeview Center to residents of Santa Rosa and Escambia counties as opposed to the HMO network of providers.

Response rates to the first survey were 44.3% for adults and 39.9% for children in the sample (adjusted for bad addresses and deceased individuals). Follow-up response rates in 2002 were 64.6% for adults 64.5% for children. Adult respondents to the survey were significantly older, more often female and more likely to be white than non-respondents. (Information on non-respondents was obtained from the AHCA enrollment file.) For children, respondents were more likely to be white than non-respondents. In terms of the follow-up surveys for adults, no significant demographic or health status differences were obtained between respondents and non-respondents. Follow-up respondents for children were significantly more likely to be responding for female

children than for male children. But, like the adults, no significant baseline differences in the health status and quality of life measures were obtained between respondents and non-respondents to the follow-up survey.

The self-reported penetration rates for physical and mental health services were examined to determine if changes in access occurred over the two mailings and to assess the impact of eligibility status (*i.e.*, TANF versus SSI) and health plan (*i.e.*, PMHP versus HMO) on access to care. With respect to physical health care, the overall penetration rate for adult respondents was 88% in 2001 and 86% in 2002. This decrease in physical health penetration rate between the two mailings is not statistically significantly. A significant time by eligibility status interaction was noted $F(1, 212) = 8.26$, $p < .005$. Adult SSI recipients' use of physical health services increased between 2001 and 2002 in both health care plans (HMO +4%; PMHP +7%) while the penetration rate among TANF recipients decreased in both plans (HMO -11%; PMHP -10%). This interaction is likely the result of TANF recipients leaving the welfare rolls and loosing their Medicaid eligibility, as 28% of the 2002 respondents reported they were no longer receiving Medicaid.

The overall self-reported penetration rate for mental health services among adults was 28% in 2001 and 32% in 2002. This increase in the mental health penetration rate between the two mailings was also not statistically significant. In addition, no significant differences were found in adult Medicaid enrollees' access to mental health services by health plan or eligibility status and no significant interactions were found.

Access was also examined in terms of adults' unmet medical and mental health services needs (*i.e.*, the percentage of respondents reporting a need for a service who did not use that service). Unmet medical needs among adult respondents were 9% at Time 1 and 5% at Time 2. The rates of unmet mental health service needs were 9% at Time 1 and 14% at Time 2. The differences in the rates of unmet medical and mental health service needs were not statistically significant. Furthermore, no significant differences were found in adult Medicaid enrollees' unmet physical or mental health service needs by plan or eligibility status and no significant interactions were found.

Finally Medicaid enrollees' access to medications was examined. Among adult respondents, 16% reported difficulty getting needed medications at Time 1 while 23% reported problems at Time 2. A significant difference was found between HMO and Medipass enrollees in reported difficulty obtaining medications. Nearly 37% of the HMO enrollees reported problems getting needed medications while this figure was 17% for MediPass enrollees. No significant differences were found in rate of adult Medicaid enrollees reporting problems getting medications over time, or eligibility status.

Caregiver's self-reports of their children's use of medical and mental health services were also examined to assess changes in use over time. Overall the medical services penetration rate among children in the sample was 82% in 2001 and 76% in 2002. This decrease was not statistically significant. No significant differences were noted in children's use of medical services between the two Medicaid plans. The only significant

finding in this analysis was a time by eligibility status interaction. The use of medical services among children living in families receiving TANF increased about 1% while the use of these services among children receiving SSI decreased by more than 13%.

In terms of children's use of mental health services, a slight increase was noted from 30% in 2001 to 33% in 2002. This increase was not statistically significant. In addition, no significant differences were found in children's access to mental health services by health plan or eligibility status and no significant interactions were detected.

Children's access to services was also examined in terms of their unmet medical and mental health services needs (*i.e.*, the percentage of caregivers reporting their children needed a service but did not use that service). Unmet medical service needs among children were reported as 5% at Time 1 and 4% at Time 2. The rate of children's unmet mental health service needs was 7% at Time 1 and 10% at Time 2. As was the case with adult respondents, no classically significant differences were found in children's unmet medical (.06) or mental health service needs by health plan, over time, or eligibility status, and no significant interactions were found.

Caregivers were asked if they had any difficulty getting their children needed medications. At Time 1, 12% of the caregivers reported experiencing difficulty getting their children medications. This rate was 10% at Time 2. No significant differences were found in the rate of difficulty getting medications by health plan, over time, or by eligibility status, and no interactions were noted.

In summary, no significant differences attributable to plan were found in these analyses of self-reported service penetration or unmet needs for either children or adults.

Costs of Services

We conducted several analyses of costs in which we contrasted the financing conditions with one another and observed changes during the pre and post implementation period. The first series of analyses involved estimating the cost to AHCA for three different types of services: those 'carved out' and capitated in the demonstration areas, specialty mental health services not carved out, and all mental health services. In general, costs to AHCA have remained relatively stable during the 16 months prior to the demonstration and the first four months following implementation of the PMHP. The case-mix adjusted capitation rate of $21.95 closely mirrors the pre-implementation costs for Carve-Out services that ranged from $21.20 to $21.48. Rates for carve out services also remained stable in the comparison conditions.

In Table 2 we present the analysis of standard costs for the four financing conditions. The purpose of the analysis is to estimate the intensity of services provided to enrollees in each condition using cost estimates as a measure of intensity. In this analysis we use a standardized price table (not what was actually paid) to value the services that are received by enrollees in each of the financing conditions. The details of the methodology that we use to derive these cost estimates are included in Appendix 2. Additionally, we categorize costs in such a way to identify who purchased the services.

Table 2. PMPM Standard Costs by Category - First Four Months of Managed Care: Areas 1, 2 & 4; Case Mix Adjusted

Expenditure Category	HMO 1	PMHP 1	MP 2	MP 4
Carve Out Mental Health	$9.23	$12.31	$28.27	$27.87
Mental Health Services in the Health Sector	2.87	3.45	3.95	5.18
Substance Abuse Services Paid by MCO	3.14	0.78		
Pharmacy	5.75	12.32	11.99	10.73
Fee for Service MH Services Outside of Carve Out	.77	4.47	3.45	3.09
Fee for Service SA	.03	.40	.67	.72
Total Mental Health	**$21.79**	**$33.73**	**$48.33**	**$47.59**
Shaded cells were paid by the managed care organizations.				

Expenditures are grouped into six categories depending on the type of service and the source of payment for the service. The first category involves carve out services upon which the capitation payment is based. In the four months following implementation of the demonstration, differences existed in the rate at which these services were provided to enrollees in the four conditions. HMO enrollees received approximately 75% of the services received by PMHP enrollees on a case mix adjusted and PMPM basis. Enrollees in the two comparison conditions received services valued at about $28 compared to the $12 value of services per enrollee in the PMHP.

In the second row of the table we depict mental health services that are delivered in the health sector. These services are such things as primary care, laboratory tests, and occupational therapy services with associated mental health diagnoses. For enrollees of the HMO, these services are included in the HMOs' overall capitation payment while

they are reimbursed through the MediPass program for enrollees in the other three conditions. As with the carve out services, we see differences between conditions here as well, with PMHP enrollees receiving 20% more mental health services delivered by the health sector as are received by HMO enrollees. Enrollees in the two comparison MediPass conditions receive services from the health sector at rates above the HMO and PMHP conditions varying from $4 to $5 per month.

In the third row we depict substance abuse services that are reimbursed by the managed care plans. Owing largely to inpatient detoxification and services to pregnant women, which are required in the HMO contract, we estimate that HMO enrollees receive about $3 PMPM for these services reimbursed by the HMO as contrasted with about $0.78 for PMHP enrollees.

The fourth row in the table displays standardized pharmacy expenditures. As we have repeatedly shown in other analyses (Murrin, 2002; Shern, et al., 2002) HMO enrollees use substantially less expensive pharmacy services than persons in either of the three financing conditions that are not at risk for these services.

The next two rows in Table 2 summarize costs for services that are reimbursed outside of the capitation rates for both managed care plans. These are mental health services that are specifically excluded from the carve-out, such as specialized therapeutic foster care, behavioral health overlay services, and comprehensive assessments. On a case mix adjusted basis, PMHP enrollees use almost six times the services in these categories as individuals in the HMO and about 25-30% more than persons in the two MediPass conditions. We do not know why this would happen, except to say that providers in the PMHP may be referring their enrollees more often for these AHCA-paid services.

The last row in Table 2 depicts overall PMPM standard costs for mental health and substance abuse services for enrollees in the four financing conditions. Consistent with other analyses that we have presented of penetration and costs to AHCA, we see that enrollees in the HMO condition receive relatively less intensive services than persons in the PMHP, or MediPass in Areas 2 or 4. Similarly, enrollees in the PMHP receive less intensive services than persons in the comparison MediPass conditions. Interestingly, the differences between the PMHP and the comparison MediPass conditions relates largely to the differences in the intensity of carve out services that are provided. With some minor exceptions, the PMHP and comparison MediPass conditions are generally equivalent in all of the other areas of service provision.

Outcomes of Care

In Area 1, outcomes are assessed using two methods. The first involves the performance measures that are collected from the community mental health agencies in conjunction with their contracts with the Department of Children and Families. Measures of days in the community (for both adults and children); the Global Assessment of Functioning Scale (GAF) for adults and the Children's Global Assessment Scale (CGAS); days worked (adults) or days in school (children) are

intended to be collected on each person admitted to a public mental health clinic at admission and annually while they remain in care.

Since we know that these data are not collected on every individual for whom they should be collected, we conducted a series of analyses to assess the characteristics of persons on whom we have outcome data in contrast to the population of individuals on whom we should have data. In Appendix 3 we present the analysis of the representativeness of the samples used in the service utilization outcome analyses. While we find statistically significant differences between individuals represented in the outcome data and those who were reported using mental health services from the Medicaid claims and encounter data, most of these differences are small. Each of the major demographic groups is adequately represented for comparison.

For the analyses presented here, we will examine data for the last three fiscal years (99-00, 00-01 and 01-02). Eight months of the 01-02 year followed implementation of the demonstration and may provide preliminary indications of the outcome differences attributable to financing conditions.

The second set of outcome measures comes from the mail survey data that we discussed in conjunction with access to services earlier in this report. The reader will recall that these data were collected prior to the implementation of the demonstration and four months following the onset of the demonstration. As with the service utilization data discussed earlier, we will interpret any differences obtained here as early indications of differences that may be attributable to the financing conditions. Next year's mail survey data will provide a stronger test of the effects of financing condition.

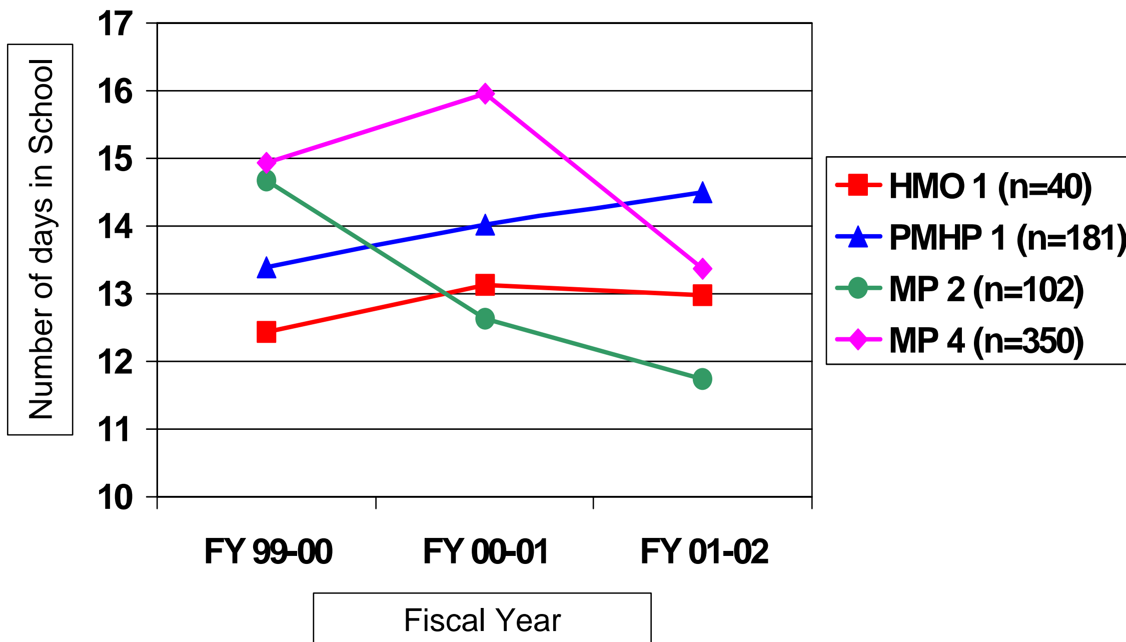
Administrative Data: Measures for Children

We completed a series of repeated measures analyses of variance to determine if the outcomes being reported for service users varied by group, by time or, most importantly for this evaluation, show differential patterns of change between financing conditions. This latter effect can be tested by examining the interaction of group by time.

For both the CGAS score and the days in the community indicators we did not detect a significant group by time interaction. This indicates no differences between the conditions in the rate at which change is occurring. A modest group difference was detected for the CGAS where children enrolled in the PMHP scored somewhat higher than children in the other three groups.

For the days in school indicator we did detect a significant interaction as is shown in Figure 5. The interaction is primarily related to the differences between the patterns of change across the four groups. Children in the comparison groups are doing relatively more poorly over time while individuals served in the PMHP improved during their third follow-up interval which occurs largely after implementation of the demonstration. Children in the HMO condition showed some improvement prior to the implementation of the managed care program in the first follow-up period and essentially showed no change during the second follow-up interval. Relative to the children in the comparison conditions, however, children in the two managed care conditions fared well in the school attendance measure.

Figure 5. Average Number of Days in School for Children Served in Areas 1, 2 & 4 Using a Matched Sample for Three Years



Administrative Data: Measures for Adults

For adults, we found no statistically significant interactions that would indicate differential change across the financing conditions. The comparison conditions differed from one another on the GAF, where adults served in MediPass in Area 2 evidenced significantly poorer functioning than individuals served in the other three conditions. Interestingly, individuals in Area 2 MediPass also had significantly more days at work than persons in the comparison areas, likely reflecting local labor conditions rather than

their overall functional status. No effects were detected on the days in the community measure.

Mail Survey Data

Respondents' self-reported health and mental health status were examined to determine if changes occurred between the two mailings and to assess the impact of respondents' eligibility status and health care plan on their health status. Overall, Medicaid enrollees' physical health status (as assessed by the physical health score on the SF-12) was about 39 (SE=.81) well below the average score of 50 that is typically found in a general population. This indicates these respondents are in poorer physical health than would be expected in a general population. Not surprisingly, TANF recipients reported themselves in significantly better health (*M*=45.3; *SE*=.84) compared to enrollees receiving SSI (*M*=32.8; *SE*=.84) $F(1,309) = 110.18$, $p < .001$. No significant differences were found across the two health care plans in terms of enrollees' physical health status. However, a significant time by eligibility status interaction was detected $F(1,309) = 4.48$, $p < .05$. SSI recipients in both health plans reported an improvement in their health status between the 2001 and the 2002 mailings, while TANF enrollees experienced a decline in their physical health status during this same time period.

Adult enrollees' mental health status (as assessed by the mental health score on the SF-12) was about 40 (*SE*=.39), again well below the average score of 50 expected in a general population, indicating they have poorer mental health. As was the case with physical health, TANF recipients reported themselves in significantly better mental health (*M*=40.8; *SE*=.39) compared to enrollees receiving SSI (*M*=39.6; *SE*=.39) $F(1, 309) = 4.96$, $p < .05$. No classically significant differences (.08) were found in enrollees' mental health status between the two health care plans. However, a significant time by eligibility status interaction was detected $F(1, 309) = 6.91$, $p < .01$. In contrast to the physical health care findings, SSI recipients in both health plans experienced a decrease in their mental health status between the two mailings, while TANF recipients in both plans reported an improvement in their mental health status.

Adults' mental health status was also measured using the Colorado Symptom Index (Shern et al., 1994). TANF recipients reported significantly less frequent mental health symptoms (*M*=30.1; *SE*=.94) compared to enrollees receiving SSI (*M*=35.7; *SE*=.91) $F(1, 336) = 18.63$, $p < .001$. A significant change over time was noted among all Medicaid respondents' mental health symptoms $F(1, 336) = 4.46$, $p < .05$, as enrollees in both plans and in both eligibility statuses reported less frequent mental health symptoms in the 2002 survey compared to the 2001 survey. No other significant differences were found.

Caregivers were asked to assess their children's health status using portions of the Child Health Questionnaire (CHQ: Landgraf, Abetz, Ware, 1999). As might be expected, children living in families receiving TANF were reported in significantly better health (*M*=58.9; *SE*=.60) compared to children receiving SSI (*M*=54.9; *SE*=.67) *F*

(1,149) = 18.77, $p < .001$. No differences were found across the two health care plans or over time in terms of children's health status. Additionally, no significant interactions were observed.

Caregivers also assessed their children's mental health status using the Pediatric Symptom Checklist (PSC: Jellinek, Murphy, & Burns, 1986). Overall, children's average score on the PSC was about 26 (*SE*=.96), which is substantially higher than the mean of 15 found among 21,000 children in a general pediatric sample, indicating they are in poorer mental health. Children living in families receiving TANF were reported as having significantly better mental health (*M*=22.9; *SE*=.97) compared to children receiving SSI (*M*=30.0; *SE*=.95) $F(1, 291) = 27.39$, $p < .001$. No significant differences were found in caregivers' ratings of their children's mental health across the two health care plans or over time, and no significant interactions were found.

Adult respondents were asked to rate their overall level of satisfaction with various aspects of their Medicaid health care plan. Overall, enrollees reported a relatively high level of satisfaction with their Medicaid health care plans (*M*=34.1; *SE*=.41). A significant difference was found in overall level of satisfaction between enrollees in the two health care plans $F(1, 324) = 10.28$ $p < .001$. Enrollees in the PMHP plan reported significantly higher levels of satisfaction with their health care plan (*M*=35.0; *SE*=.40) compared to HMO enrollees (*M*=33.1; *SE*=.42). No significant differences were found between TANF and SSI recipients or over time, and none of the interactions were significant.

Adult respondents who used services were asked to specifically rate their level of satisfaction with the medical and mental health services they received. In terms of medical services, significant differences were found between enrollees in the two health care plans $F(1, 185) = 4.58$ $p < .05$ and a significant eligibility status by time interaction was also observed $F(1, 185) = 4.83$ $p < .05$. PMHP enrollees reported a significantly higher level of satisfaction with the medical services they received (*M*=4.32; *SE*=.07) compared to HMO enrollees (*M*=4.08; *SE*=.08). In addition, the satisfaction with medical services among adults receiving SSI increased over the two mailings while TANF recipients' level of satisfaction with their physical health care services decreased. As was previously noted, TANF recipients leaving the welfare rolls and loosing their Medicaid eligibility likely drive this interaction.

In terms of adult enrollees' level of satisfaction with the mental health services they had received, significant differences were found between HMO and PMHP enrollees $F(1, 41) = 6.86$ $p < .05$. As was found with medical service satisfaction, PMHP enrollees reported significantly higher level of satisfaction with the mental health services they had received (*M*=4.24; *SE*=.17) compared to HMO enrollees (*M*=3.55; *SE*=.20). Additionally, a significant time effect $F(1, 185) = 5.04$ $p < .05$ and a time by plan by eligibility status interaction $F(1, 185) = 7.09$ $p < .01$ were found. With respect to the time effect, respondents' level of satisfaction with mental health services increased between the two mailings from a mean of 3.91 in 2001 to 4.13 in 2002. An examination of the significant three-way interaction reveals that SSI HMO enrollees' level of

satisfaction with mental health services increased over time while TANF HMO enrollees' satisfaction decreased. Among PMHP enrollees, SSI recipients' level of satisfaction with mental health services increased over time while TANF recipients' satisfaction remained stable.

Adult respondents completed a measure assessing their level of trust in their health care providers (Anderson, & Dedrick, 1990). Overall, enrollees reported a relatively high level of trust in their health care provider (M=45.7; SE=1.2) compared to an average of 40 typically found in a general population. Further examination revealed no significant differences in respondents' level of trust in their health care providers between HMO and PMHP enrollees, TANF and SSI recipients, or over time. In addition, no significant interactions were found.

Finally, adult Medicaid enrollees were asked to assess their quality of life using the subject domains from Lehman's (1988) Quality of Life Interview. A significant overall improvement was noted in respondents' quality of life over time $F(1, 343) = 43.94$ $p < .001$, increasing from a mean of 21.0 (SE=.32) in 2001 to 22.8 (SE=.28) in 2002. A significant time by eligibility status interaction was also noted $F(1, 343) = 3.88$ $p = .05$. TANF recipients reported a significantly greater increase (+2.5 points) in their quality of life over the two mailings compared to respondents receiving SSI (+1.2 points). No significant difference was found in the quality of life among adults enrolled in the two health care plans.

Caregivers of the children surveyed were asked to rate their level of satisfaction with various aspects of their children's Medicaid health care plan. Overall caregivers also reported a relatively high level of satisfaction with their Medicaid health care plans (M=37.4; SE=.39). No significant differences were found in caregivers' satisfaction between children enrolled in the two health care plans, over time, or based on their eligibility status. The differences found in caregivers' level of satisfaction with their children's health care plan included a significant plan by eligibility status interaction a $F(1, 283) = 4.06$ $p < .05$ and a significant time by plan by eligibility status interaction $F(1, 283) = 8.94$ $p < .005$.

Caregivers of children receiving TANF in the PMHP plan reported higher levels of satisfaction with their plan (M=38.5; SE=.72) compared to caregivers of children on SSI (M=36.7; SE=.68). In contrast, caregivers of children receiving TANF in the HMO plan reported lower levels of satisfaction with their children's health care plan (M=36.4; SE=.87) compared to caregivers of children receiving SSI (M=37.8; SE=.87).

Examination of the three-way interaction indicates that the level of caregivers' satisfaction with the children's health plan for SSI children enrolled in the HMO plan decreased over time while the level of satisfaction among caregivers receiving TANF with children in the HMO plan increased over time. In contrast, the effects among caregivers of children enrolled in PMHP were the opposite. That is, the level of caregiver satisfaction for children on SSI enrolled in the PMHP plan increased over time

while the level of satisfaction among caregivers receiving TANF with children in the PMHP plan decreased over time.

Additionally, caregivers whose children used services were asked to specifically rate their level of satisfaction with the medical and mental health services their children received. Caregivers generally reported high levels of satisfaction with the medical health services their children received at both Time 1 (*M*=4.32; *SE*=.07) and Time 2 (*M*=4.45; *SE*=.07). No significant differences were found in caregivers' level of satisfaction between the two health care plans, over time, by eligibility status and no significant interactions were found.

In term of mental health services, caregivers also reported high levels of satisfaction with the services their children received at both Time 1 (*M*=4.17; *SE*=.23) and Time 2 (*M*=4.24; *SE*=.21). No significant differences were found by plan, over time, of by eligibility status, however significant time by eligibility status, and time by plan by eligibility status interactions were found. Examination of the significant time by eligibility status interaction revealed the level of satisfaction with mental health services among caregivers whose children were receiving SSI increased between 2001 and 2002 while the satisfaction level of mental health services among caregivers receiving TANF decreased over time. The significant three-way interaction shows a decrease in satisfaction among caregivers receiving TANF whose children were enrollees in the HMO and stability in satisfaction among caregivers receiving TANF with children in the PMHP plan while caregivers of children receiving SSI enrolled in the HMO reported increased satisfaction while the satisfaction levels among caregivers of children enrolled in the PMHP plan decreased.

Caregivers were also asked to assess their level of trust in their children's health care providers. Overall caregivers reported a relatively high level of trust in their health care provider (*M*=47.9; *SE*=.88). Further examination revealed no significant differences in trust in health care providers between caregivers whose children were enrolled in an HMO or PMHP, received TANF or SSI, or over time. Additionally, no significant interactions were detected.

Finally, caregivers were asked to assess their family's quality of life using portion of Lehman's (1988) Quality of Life Interview. As was found among adult respondents, caregivers reported significant overall improvement in their quality of life over time $F(1, 290) = 13.12$ $p < .001$, increasing from a mean of 22.5 (*SE*=.34) in 2001 to 23.6 (*SE*=.30) in 2002. No differences were found in caregivers' ratings of quality of life across the two health care plans or by eligibility status, and no significant interactions were observed.

The effects with regard to plan are summarized in Table 3 below. It is important to note that the effects summarized below cannot be attributed to the implementation of the demonstration program but reflect overall differences that existed between the plans before and after implementation. Since we detected nearly no interactions that would signal differential effects of plan across time, our preliminary conclusion from these analyses is that no effects of changing financing condition are detected in this early phase of implementation.

Table 3: Summary of Differences Between the Financing Conditions in Area 1

Plan Effects in Access Indicators	Adults	Children
Medical penetration rate	-	-
Mental health penetration rate	-	-
Unmet medical needs	-	+ Medipass (.06)
Unmet mental health needs	-	-
Problems getting medications	+ MediPass	-
Plan Effects On Status Indicators		
SF-12 physical health	-	NA
SF-12 mental health	+ MediPass (.08)	NA
Colorado Symptom Index	-	NA
Child Health Questionnaire	NA	-
Pediatric Symptom Checklist	NA	-
Plan Effects on Outcome Indicators		
Satisfaction with plan overall	+ Medipass	-
Satisfaction with medical services used	+ Medipass	-
Satisfaction with mental health services used	+ Medipass	-
Trust in health care provider	-	-
Quality of life	-	-

Summary and Conclusions of Area 1 Evaluation Results

The results from the second year of the evaluation indicate that important changes continue to occur in the organization of services for both of the managed care entities. Both have simplified their operations with ABH now providing the administrative services that were previously purchased from Value Options and HealthEase now directly managing its behavioral health services rather than contracting with a BHO intermediary. The two managed care organizations are using different networks of providers, which will offer real choice of providers to some enrollees, which is not present in the Area 6 demonstration.

Our results from the children's case study indicate some concern with the quality of care being delivered to children with SED – particularly in the HMO condition. The difficulty of locating and interviewing families in the HMO condition may be diagnostic of problems since the Targeted Case Management programs designed to serve them rely on continuity of relationships and assertive outreach. Inability to identify and locate these children may suggest an important lack of accountability for these high-risk

children. Other aspects of care in the HMO condition were non-concordant with treatment guidelines suggesting lower quality of services in this condition than would be desirable. Family support and education and the use of informal resources was weak in ABH and HealthEase.

As was the case in Area 6, pre-existing differences in the rates of mental health service use exists between HMO and PHMP enrollees with PMHP enrollees using all classes of services at a greater rate than HMO enrollees. We did not detect any decrease in utilization rates during the first four months of the demonstration that are included in our administrative data analysis. Next year's results will include a full year of utilization data for a more extensive analysis. Also, in contrast to the results for Area 6, we did not see any differential access to atypical agents or SSRIs for persons served in the HMO.

As with the access analyses, we have quite limited data with which to evaluate costs and the cost containment objectives. Our analysis of standard costs across plans and areas indicates differential intensity of service use between the HMO, PMHP and both of the comparison areas. Greater intensity of services occurs in the MediPass comparison areas. On a case mix adjusted PMPM basis, HMO enrollees receive approximately 75% of the carve out services received byPMHP enrollees. HMO enrollees also receive about 17% less of the behavioral health services that are received by PMHP enrollees in the health sector (for which the HMO is financially responsible, but the PMHP is not.) HMOs are required by their contract with AHCA to cover substance abuse services for pregnant women and medically complicated withdrawal cases; those same services are not included in the capitation for the PMHP. This may account for the fact that HMO enrollees receive almost 4 times the amount of substance abuse services than those received by PMHP enrollees. In terms of other substance abuse services (for which neither plan is financially responsible) HMO enrollees receive less than ten percent of what PMHP enrollees receive. Overall, individuals in the PMHP receive more costly or intensive services than persons in the HMO, but the differences are largely driven by mental health services provided in the health sector and by pharmacy costs (both of these services are off-budget for ABH and are paid by AHCA). The differences between the PMHP and the comparison MediPass conditions in standard costs are largely explained by their differences in the costs for carve out services - which, of course, are the target of the pre-paid payment.

While we note these differences in costs, we report no important or consistent differences between the conditions in the outcomes that are being experienced by their enrollees. Several differences do exist among the health status of enrollees in different plans. However, these differences do not change differentially across time in a way that leads us to be concerned regarding differential outcomes, either for the general enrollee population or for those individuals who received services from a specialty provider.

In conclusion, during the second year we see continuing organizational changes as the demonstrations mature, pre-existing differences between the plans in the characteristics of their service populations and service penetration rates, initial differences in cost structure, but no real differences in the outcomes between the conditions. It is

important to recall that many of these analyses focused on time periods in which many HMO enrollees were still receiving services from Lakeview Center, which will not be the case with next year's analysis.

Recommendations for Area 1

While we will make some general recommendations to the state regarding the PMHPs and their implementation, our recommendations regarding Area 1 are quite limited given the early state of these analyses.

Perhaps the most disturbing findings in this year's study relate to the case study of children with SED. Services in both conditions could be improved, but those in the HMO condition seem to require special attention. Our rationale for carving behavioral health services out of the general health sector involves the special needs of persons with severe disorders. The traditional mental health service system, that often manages carve outs, is thought to be better prepared to provide these services than generic mental health providers. The difficulty in locating children for the case study, as well as information that was obtained from those individuals that were contacted suggests that greater focus on people with severe illnesses in the HealthEase condition is needed. We recommend that these populations be the subject of performance improvement projects implemented by the HMO.

Because of the significant differences in the networks of the two plans and the fact that they are likely using different clinical guidelines, it will be important to continue assessing any differences in satisfaction or outcomes that are experienced by individuals who are served by the different networks. It will also be important to incorporate the providers of the HMO network in the data collection for the implementation analysis in the coming year to gain a better understanding of their roles and how they deliver services.

Area Six: Year Six Evaluation of the Prepaid Mental Health Program

The evaluation of the Prepaid Mental Health Program (PMHP) in Area 6 used methodologies that generally parallel those used in the Area 1 evaluation. It includes an interrelated set of sub-studies in which we document major features of the PMHP and HMO implementation of managed care for mental health services. Additionally, we use a non-equivalent comparison group design and administrative data to examine the composition of the enrolled population, service utilization rates and costs. Mail survey and outcome data for service users are employed to assess outcomes.

Area 6 Implementation Analysis

Methods

This year we conducted a mail survey of the HMOs, BHOs, and CMHCs in Area 6 instead of face-to-face interviews. Much of the information we collect from these organizations is factual and a mail survey is a standardized data collection method that is an efficient and accurate way of gathering the needed information.

We developed five slightly different versions of the mail survey: 1) for the HMOs that do not have a BHO, 2) for the HMOs that have a BHO, 3) for the BHOs, 4) for the carve-out, and 5) for the CMHCs. The content of the mail survey was very similar to the questions we asked in the face-to-face interviews in previous years of the evaluation. The HMOs with no BHO, the BHOS, and the carve-out were asked about changes in their organizational structure, network of providers, contractual relationships, utilization management processes, management information systems (MIS), what clinical guidelines they use, how they measure quality of care and outcomes, efforts to integrate health and behavioral health care, feedback they give to providers, if and how they manage pharmacy practices, and the impact of child welfare privatization that has been implemented in part of Area 6. The HMOs that subcontract with a BHO were asked a smaller set of these questions, excluding ones about their relationship with providers, clinical guidelines, quality of care measures and outcomes, and impact of child welfare privatization, which do not apply to their role with their subcontractor, the BHO. The CMHCs were asked similar questions, but also were asked about the fiscal impact of the demonstration on their organization, new services they have added, how they measure access to services, their ability to provide adequate services to those with co-occurring disorders, and the ways in which consumers and their families are involved in the management and delivery of mental health services at their agency.

Fourteen organizations in Area 6 were contacted to participate in the mail survey: the Carve-out (FHP), the five Medicaid HMOs currently in operation in Area 6 (St. Augustine/AvMed, United Health Care, Staywell, HealthEase, and AmeriGroup), the three BHOs that three of these HMOs subcontract with to manage the mental health benefit (Horizon, United Behavioral Health, and Comprehensive Behavioral Care or CompCare), and the five CMHCs (MHC, Northside, Manatee Glens, Peace River

Center, and Winter Haven Hospital Behavioral Health Division). Each of these organizations was contacted to verify the specific responder for the mail survey. Participants were sent an introduction letter explaining the study and a consent form. This study was reviewed and approved by USF's Institutional Review Board (IRB). Participants were asked to return the completed survey and signed consent form to FMHI research staff. We had a 100% response rate to the survey.

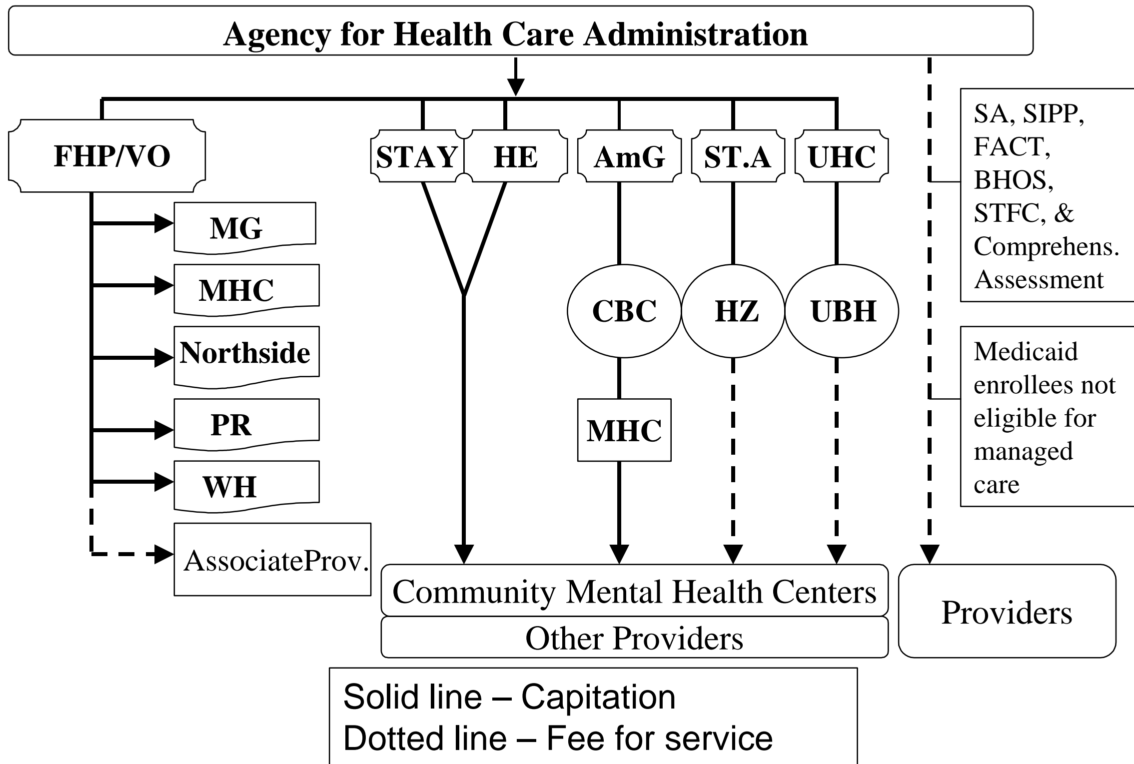
Structures

Consistent with all previous years of the evaluation, FHP's organizational structure and financial relationships remained stable in year 6. For the first four years of the demonstration the HMO condition experienced several major changes each year, including HMO/BHOs entering and leaving the Area 6 market, consolidations, mergers, and HMOs changing their BHOs. Then there was a 19-month period of stability in the HMO structures. But, between August 2002 and January 2003 there were four structural changes in the HMO condition:

- HealthEase was purchased in August 2002 by WellCare Health Plans, Inc.
- HealthEase terminated their contract with CompCare effective January 1, 2003 and now uses the Behavioral Health Department of Well Care/Staywell to manage their behavioral health services. With the addition of HealthEase, the Behavioral Health Department added four full-time staff in their Tampa office and an additional psychiatrist two days per week.
- Florida 1st Health Plan was purchased by the same company that owns Physicians Healthcare Plan, Inc (PHP), effective August 1, 2002.
- AmeriGroup then bought PHP in January 2003. Therefore, two HMOs that were previously in the market (Florida 1st and PHP) are no longer present and there is a new HMO, AmeriGroup, participating in Area 6 for the first time since the demonstration began.

The current funding streams in AHCA Area 6 are illustrated in Figure 6. The dotted line on the right side of the figure identifies the services that are not covered in the prepaid premium to the PMHP and HMOs (i.e., substance abuse, SIPP, FACT, BHOS, specialized therapeutic foster care (STFC), and Comprehensive Assessments). There are also populations of Medicaid enrollees that are excluded from participating in managed care. The excluded services and services for the excluded populations are paid by AHCA on a fee-for-service basis. According to AHCA's April 2003 Enrollment Report, there are 251,790 total Medicaid recipients in Area 6, 57,745 of which are enrolled in MediPass and 123,321 are enrolled in a Medicaid HMO. That means that a large minority (70,724) of enrollees are not in any kind of managed care program.

Figure 6. Area 6 Funding Streams as of 4/03



Contractual relationships
The capitation and reinsurance arrangements for the CMHCs within the carve-out remained stable over the past year. The purchasing arrangements in the HMO condition changed a little. Of the 22 purchasing arrangements between HMOs/BHOs and CMHCs, eight (36%) are fee-for-service, nine (41%) are capitation for outpatient services only, and five (23%) are capitation arrangements for both outpatient and inpatient services (See Table 4.) Capitation for both inpatient and outpatient services are used by only two of the CMHCs across three HMO/BHOs. There are no risk-sharing arrangements (e.g., stop-loss arrangements) between the HMO/BHOs and CMHCs.

Table 4. Area 6 Contractual Relationships

MCO	CMHC1	CMHC2	CMHC3	CMHC4	CMHC5
Carve-Out	cap both	cap both	cap both	cap both	cap both
HMO	cap both	cap outpt	cap outpt	cap both	cap outpt
HMO2	cap both	cap outpt	cap outpt	cap both	cap outpt
HMO3 / BHO1	Fee-For-Service	cap outpt	cap outpt	cap both	Fee-For-Service
HMO4 / BHO2	Fee-For-Service	cap outpt	Fee-For-Service	Fee-For-Service	Fee-For-Service
HMO5 / BHO3				Fee-For-Service	Fee-For-Service

Utilization Management
CMHCs conduct their own internal utilization management for the services under their capitated agreements. Managed care organizations (FHP, HMOs and BHOs) monitor service utilization retrospectively for over and under-utilization of services through examination of the encounter data submitted to them by the CMHCs. FHP requires concurrent registration of inpatient admissions by the capitated CMHCs to ensure medical necessity, appropriate treatment and proper discharge planning. Outpatient services reimbursed on a fee-for-service basis undergo pre-authorization utilization management (initial approvals are usually for 3-7 visits). Inpatient services reimbursed on a fee-for-service basis undergo standard utilization management requiring preauthorization and daily authorization with concurrent review.

An additional requirement imposed this year by one of the BHOs in Area 6 requires the prospective client to call a toll free number and initially request all services prior to the authorization request by the agency. This has posed a hardship for some consumers unable to independently perform this task because of problems associated with their mental illnesses. The contractual relationship between this BHO and CMHC was a fee-for-service arrangement and this requirement appeared to be an obstacle that likely

reduced access to care. This particular BHO is no longer in the Area 6 market as of June 1, 2003 due to some additional organizational changes in the market.

Management Information Systems (MIS)
FHP's Decision Support System (DSS) through the use of Cognos PowerPlay cubes allows for the integration of multiple datasets to be analyzed in hundreds of configurations without writing new report programs. It can link diagnoses and severity of illness information, eligibility data, service utilization data, functional outcomes, pharmaceutical data, financial data, treatment record reviews, and satisfaction results. This integration of data allows for the development of specific disease management programs and the initial diagnoses they have targeted for disease management interventions are schizophrenia, bipolar disorder, major depression, and attention deficit hyperactivity disorder (ADHD).

The HMOs and BHOs are at different stages of using their MIS to manage care. The two HMOs that manage the mental health benefit directly without the assistance of a BHO report that one of the major advantages of that model is the ability to integrate pharmacy data with service utilization data. Another MCO reported they are in the process of implementing a system that will integrate all system applications currently being used into one application that will facilitate greater ease in gathering data related to past authorizations and previous mental health and substance abuse treatment through their program. However, another managed care organization said they do not use MIS data for examining the need for improvements in care, but do review complaints, grievances or denials for possible issues. FHP and some of the HMO/BHOs reported efforts to improve the accuracy of the encounter data the CMHCs submit to them.

Quality of Care
There are several ways that the CMHCs and managed care organizations can monitor and assess quality of care and the health of their of enrollees. Access to services, adherence to clinical practice guidelines, quality of care delivered, and clinical outcomes are four important domains of interest.

<u>Access Indicators</u>
Access to care logs are electronically maintained for all consumers at the CMHCs. Timeframes for scheduling intake appointments are seven days for routine appointments, 24 hours for urgent appointments and same-day for emergency appointments. Amount of time from inquiry to first appointment and amount of time from first appointment to follow-up appointment are monitored. Complaints and grievances are monitored for access issues.

<u>Clinical Guidelines</u>
FHP uses their own Level of Care Clinical Criteria and Diagnosis Based Treatment Guidelines, which were derived from those developed by ValueOptions, Inc. Adherence indicators are tracked with their automated treatment record audit tool. FHP's Member Advisory Committee also developed consumer friendly treatment guidelines for four of

the most common diagnoses (i.e., Major Depressions, Schizophrenia, ADHD and Bipolar Disorder). These "plain language" guidelines are designed to help consumers and families better understand their treatment and to facilitate communication with their provider about their treatment needs.

In the HMO condition, CMHCs operating under capitation arrangements utilize their own internal utilization management criteria and usually undergo an annual audit to ensure the applicability of those internal criteria. The HMOs and BHOs reported using a number of different practice guidelines and mechanisms for helping to ensure their use by providers:

- InterQual Behavioral Health Level of Care Criteria. These are clinical criteria for determining medical necessity for all levels of care. For one BHO, InterQual is used to conduct utilization management with all fee-for-service outpatient providers who receive a summary of the criteria in their provider handbook.
- In some cases, level of care guidelines developed by the managed care organizations are used. In some places, they are available on the Internet for providers. Education regarding the guidelines may be provided in provider bulletins that discuss any updates/revisions that have been made. Methods to determine that the level of care guidelines are in use is done sometimes through clinical discussion or peer-to-peer reviews with the providers.
- American Psychiatric Association Guidelines. Clinical outcome studies are conducted yearly on providers to review adherence to these guidelines. In other cases, their manual is reviewed with new and existing providers on a monthly basis by conference calls. They have a Network Advisory Committee, which is a forum in which participating providers review policies and procedures, clinical practice guidelines, and provide feedback to operations regarding processes. They distribute a quarterly newsletter to the entire network containing updates on clinical practice guidelines.
- Milliman and Robertson and American Society of Addiction Measures (ASAM) were also mentioned as guidelines that are used.

Quality of care delivered

Some measures of the quality of care that is delivered are specific indicators that could be tracked by chart reviews: presenting problems are documented, treatment plans are consistent with diagnosis, progress notes include the patients' strengths and limitations in achieving treatment plan goals, and releasing of information to primary care physicians (PCPs).

These indicators may be tracked by examination of utilization data: readmission rates, treatment lengths of stay for all levels of care, utilization trends by provider, aftercare from inpatient hospitalization within 10 days, and National Committee for Quality Assurance's Quality Compass benchmarks to evaluate utilization data.

These indicators are based on other data: client satisfaction surveys, complaints/ grievances, clinical peer review, adherence to mandatory trainings, and The HEDIS "Plus" Program.

Clinical Outcomes
FHP uses utilization, satisfaction, improved pharmacotherapy, readmissions, and adverse events as outcome indicators. Using the FARS/CFARS data they routinely collect from the CMHCs they created six domains for outcome analysis: global functioning, diagnostic, risk, psychosocial, co-morbid, days in community (and school for children). Scores are divided into four severity groupings: none, slight, moderate, and severe. The member specific outcomes are sent to the CMHCs to use in their continuous quality improvement process. Other outcome indicators that are tracked by MCOs include days worked, days in the community or school, that treatment plans will be congruent with foster care and protective services case plans, clients stabilized in a supported employment program will be employed after 90 days, progress towards TANF goals, and readmission rates.

Co-occurring disorders
Substance abuse services are non-covered services under the waiver. The HMOs are required to provide substance abuse services to pregnant women abusing substances and individuals with medically complicated withdrawal cases. The exclusion of substance abuse from the prepaid premiums makes the delivery of integrated mental health and substance abuse care to with those co-occurring disorders difficult.

FHP has actively participated in the regional and statewide efforts to promote the Minkoff "12-step" model for treating co-occurring disorders, especially in Hillsborough County which hosts a SAMHSA-funded Community Action Grant to develop a planning process to improve the service delivery system for persons with co-occurring disorders. One of the CMHCs reported that the flexibility of the prepaid plan funding streams have allowed them to: increase crisis-screening staff to allow for both MH and SA screening of 100% of all crisis and emergency patients, initiate SA interventions for 100% of all inpatient admissions with indications of co-occurring disorders, initiate outpatient intensive co-occurring groups for people with severe mental illness, and participate in substance abuse and medical staff training sponsored by the FHP.

Overall, the CMHCs still require that a consumer have a primary diagnosis of mental illness in order for them to provide treatment. They have cooperative agreements with the substance abuse agencies to refer individuals for substance abuse treatment. The providers attend trainings and develop internal performance plans to address training needs in this area. These are standard practices for a non-integrated system.

New Services
The CMHCs reported a number of new services that they have added to their continuums of care. Given the flexibility inherent in the PMHP and HMO mental health capitation, these services are available to the Medicaid enrollees enrolled in their plans even though they are not Medicaid-reimbursable in the Medicaid fee-for-service system.

The following groups were added: anger management groups for adults, domestic violence groups for adults, a co-occurring disorders treatment group co-led by mental health and substance abuse counselors. The following rehabilitation services were added in places: supported employment, supported housing, peer specialists, and a supported living program. Two crisis-oriented services were added: crisis support emergency services in Highlands County and a 24-hour mobile crisis response team. Other services were added as well: juvenile sex offender treatment, a children's 1st response team, specialized triage, co-occurring residential treatment (12 bed unlocked, Level 2 residential facility), and co-occurring services by two master level therapists at one center.

Integration of Primary and Mental Health Care

All stakeholders report that the basic component of providing integrated primary and behavioral health care involves the behavioral health provider getting signed consent from the consumer to release their records to their primary care physician and then following up. Reportedly, the mental health providers do this routinely. Patients and families are also urged to notify their PCP regarding their behavioral health treatment.

There were also some other mechanisms reported: Screening for physical health conditions initially and upon follow-up behavioral health visits and education of primary care physicians about mental illnesses and their treatment through provider newsletters and presentations.

Some HMOs encourage their PCPs to do a behavioral health assessment of their patients. The health case managers and the mental health case managers within the HMOs and BHOs can collaborate on patients' care, but it is not clear that this happens consistently. The behavioral health director at the HMO and the psychiatric medical director of the HMO or BHO can participate in health services meetings together regarding their commonly enrolled populations, but again, it is not clear that this happens consistently.

Some innovative practices have been implemented over the past year to facilitate the integration of care. FHP can provide specific pharmacy reports to assist in the identification of members with co-morbid physical conditions and the medications prescribed for them. One CMHC is presently involved in partnering with a network of four primary health clinics to acquire federal funds for the provision of mental health services in the clinics. One BHO established a PCP hotline in 2002 giving the PCPs a toll free number that will give them direct access to a behavioral health clinician whenever needed.

Pharmacy

FHP identifies members who are receiving medication from multiple providers and/or are on duplicative medications. Their reports are user-friendly and organize the information by CMHC, by prescriber, by recipient, so interventions with the outliers can be implemented.

AHCA continues to have an open formulary for pharmaceuticals. However, HMOs reported varying methods for managing the pharmacy benefit, including implementing rules for accessing medications. One mentioned that FDA and APA guidelines regarding disease-, age- and dosage-related approvals are followed in managing pharmacy services. Another reported that they review the literature for standards of prescribing practice and appropriate, effective alternatives to high-cost medications. In another, HMO physicians are provided information on standards of practice, pharmacological outcomes and alternatives, and HMO policies and procedures through mailings, facsimiles and participation in their monthly Physicians Advisory Committee (PAC) meetings. One BHO participates in the PAC meetings and also employs additional methods for review of practice patterns and education of providers.

Consumers and families

Providers reported a number of ways that consumers and their families are involved in the system and in their care. These include being involved in the development of their individualized treatment plan, completing consumer satisfaction surveys, filing complaints and grievances, completing "comment forms", participating in consumer support groups, local NAMI chapter, Baker Act Advisory Board, HUD Board, FACT Team Advisory Committee, Partners in Crisis meetings, as members of agency Board of Directors, and as agency employees.

Fiscal Impact on Community Mental Health Centers

The largest positive impact that the demonstration has had for the CMHCs is increased cash flow that allows delivery of medically necessary services to Medicaid enrollees without concrete benefit limitations. There has been noted improvement over the past couple of years regarding the fiscal impact of HMO reimbursement. In the past, reimbursement was primarily through fee-for-service arrangements and was at times inaccurate, delayed, or in some cases, withheld by the Medicaid HMOs/BHOs. With many of the HMOs/BHOs having prepaid purchasing arrangements with the CMHCs, administrative follow-up on billing issues has been eliminated to a great extent.

One CMHC quantified the additional annual cost of doing business in a capitated environment. They experienced a fiscal impact both in the number of administrative staff needed to manage the project as well as upgrades to their MIS to allow for the management of capitated services and the transmission of data within the support areas. They added four permanent staff at an annual cost of $145,000 to deal with utilization management, data management, data entry and accounts receivable. Annual MIS upgrades, installation services and maintenance services cost $100,000. These costs do not reflect the additional upfront costs they incurred when the demonstration began.

Privatization of child welfare services

Community Based Care (CBC) is at different implementation stages throughout Area 6. Manatee County has the most mature CBC intervention. Manatee Glens CMHC has established a single referral hotline for CBC caseworkers. They have conducted

training with caseworkers in identifying mental health and substance abuse issues. Manatee Glens has placed co-located staff with CBC staff to provide interventions for families referred by protective investigations. Outpatient and residential services have been retooled to support children and families at risk. This includes a requirement that the treatment plan support the CBC case plan goals and deadlines for the family. As a result, Manatee Glens reports that the number of hours of service to foster care children under the prepaid plan increased 500%.

In Hillsborough County there have been increased requests for child and adolescent mental health services (psychiatric, outpatient, and intensive case management) as a result of CBC. The need is typically for individual and/or family therapy directed at reunification of families as well as individual therapy and psychoeducational skill-building groups for parents and children who are involved with DCF as a result of abuse/neglect. CMHCs are finalizing contracts with the selected lead agency. FHP reports that the transition has involved increased attendance in community meetings to address various system of care and operational topics. Mechanisms have been established to deal with issues such as access to behavioral health services, case management, determining financial responsibility for services, communication and coordination, case plan/treatment plan development, evaluations, and collaboration.

The District 14 Community Based Care (CBC) contract was recently signed, so there has been little impact in District 14. There are ongoing discussions with the CBC lead agency pertaining to contracting for outpatient mental health, supportive, and community-based services.

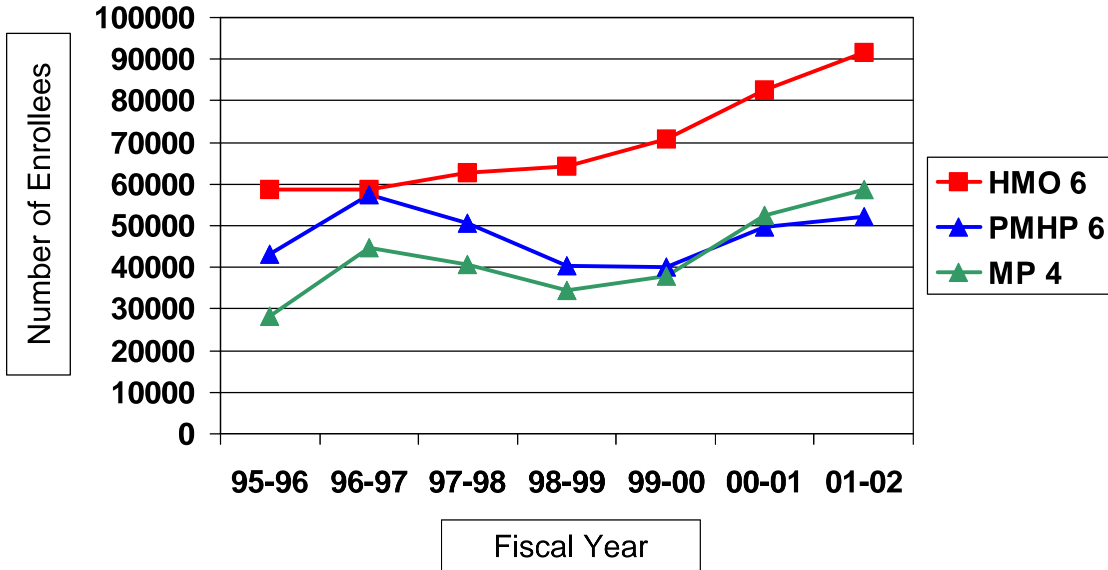
Area 6 Implementation Summary

The FHP structure remained the same over the past year while there were four structural changes in the HMOs. Overall, FHP is advanced in their management of Medicaid mental health services in Area 6. Their financial strategy (capitation with a risk pool), MIS, clinical guidelines and automated adherence audit tool, and pharmacy management methods are exemplary. Additionally, their increased integration of consumer input into their management through a paid consumer coordinator on their staff and a consumer advisory group is progressive. The FHP service center staff has a "systems coordinator" position and remains involved in many system efforts (e.g., child welfare privatization, SAMHSA co-occurring disorders initiative) related to the Medicaid mental health benefit. The Area 6 market in both financing conditions has matured since 1996, but there are still areas that have not advanced to their fullest potential. Some of the management information systems could be improved to more fully integrate information and new and creative services could be implemented.

Characteristics of the Enrolled Population

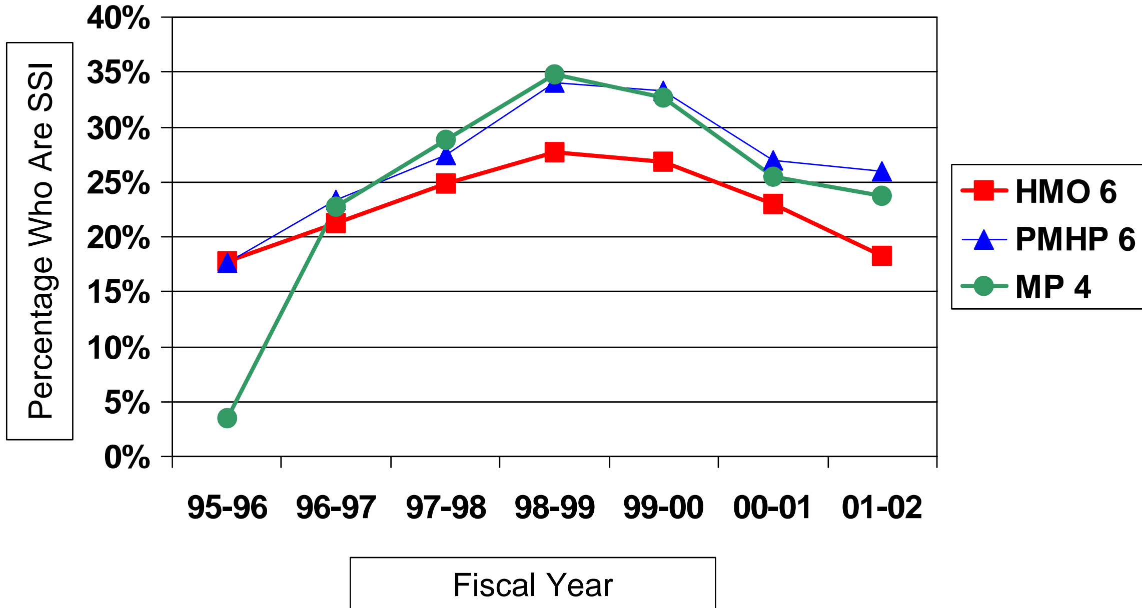
In Figure 7 we display the average monthly enrollment for each of the last seven years, beginning in the year prior to implementation of the demonstration and ending in 01-02. These data reflect March through February intervals since the PMHP began operation in March of 1996. Enrollment in all three conditions has continued to increase in all three financing conditions and appears to be increasing at somewhat greater rates in the MediPass Area 4 comparison site (16% growth last year) and in the HMOs (13%) as contrasted with the PMHP growth rate of about 6%. Enrollment in Area 4 MediPass, which was below that for the PMHP by over 10,000 enrollees in the early years of the demonstration, now exceeds that for PMHP by approximately 6,000 enrollees.

Figure 7. Average Monthly Enrollment: Areas 6 & 4



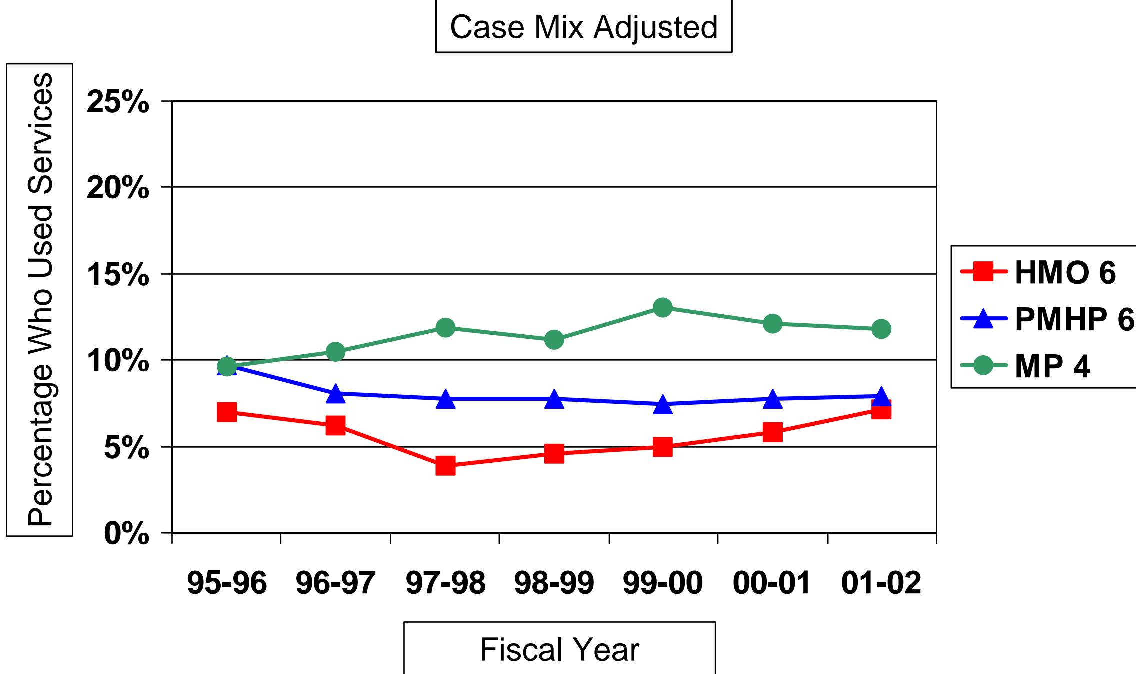
While the absolute number of enrollees has been increasing for the last three years in all three conditions, the relative proportion of the caseload on SSI has been decreasing since 98-99. This likely reflects the disproportional addition of new TANF enrollees to Medicaid. While the three conditions appeared to be converging with respect to the proportion of SSI eligibles in their enrollment in last year's analysis, the differential rates of growth in Area 4 MediPass and the HMOs, coupled with the growth coming predominantly from the TANF population, has begun to differentiate the conditions once again as seen in Figure 8. The PMHP has a slightly higher proportion of SSI enrollees than Area 4 MediPass and an even greater disparity with the HMOs in Area 6.

Figure 8. Proportion of SSI Enrollment: Areas 6 & 4



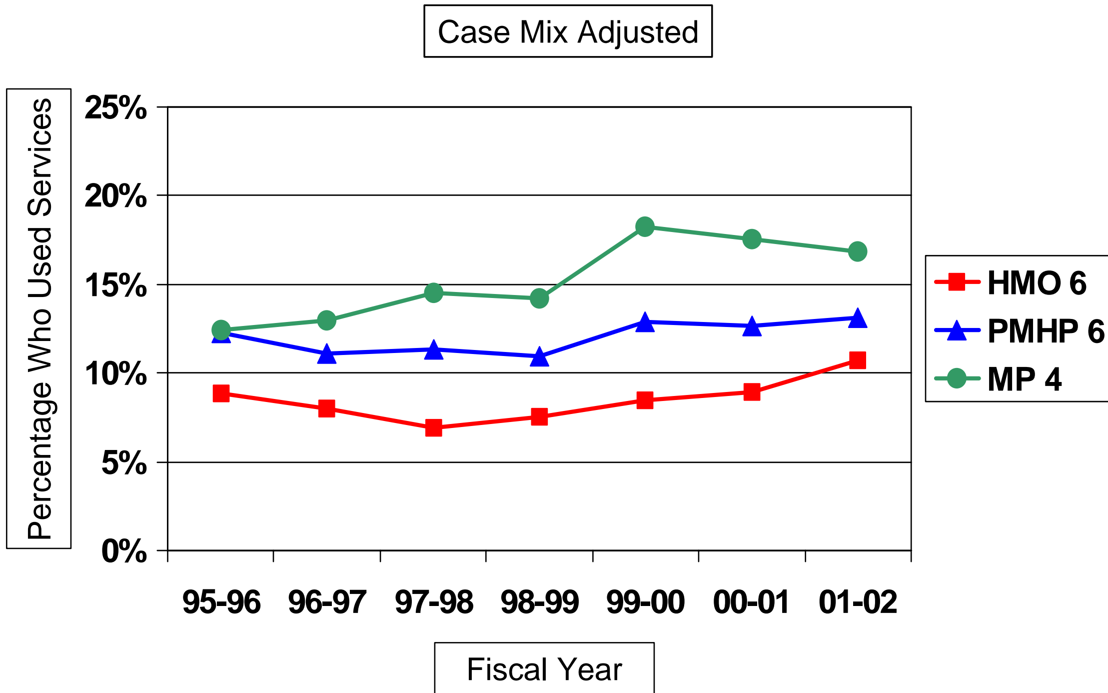
Access to Services: Penetration Rates

In Figure 9 we display the annual service penetration rates, case mix adjusted, for each of the three conditions. In contrast to trends observed in earlier years, the penetration rate for carve out services among HMO enrollees, which has traditionally lagged those of the PMHP, is now nearly equal to the rate in the PMHP. The penetration rate in Area 4 MediPass continues to exceed that for the managed care conditions by about 4 points and has slightly declined during the last three years. Enrollees in the HMO conditions now have penetration rates which slightly exceed those for HMO enrollees prior to the demonstration, while the decline seen in the PMHP following implementation of managed care has remained quite stable during the post implementation interval.



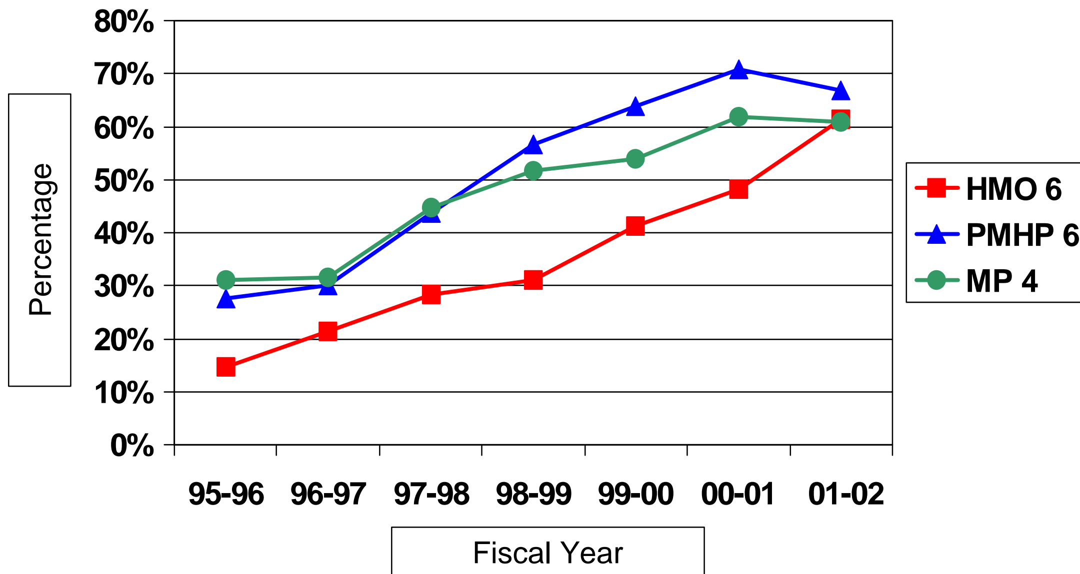
While the HMO and the PMHP rates for utilization of carve out services are now nearly identical, they continue to differ in their rates of other mental health services used. In Figure 10 we present the penetration rates for all mental health services. In the figure we see the same ordering of the conditions that we have observed during the last several years. Both of the managed care conditions in Area 6 have lower rates of utilization than those for MediPass in Area 4. Interestingly, the rates in MediPass have fallen by about 1.4 points from their high of over 18% annual utilization in 99-00. The increase in utilization rates for all mental health services in the HMO condition is largely explained by the increase in carve out services. The net reduction in access associated with the PMHP may be directly estimated as the difference between the MediPass and PMHP rates since the utilization rates for these two conditions were nearly identical before the demonstration was implemented. It is approximately a 3.7 point reduction for the PMHP. Similarly, enrollees in the HMOs have shown a net reduction in use of about 2.5 points for all mental health services following the implementation of the comprehensive managed mental health benefit.

Figure 10. Annual Penetration for All Mental Health Services: Areas 6 & 4

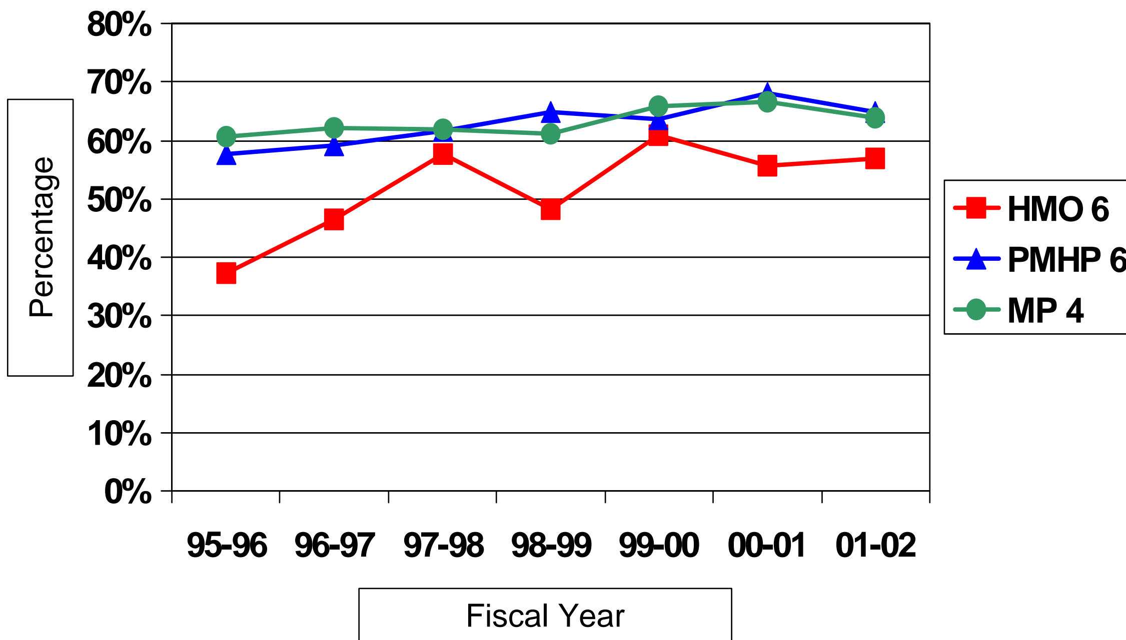


The second set of access analyses involves utilization rates for atypical anti-psychotic agents for persons with schizophrenia and of SSRI antidepressants for persons with depression. We have consistently seen a financing condition effect in access to these drugs – particularly the atypical agents – in which persons in the HMO condition with a diagnosis of schizophrenia have used atypical agents at rates up to 20% lower than individuals in the comparison conditions whose pharmacy benefits are paid on a fee-for-service basis by AHCA. In Figure 11, we see that the differences between conditions largely disappear in this year's analysis with the rate of utilization for HMO enrollees equaling that for enrollees in Area 4 MediPass while remaining about 6 points below that for the PMHP. Interestingly, the equalization of rates occurs because of an increased rate of utilization for the HMO enrollees and because of a flattening of the growth curve for both the PMHP and Area 4 MediPass. It appears as though we may have reached a plateau for these atypical agents and that the effect of financial risk may be interpreted as slowing the adoption of this technology for HMO enrollees who ultimately use the agents at approximately the same rate as individuals in the non-managed conditions.

Figure 11. Atypical Anti-psychotic Penetration for Adults with a Schizophrenia Diagnosis: Areas 6 & 4



While we have observed the plateau in atypical utilization this year, utilization of the SSRIs for persons diagnosed with depression has been relatively stable in the PMHP and Area 4 MediPass over the seven years of this analysis, increasing from slightly less than 60% in 95-96 to about 65% in 01-02 as seen in Figure 12. From 95-96, utilization in the HMO condition increased from about 40% to just under 60% - converging on the non-managed conditions, and is more unstable from year to year than the PMHP and MediPass conditions.



From these multi-year data, it appears as though the financial risk for pharmacy services may ultimately result in penetration rates that are approximately equal to those in the non-risk conditions. However, from the adoption rates for both the SSRIs and the atypicals, financial risk seems to delay adoption. This seems clearest in the atypical condition where the slopes of the penetration rate curves are generally parallel to one another across conditions - intersecting when non-risk bearing conditions plateau in their rate of use.

Access Summary

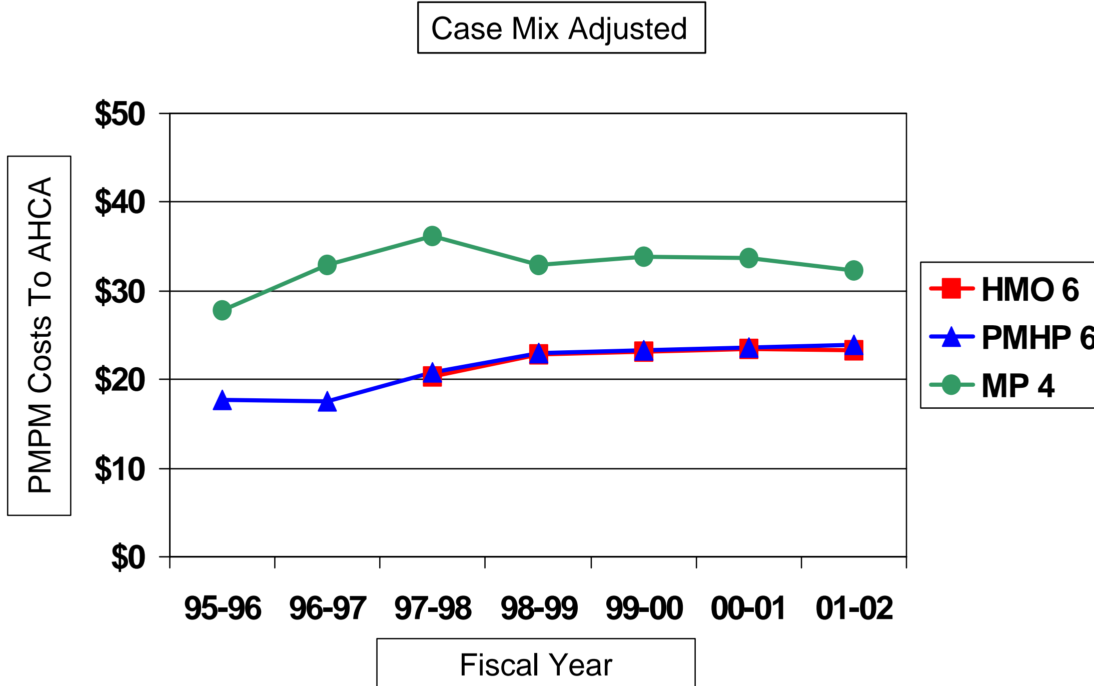
Throughout the evaluation of the Area 6 demonstration, we have noted differences in the rates at which services are used. For the first time this year, we see a convergence in the overall penetration rate for carve out services between the HMO and the PMHP. Additionally, we also see a convergence among the HMOs, the PMHP and MediPass in Area 4 regarding access to pharmaceuticals for people with depression and

schizophrenia. The convergence in service use reflects the gradual increase in HMO use rates since August 1996, while rates have remained flat in the PMHP condition. Rates for the managed care conditions remain substantially below those for the MediPass comparison area, however, and the more comprehensive capitation premium associated with the HMO condition seems to depress utilization of services – for even those services outside of the capitation rate.

Costs

In an analysis that parallels those for penetration, the per-member-per-month (PMPM) costs to AHCA for the carve out services covered by the PMHP capitation payment are displayed in Figure 13. These estimates are case mix adjusted. Since the capitation rate in Area 6 is determined by the historical utilization in Area 4, trended forward by estimated medical inflation, the parallel lines between the managed care condition and the expenditures for carve out services in MediPass in Area 4 is exactly what we would expect. Since it is practically impossible to independently estimate the behavioral health component of the HMO capitation, we use the PMHP rate to estimate the HMO rate for carve out services. Given the lower overall cost in the Area 6 programs, we conclude that the program is cost neutral relative to the comparison area for the services that are included in the capitation payment.

Figure 13. PMPM Costs to AHCA for Carve-Out Services: Areas 6 & 4

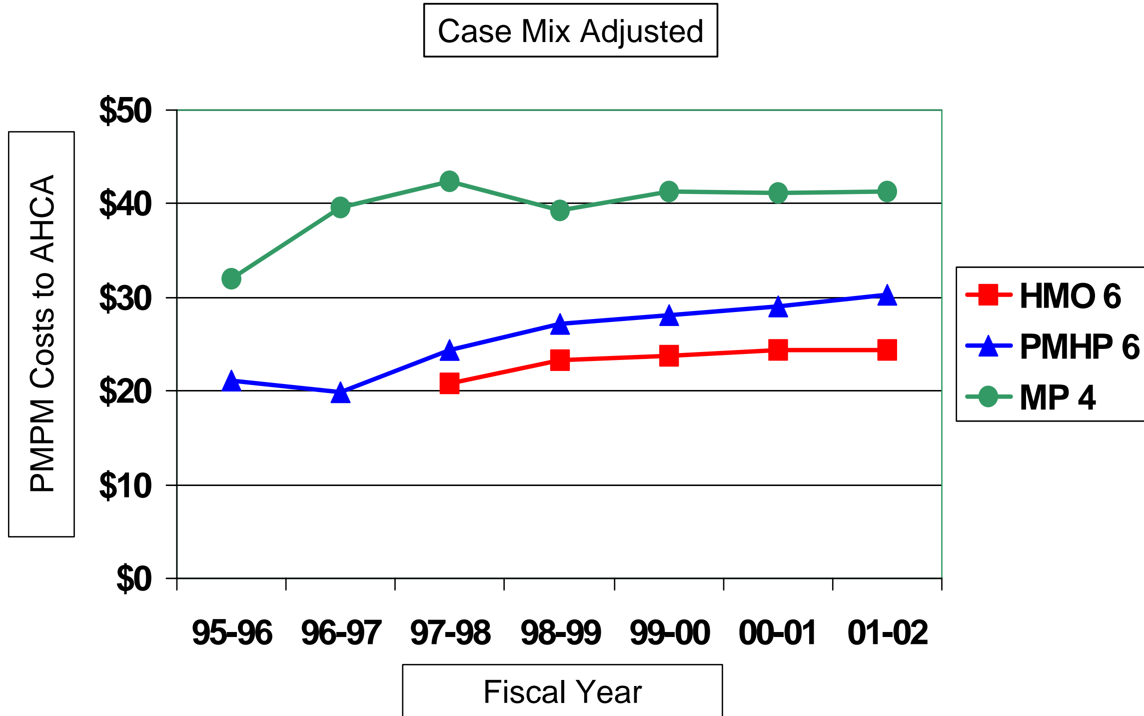


In Figure 14 we present the cost to AHCA for all mental health services, which includes (See appendix 2 for a full discussion.)

- any service with a mental health diagnosis,
- any service with a mental health procedure code,
- any service provided by a mental health professional or a specialty behavioral health care organization or
- any service with a mental health appropriations code

As expected, total costs exceed those for carve out services. The Area 4 MediPass costs exceed those for the HMO and PMHP. As is evidenced by the differences between the PMHP and HMO costs, the greater savings in the HMO condition indicate that the more comprehensive the premium the more cost containment overall. Interestingly, costs for all mental health services have been growing slowly in the PMHP condition while they have remained relatively stable in Area 4 MediPass during the last three years.

Figure 14. PMPM Costs to AHCA for All Mental Health Services: Areas 6 & 4



In Table 5 we present the analysis of standard costs among the three conditions. In these analyses we estimate the costs for each of the services as the average cost paid by the plans for services, grouped into major categories or prices, and from the Medicaid Area 4 fee schedule for services that are equivalent across the conditions. By so doing, we more appropriately value the 'step down' services that may be purchased by the managed care organizations as opposed to using a standard rate table, which would assume that the intensity of these services were equivalent to those offered in the standard price table. (See Appendix 2 for details.) All estimates are case mix adjusted. This is not an analysis of what the plans actually paid (an example of that kind of analysis is in our year 4 report). This analysis is based on a standard cost table and the service use data.

Table 5. PMPM Standard Costs by Category: Areas 6 & 4; Case Mix Adjusted

Expenditure Category	HMO 6	PMHP 6	MP 4
Carve Out Mental Health	$5.27	$8.53	$30.10
Mental Health Services in the Health Sector	1.49	2.86	5.05
Substance Abuse Services Paid by MCO	1.33	.05	
Pharmacy	4.90	11.37	12.71
Fee for Service MH Services Outside of Carve Out	1.51	4.10	3.75
Fee for Service SA	.13	.54	.71
Total Mental Health	**$14.63**	**$27.45**	**$52.32**
Shaded cells were paid by the managed care organizations.			

The first row in the table presents the standard cost for carve out services while the second summarizes the costs for mental heath services delivered in the health sector. These health sector services (such things as primary care, laboratory tests, and occupational therapy services with associated mental health diagnoses) are included in the HMO capitation payment and are billed to AHCA in the PMHP and MediPass conditions. The third row presents substance abuse services that are reimbursed by the plans.

Using a standard cost table (not what the plans actually paid) and data on service use and intensity, standard cost analyses show that the HMO enrollees' use about 38% fewer carve-out services than PMHP enrollees on a case mix adjusted and PMPM

basis. It is also interesting that the volume and intensity of services delivered in the health sector and paid by AHCA for PMHP enrollees is nearly double that of the managed benefit in the HMO. HMOs are required by their contract with AHCA to cover substance abuse services for pregnant women and medically complicated withdrawal cases; those same services are not included in the capitation for the PMHP. This may account for the fact that HMO enrollees receive considerably more substance abuse services than PMHP enrollees, which we also noted in our Area 1 findings. In terms of other substance abuse services (for which neither plan is financially responsible) HMO enrollees receive less than 25% of what PMHP enrollees receive. While we note these differences between the managed care conditions, it is also important to note that, overall, the intensity and volume of services in the relatively unmanaged Area 4 MediPass greatly exceed those for the managed care conditions.

Although utilization rates of atypical and SSRI agents for diagnostically homogeneous groups has roughly equilibrated across conditions, the overall expenditures for pharmaceuticals continues to be quite different for the differing plans, with expenditures in the PMHP and MediPass conditions being over twice as high as those in the HMO, which is at risk for pharmaceutical expenditures.

Substantial overall differences in the intensity of services provided are clearly seen in the last row of the table which represents overall standard costs. While enrollees in the PMHP receive services that cost nearly double that for individuals in the HMO, most of these expenditures derive from expenses borne by AHCA and not by the PMHP. Nearly twice as much resource is expended in Area 4 MediPass as in the PMHP, with most of these differences coming from the rate at which carve out services are utilized, as well as the greater use of the health sector services.

Summary of Cost Analyses

As in previous years these analyses indicate the cost containment objectives of the intervention appear to have been met and further indicate that the greater the service coverage for the capitated payment, the greater the costs are controlled – even for services outside of the payment. More comprehensive premiums result in greater overall cost control.

Outcomes

In these outcome analyses we will examine both the administrative data collected as part of the DCF outcomes monitoring project and the population health status outcomes for individuals on whom we have multiple mail survey measures.

Administrative Data: Measures for Children

We examine three indicators of outcome in these analyses:

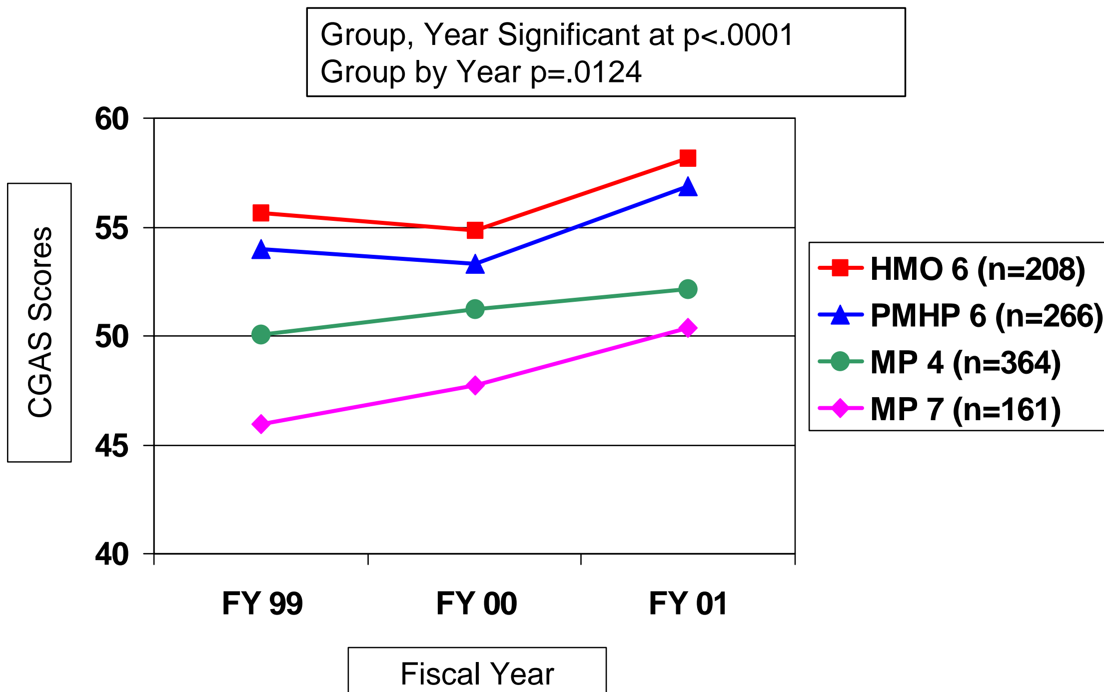
- Children's Global Assessment Scale
- Days in school last month

- Days in the community last month

The statistical comparisons here involve estimates that are derived on individuals for whom we have outcome assessments in each of the three years of the study (99-00, 00-01, and 01-02). Given the longevity of these individuals in the system, they may differ systematically from individuals who have a shorter duration in care. They may represent a relatively more impaired group than the general service population. Also, we have restricted the analyses to individuals who did not switch financing conditions within 6 months of their assessment on the outcome measures. We conducted repeated measures analysis of variance to test the effects of time, financing condition and the time by financing condition interaction. It is the latter effect that would indicate differential patterns of outcome change that could indicate an effect of financing condition. For these analyses we are using two comparison conditions: Area 4, the Jacksonville area, and Area 7, which includes Orlando and surrounding counties.

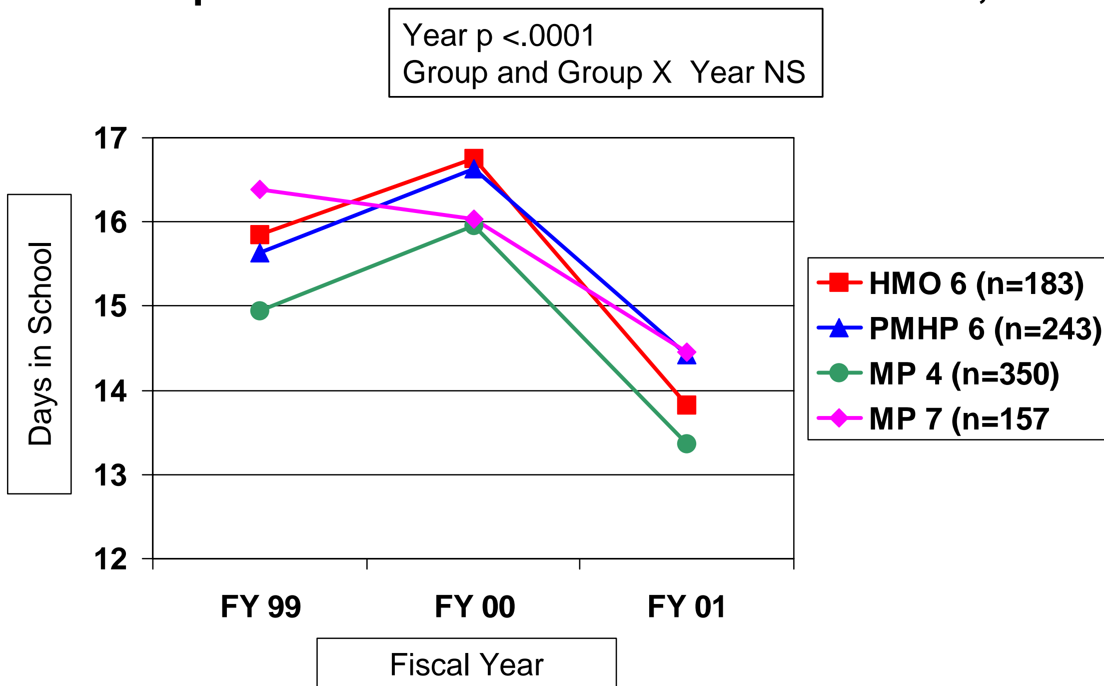
The results for the CGAS comparison are presented in Figure 15. As can be seen from the figure, the four groups differ from one another in the overall levels of impairment. In general, persons served in Area 6 are judged to have better global functioning than persons served in either Area 4 or particularly, Area 7. In general, persons improve over time with mean CGAS scores increasing from about 51 in FY99-00 to about 54 in FY01-02. Finally, the four financing conditions show statistically significant differences in the rate with which they improve, with the two managed care conditions showing a slight decrement in functioning during the first assessment period and improvement in the final assessment. Area 4 and 7 MediPass conditions showed improvement in each year assessed, with Area 7 having a relatively greater rate of improvement than Area 4. Area 7's rate of improvement might be in part attributable to the relatively more impaired population estimates at the first assessment.

Figure 15. Comparison of CGAS Scores for Matched Samples Across Three Fiscal Years: Areas 6, 4 & 7



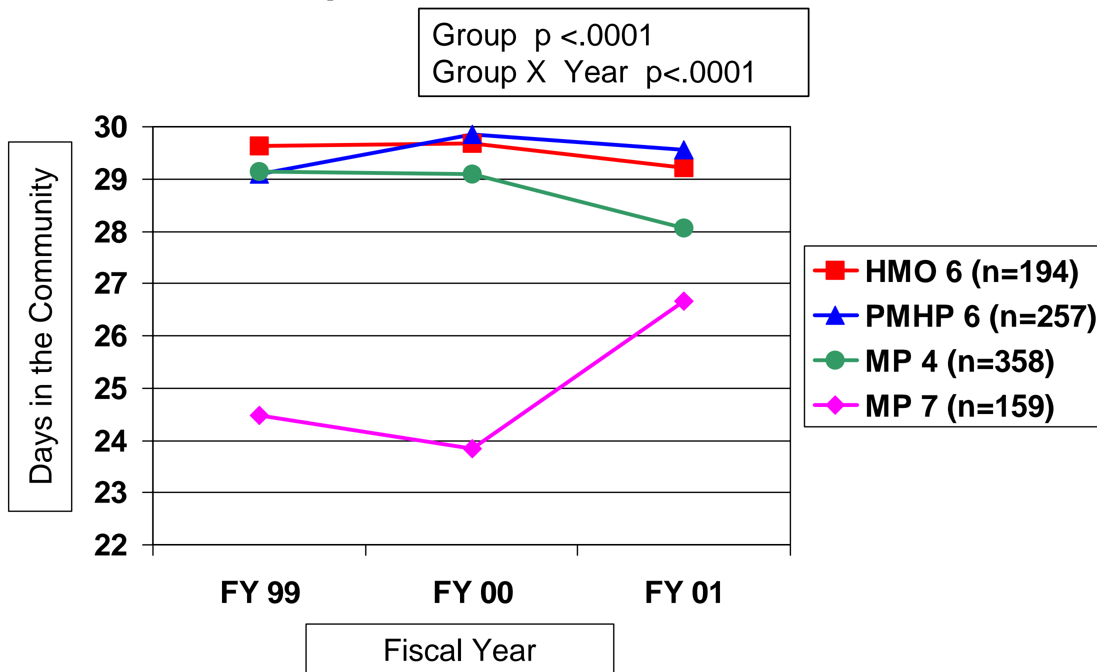
The measure of days spent in school is portrayed in Figure 16. While no group or group by time differences are detected here, it is interesting to note the strong effect of time, with individuals reported to be spending significantly fewer days in the classroom in all four conditions over time, particularly in the final assessment period. This indicator seems to sharply contrast with the CGAS scores that we reported in Figure 14, which indicate improved functioning over time, and bears further examination.

Figure 16. Comparison of Days in School for Matched Samples Across Three Fiscal Years: Areas 6, 4 & 7



Finally, in Figure 17 we present the data for days in the community during the last month. In these analyses we detect a significant group effect, which is principally explained by the greater disruption for individuals in MediPass in Area 7 who have significantly fewer days in the community than like cohorts in either Area 4 MediPass or Area 6. Similarly, the significant group by year interaction is principally explained by the differences between MediPass in Area 7 and the other areas, with each of the other areas showing much less change and a modest decrease in days during the third assessment period while Area 7 MediPass has a marked increase in days in the community during the FY 01-02 period.

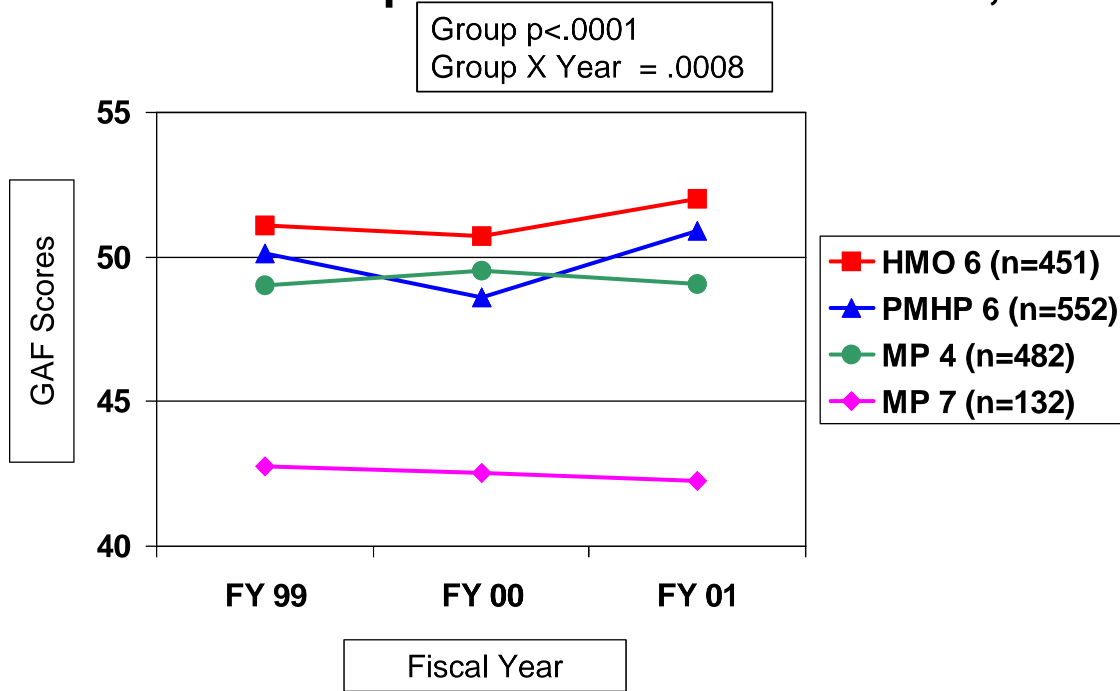
Figure 17. Comparison of Days in the Community for Matched Samples Across 3 Fiscal Years: Areas 6, 4 & 7



Administrative Data: Measures for Adults

For adults we also have three outcome measures, Global Level of Functioning, days at work and days in the community. For the Global Level of Functioning measure we detected both a significant group effect and a group by time interaction (see Figure 18). The group effect primarily reflects the substantially lower functioning ratings for individuals who are served in Area 7 while the group by time interaction reflects the differential change trajectories for the four groups. The two comparison conditions (Areas 4 &7) show a relatively flat profile across time, while the managed care conditions show some decline in functional ratings during the first follow-up interval and a subsequent improvement in the last interval. Differences between the HMO and PMHP conditions attain conventional levels of statistical significance during the last two fiscal years.

Figure 18. Change in GAF by Group for a Matched Sample of Individuals: Areas 6, 4 & 7



For days in the community, we find no evidence for differential change across time related to the financing conditions. As with the GAF, however, there are overall differences between the groups with individuals in the comparison areas having somewhat fewer days in the community than persons served in the managed care conditions. Similar results are obtained for days spent at work where we find no evidence of differential effects by group.

Mail Survey Longitudinal Results.

In this year's analysis of the mail survey results from Area 6, we used data from the four waves of mailings to compare longitudinal outcomes across financing conditions as well as several other demographic and eligibility variables. Our general analytic framework involves identifying individuals on whom we have obtained at least one follow-up mail survey and assessing their change in health or mental health status and satisfaction with services over time. We analyzed adults and children separately.

Adult Longitudinal Mail Survey Responses

Over 78% of adults who responded to our initial mail survey in February 1998 responded to at least one follow-up survey that were administered in October 1998, March 2000 and June 2001. Of the respondents, most (46%) are represented in the third follow-up survey, 33% are represented in the second follow-up mailing and only 21% responded only to the first follow-up survey. Most of the change data, therefore, represents a two to three year follow-up period. Approximately 1,000 respondents are represented in these longitudinal analyses.

Since significant time lags occur between obtaining the mailing lists and mailing the initial survey as well as between the initial and follow-up mailings, some participants are likely to lose their Medicaid eligibility while data are being collected. We attempted to follow individuals regardless of their eligibility status at any given follow-up interval. As might be expected, individuals who did not respond to the initial mailing in February 1998 were more likely to have lost their eligibility at the time of the survey than persons who returned their survey. As we have reported in earlier papers, respondents to the initial and follow-up surveys are more likely to be white, older and participants in the SSI program than are persons who don't return any of our surveys. Importantly, no differences in follow-up rates were obtained between the financing conditions.

We used a regression model to predict change in symptom or functional status as well as satisfaction with health and mental health services. For adults, we found that persons who were enrolled in the PMHP were more likely to report a decrease in the frequency of their psychiatric symptoms than were persons in other groups, holding other demographic, eligibility and enrollment variables constant. Also, the duration of lost eligibility status was positively related to improvement, probably indicating that persons who were less symptomatic were more likely to lose eligibility. With regard to the physical health functioning of individuals who responded to the mail survey, we detected no relationship between financing condition and physical functioning. Enrollment in one of the financing conditions, the HMOs, PMHP or MediPass in Area 4, did not predict improved satisfaction ratings over time for either mental health or general health services received.

For children, approximately 70% of individuals who responded to the initial survey returned at least one follow-up survey. The average age of the child referenced in the survey was approximately 12 with about 61% of these children being girls, 60% non-

white, 53% SSI enrollees and approximate equal representation of the financing conditions. These respondent characteristics generally parallel those for the overall sample. Data for about 925 children are available with at least one follow-up questionnaire.

The mental health status for children was measured by the Pediatric Symptom Checklist (Jellinek, et al., 1986). Children enrolled in MediPass in Area 4 and the HMO condition in Area 6 reported a significant decrease in their symptoms during the follow-up period. Regression results indicated that no plan condition was significantly related to symptom reduction once other variables were entered into the equation. Persons receiving SSI were more likely to report improvement than other eligibility groups and individuals who had a longer eligibility time were less likely to improve than persons with shorter eligibility duration. Children in all three financing conditions showed significant deterioration in their physical functioning over time – perhaps reflecting the impact of increasing disability for the predominant SSI eligibility group. Individuals who participated in the study for a longer duration showed greater decline than persons with a shorter length of study participation. Individuals in the HMO condition, showed relatively greater decline in physical functioning than individuals in the other two financing conditions .

No differences in satisfaction by group for either physical or mental health conditions were obtained. Similarly, no difference in the rate at which individuals with elevated mental health symptom levels accessed care was detected either by financing condition or over time.

Summary of Outcome Findings

From these outcome findings we do not see a strong and consistent pattern of differences across the various comparisons that would lead us to conclude that persons served in the managed care conditions have significantly different outcomes than persons served in the fee-for-service comparison groups. In fact, and in contrast to the results that we presented last year, in several of the outcome comparisons persons enrolled in the managed care conditions had better outcome trajectories than persons who were enrolled in the comparison conditions. Most notably, persons in the PMHP showed more symptom reduction than individuals in the other groups and the functional status (CGAS and GAF scores) of persons in the managed care conditions improves relative to the comparison conditions.

The analyses this year are restricted to individuals for whom we have multiple years of data. These 'long stayers' might represent a specific sub-group of individuals who are relatively more engaged with the service system than persons who either responded to only one mail survey and/or did not have multiple clinic based outcome assessments over time.

Summary and Conclusions Year Six Evaluation in Area 6

The results of the sixth year evaluation document the continuing maturation of the managed care demonstrations. Perhaps the most persistent implementation theme is the nearly continuous change in the business arrangements for the HMO condition, which contrasts sharply with the stable configuration of the FHP. Another recurring theme involves the simplification of the HMO business arrangements and the increasing use of capitation at the provider level. Two of the three largest HMOs now have eliminated the use of an external BHO and use capitation arrangements with the CMHC providers giving them greater predictability in their earnings and greater flexibility in planning their service array.

The ability of the CMHCs to assume risk and manage utilization has come at a cost, however. They report having to add administrative staff to manage these functions, incurring additional expenses. They also report developing a more flexible array of services for their Medicaid recipients, which was one of the original goals of capitated managed care arrangements.

Perhaps as a result of this increasing control at the CMHC level for enrollees in both financing conditions, we are beginning to see that the differences that we have generally reported between the PMHP and HMO are beginning to disappear. Most notably, this year, for the first time in the evaluation, the penetration rate for the capitated carve out services is nearly identical for the HMO and PMHP populations. This is a marked contrast to the differences between the groups that has persisted since the inception of the evaluation. Similarly, the differential rate of access to newer psychotropic medications for people with schizophrenia and depression that has been a persistent theme of this evaluation since we began to monitor pharmaceuticals, has largely vanished in this year's results. This is in part a function of the plateauing of rates in Area 4 MediPass and the PMHP, as well as the continued increase in penetration for the HMO condition. Nonetheless, utilization rates are now roughly equivalent across groups.

Cost differences continue to characterize the conditions. Using a standard cost table (not what the plans actually paid) and data on service use and intensity, standard cost analyses show that the HMO enrollees' use about 38% fewer carve-out services than PMHP enrollees on a case mix adjusted and PMPM basis. We conclude that the managed care conditions have contained costs overall and that the greater the degree of management, the greater the overall cost savings to AHCA.

Driven largely by pharmacy cost differences and other services that are reimbursed fee-for-service by AHCA, individuals in the PMHP receive approximately twice as much service as persons in the HMO overall. Enrollees in both of the managed care conditions use significantly fewer services than persons served in the MediPass Area 4 comparison condition.

While we see substantial differences between the conditions in the cost of services reimbursed by Medicaid, we do not see any consistent pattern of outcome differences that would lead us to conclude that managed care enrollees are disadvantaged in any important way. Last year we reported that persons in the managed care conditions appeared to have poorer outcomes than individuals in the comparison groups. Outcome analyses this year involve a somewhat different group of individuals than those we included last year. This year we required three assessments for the service sample and looked at the longest follow-up interval available in the mail survey sample. Both the administrative and mail survey samples, therefore, may consist of enrollees who stay longer and are better engaged with the treatment system. This being noted, with some minor exceptions, persons in the managed care conditions are doing as well or better than individuals in the comparison conditions in their health, mental health and functional status.

As these interventions have matured, therefore, we have seen a simplification of organizational arrangements, greater risk and autonomy at the provider level and a convergence of pharmacy practice patterns across conditions. Within the restrictions of our outcome assessment tools, we have not seen a decrement in outcomes that are associated with the decrease in cost.

Recommendations

Clearly, the programs in Area 6 and Area 1 are at different stages of development and confront different challenges.

In Area 1 we recommend that AHCA

- Continue careful monitoring of the ABH arrangements to assure that the potential conflict of interest between its management/insurance role and its role as a provider does not occur.

- Continue to evaluate the adequacy of the provider network that is available to HMO enrollees in Area 1. Our analyses of the services for children with SED highlighted concerns with the outreach and case management services, which might be indicative of an overall concern with the management of individuals with severe mental illnesses in the HMO condition.

- Provide oversight for the implementation of evidence based treatment protocols throughout both of the managed care conditions.

In Area 6 we have no specific recommendations for action by AHCA except to implement safeguards so that HMO/BHOs do not require enrollees to formally request services prior to an ongoing provider initiating a request for service. This was happening in Area 6 this past year for a period of time and it only further frustrates access to care.

Overall Recommendations

Our recommendations this year are couched in the understanding that Florida intends to implement pre-paid mental health plans throughout the state by 2006, or earlier.

First, given all of the issues that have arisen during the implementation of the managed care plans, it is essential that AHCA in collaboration with DCF maintain active oversight of the implementation. Knowledge gained from the current implementation by the providers should also be employed to avoid repeating common problems.

Care should be exercised to assure that the managed care vendors have access to providers who are experienced with individuals who have severe and disabling mental illnesses. In both Areas 6 and 1 we saw that early in the demonstrations, some managed care organizations did not appear to have this experience and persons with more severe disorders may have experienced service disruptions.

Cost containment objectives are best realized by including more types of services in the capitation payment. The more services or populations 'carved out' of the capitation, the greater the ability to shift costs from the managed care organizations to the state. The more carve outs, the more fragmented the service system becomes. Aggressive monitoring of the most vulnerable populations should be used to assure access to care.

The inclusion of substance abuse services in the proposed capitation arrangement is conceptually appealing since it holds the promise for better integration of services. However, we have seen from our analysis of the HMO condition, that integrating premiums does not automatically integrate services. Leadership in the adoption of integrated treatment models for persons with dual disorders should be an important state role.

AHCA should reinforce the provision of flexible, consumer driven services within an evidence based framework. It was our experience in observing the development of the PMHP in Area 6 that the flexibility in payment has resulted in a greater range of services and 'creative downward substitution' only in recent years, except for CSU services, which began soon after implementation. Strategies that emphasize this benefit of flexible, assured payment should be used to facilitate their development.

The start up costs for implementing managed care arrangements should not be underestimated. Without adequate capitalization and time, the initial years of managed care will likely result in service disruptions and confusion.

Management information systems at MCOs and providers are essential for the successful management of capitated programs. MIS development unfolded over several years in both of the managed care organizations in Area 6. Any assistance in promoting their development will greatly enhance the quality and accountability of the managed care programs.

Systematic program evaluation is essential for program development.

DCF should be actively engaged in the development of the prepaid plans. All efforts should be made to coordinate existing ADM and Child Welfare services with the plans since they are intrinsically dependent upon one another for their success.

Similarly, other aspects of state government should be considered when developing the programs including locally run health programs, jails, the Departments of Corrections, Juvenile Justice, Education, Health, etc.

Capitating poorly funded programs is always a risky proposition. Efforts to assess the overall adequacy of the service continuum and the competency of service provision continue to be extremely important. Trying to set a service floor, below which we cannot venture, is an important component of developing a competent system.

It is perhaps this last point that is most important. Florida has a very leanly funded specialty behavioral health system – among the poorest in the nation. Management innovations like the prepaid plans hold the promise of increasing the efficiency and effectiveness of services delivered. However, these management functions also require investments and oversight. Shifting the risk away from the state and onto private provider networks will contain costs within budget lines but may simply shift costs onto families and communities. It is critical that all of the key stakeholders in our behavioral health system be involved in the development and oversight of these plans and that we use novel regulatory strategies that focus on the performance of the managed care entities in access to services, quality of services, and the outcomes that are ultimately obtained. Assuring adequate levels of payment is essential for the success of this endeavor.

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Appendix 1:

Implementation Analysis Surveys

FMHI's Medicaid Managed Mental Health Care Study
AHCA Area 1: 2002-2003 ABH/Lakeview Survey

Please complete the following questions.

- If the format provided is incompatible with the information you need to provide or additional space is needed, feel free to use your own format and attach the information.
- Please feel free to submit any relevant reports or information.
- Please include the name and contact information for the person we should contact if we have questions about the answers provided.

As a managed care organization:

1. Please describe any significant changes in your organizational structure or administrative/service delivery staff since the previous year.

2. Please describe any changes in your network of providers during the past year.

3. Please describe the contractual relationships your organization has with each behavioral health provider for your Medicaid enrollees in Area 1. Please describe the financial arrangements within these contracts (e.g., fee-for-service, capitation, case rates). Please highlight any changes since the previous year.

4. Please describe any prior authorization processes or other utilization management processes you continue to employ for managing mental health services provided through your network.

5. Please describe any problems you have had with your MIS in the past year that would affect your reporting of data for the evaluation or to your providers. Please describe how you are now using MIS data to improve the administration of this program and/or clinical services.

6. Please describe the clinical guidelines you make available to your network providers. (Please include information regarding their source and when they were last updated.) Please indicate your methods for determining that they are in use by your providers.

7. Please describe any methods you use to measure quality of care being provided by your network. What do you measure as an access indicator? How do you measure consumer outcomes achieved by your providers?

8. Please describe your provider network's efforts to coordinate or integrate health and behavioral health care.

9. Please describe your efforts to manage pharmacy practices.

10. Please describe the feedback you provide to your network providers. How often and by what method is it provided?

11. How would you describe the fiscal impact that this Medicaid managed mental health care demonstration has had on your organization?

As a provider:

1. Please describe how your agency uses indicators of clinical outcomes to improve clinical practice.

2. How has this managed care demonstration affected your ability to provide services to individuals with co-occurring disorders (mental health and substance abuse)?

3. What new services has your agency implemented during the past year that are available to your Medicaid enrollees?

4. The privatization of child welfare services (i.e., the community based care initiative) has been another major systems change in your area of the state. Please describe the impact that the CBC initiative has had on your agency and consumer care.

5. Please describe your agency's efforts to coordinate or integrate health and behavioral health care on behalf of people you serve.

6. Please describe the ways in which consumers and families are involved in the management and delivery of mental health services at your agency.

7. Please describe any methods you use within your agency to measure quality of care.

FMHI's Medicaid Managed Mental Health Care Study
AHCA Area 1: 2002-2003 Provider Survey

Please complete the following questions.

- If the format provided is incompatible with the information you need to provide or additional space is needed, feel free to use your own format and attach the information.
- Please feel free to submit any relevant reports or information.
- Please include the name and contact information for the person we should contact if we have questions about the answers provided.

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1. Please describe any significant changes in your agency's organizational structure or staff over the past year.

2. Please describe each contractual relationship your agency has with managed care organizations for Medicaid enrollees in Area 1. Please describe the financial arrangements for inpatient and outpatient services within these contracts (e.g., fee-for-service, capitation, case rates). Please highlight any changes over the past year. Are the contracts multi-year or single year?

3. How would you describe the fiscal impact that this Medicaid managed mental health care demonstration has had on your organization?

4. What new services has your agency implemented during the past year that are available to your Medicaid enrollees?

5. What do you measure as an indicator of access to services?

6. Please describe any methods you use to measure quality of care. Also, please describe how your organization utilizes any feedback received from the managed care organizations to improve quality of care.

7. Please describe how your agency uses indicators of clinical outcomes to improve clinical practice.

8. How has this managed care demonstration affected your ability to provide services to individuals with co-occurring disorders (mental health and substance abuse)?

9. Please describe the ways in which consumers and families are involved in the management and delivery of mental health services at your agency.

10. Please describe your efforts to coordinate or integrate health and behavioral health care.

11. The privatization of child welfare services (i.e., the community based care initiative) has been another major systems change in your area of the state. Please describe the impact that the CBC initiative has had on your agency and consumer care.

FMHI's Medicaid Managed Mental Health Care Study
AHCA Area 6: 2002-2003 FHP Survey

Please complete the following questions.

- If the format provided is incompatible with the information you need to provide or additional space is needed, feel free to use your own format and attach the information.
- Please feel free to submit any relevant reports or information.
- Please include the name and contact information for the person we should contact if we have questions about the answers provided.

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1. Please describe any significant changes in your organizational structure or staff since the previous year.

2. Please describe any changes in your network of providers during the past year.

3. Please describe the contractual relationships your organization has with each behavioral health provider for your Medicaid enrollees in Area 6. Please describe the financial arrangements within these contracts (e.g., fee-for-service, capitation, case rates). Please highlight any changes since the previous year.

4. Please describe any prior authorization processes or other utilization management processes you continue to employ for managing mental health services provided through your network.

5. Please describe any problems you have had with your MIS in the past year that would affect your reporting of data for the evaluation or to your providers. Please describe how you are now using MIS data to improve the administration of this program and/or clinical services.

6. Please describe the clinical guidelines you make available to your network providers. (Please include information regarding their source and when they were last updated.) Please indicate your methods for determining that they are in use by your providers.

7. Please describe any methods you use to measure quality of care. What do you measure as an access indicator? How do you measure consumer outcomes?

8. Please describe your efforts to coordinate or integrate health and behavioral health care.

9. Please describe the feedback you provide to your network providers. How often and by what method is it provided?

10. Please describe your efforts to manage pharmacy practices.

11. The privatization of child welfare services (i.e., the community based care initiative) has been another major systems change in your area of the state. Please describe the impact that the CBC initiative has had on your agency and consumer care.

FMHI's Medicaid Managed Mental Health Care Study
AHCA Area 6: 2002-2003 Provider Survey

Please complete the following questions.

- Please feel free to use your own format and/or attach information to answer the questions.
- Please include the name and contact information for the person we should contact if we have questions about the answers provided.

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1. Please describe any significant changes in your agency's organizational structure or staff over the past year.

2. Please describe each contractual relationship your agency has with managed care organizations for Medicaid enrollees in Area 6. Please describe the financial arrangements for inpatient and outpatient services within these contracts (e.g., fee-for-service, capitation, case rates). Please highlight any changes over the past year. Are the contracts multi-year or single year?

3. How would you describe the fiscal impact that this Medicaid managed mental health care demonstration has had on your organization?

4. What new services has your agency implemented during the past year that are available to your Medicaid enrollees?

5. What do you measure as an indicator of access to services?

6. Please describe any methods you use to measure quality of care. Also, please describe how your organization utilizes any feedback received from the managed care organizations to improve quality of care.

7. Please describe how your agency uses indicators of clinical outcomes to improve clinical practice.

8. How has this managed care demonstration affected your ability to provide services to individuals with co-occurring disorders (mental health and substance abuse)?

9. Please describe the ways in which consumers and families are involved in the management and delivery of mental health services at your agency.

10. Please describe your efforts to coordinate or integrate health and behavioral health care.

11. The privatization of child welfare services (i.e., the community based care initiative) has been another major systems change in your area of the state. Please describe the impact that the CBC initiative has had on your agency and consumer care.

Appendix 2:

Technical Appendix for the Administrative Data Analyses

Prepared by Mary Rose Murrin, M.A.

Guide to Documentation for the Tables

For each table, the following sections are necessary to read for a complete understanding of the data in each table.

Table 2. PMPM Standard Costs by Category- First Four Months of Managed Care
Table 5. PMPM Standard Costs by Category: Areas 6 & 4

- Part I: Definitions
  - Diagnostic Definitions
  - Mental Health Services Definitions
  - Definitions for the Standard Costs Tables
  - Mental Health Pharmaceutical Definitions

- Part II: Methods
  - General Rules of the Administrative Data Analysis
  - Monthly Enrollment
  - Case Mix Adjustment
    - Case Mix Weights for Penetration and Cost Analyses in Areas 4 and 6
  - Cost to AHCA (capitation payments excluded)
  - Expenditure Estimates
  - Pharmaceutical Service Costs

Guide to Documentation for the Figures

For each figure, the following sections are necessary to read for a complete understanding of the data in the figure.

Figure 2. Average Monthly Enrollment: Areas 1, 2, & 4
Figure 3. Proportion of SSI Enrollment: Areas 1, 2, & 4

- Part II: Methods
  - General Rules of the Administrative Data Analysis
  - Monthly Enrollment

Figure 4. Penetration Rates for Carve-Out, Specialty, and All Mental Health Services: Areas 1, 2, & 4

- Part I: Definitions
  - Diagnostic Definitions
  - Mental Health Services Definitions
- Part II: Methods
  - General Rules of the Administrative Data Analysis
  - Monthly Enrollment
  - Case Mix Adjustment
    - Case Mix Weights for Penetration and Cost Analyses in Area 1
  - Annual Penetration

Figure 6. Average Monthly Enrollment: Areas 6 & 4
Figure 7. Proportion of SSI Enrollment: Areas 6 & 4

- Part II: Methods
  - General Rules of the Administrative Data Analysis
  - Monthly Enrollment

Figure 8. Annual Penetration for Carve-Out Services Only: Areas 6 & 4

- Part I: Definitions
  - Diagnostic Definitions
    - Carve-Out Diagnosis
  - Mental Health Services Definitions
    - Carve-Out Mental Health Services
- Part II: Methods
  - General Rules of the Administrative Data Analysis
  - Monthly Enrollment
  - Case Mix Adjustment
    - Case Mix Weights for Penetration and Cost Analyses in Areas 4 and 6

Figure 9. Annual Penetration All Mental Health Services: Areas 6& 4

- Part I: Definitions
    - Diagnostic Definitions
    - Mental Health Services Definitions

- Part II: Methods
    - General Rules of the Administrative Data Analysis
    - Monthly Enrollment
    - Case Mix Adjustment
        - Case Mix Weights for Penetration and Cost Analyses in Areas 4 and 6
    - Annual Penetration

Figure 10. Atypical Anti-psychotic Penetration for Adults with a Schizophrenia Diagnosis: Areas 6 & 4

- Part I: Definitions
    - Diagnostic Definitions
        - Adult Schizophrenia
        - Adult Depression
        - Adult Bipolar
    - Mental Health Services Definitions
        - All Mental Health
    - Mental Health Pharmaceutical Definitions
        - Atypical Agents

- Part II: Methods
    - General Rules of the Administrative Data Analysis
    - Monthly Enrollment
    - Access to Pharmaceuticals

Figure 11. SSRI Penetration for Adults with a Depression Diagnosis: Areas 6 & 4

- Part I: Definitions
    - Diagnostic Definitions
        - Adult Schizophrenia
        - Adult Depression
        - Adult Bipolar
    - Mental Health Services Definitions
        - All Mental Health
    - Mental Health Pharmaceutical Definitions
        - SSRI Agents

- Part II: Methods
    - General Rules of the Administrative Data Analysis
    - Monthly Enrollment
    - Access to Pharmaceuticals

Figure 12. PMPM Costs to AHCA for Carve-Out Services: Areas 6 & 4

- Part I: Definitions
    - Diagnostic Definitions
        - Carve-Out Diagnosis
    - Mental Health Services Definitions
        - Carve-Out Services

- Part II: Methods
    - General Rules of the Administrative Data Analysis
    - Monthly Enrollment
    - Case Mix Adjustment
        - Case Mix Weights for Penetration and Cost Analyses in Areas 4 and 6
    - Costs to AHCA

Figure 13. PMPM Costs for All Mental Health Services: Areas 6 & 4

- Part I: Definitions
    - Diagnostic Definitions
    - Mental Health Services Definitions
        - Total Mental Health Services Definition

- Part II: Methods
    - General Rules of the Administrative Data Analysis
    - Monthly Enrollment
    - Case Mix Adjustment
        - Case Mix Weights for Penetration and Cost Analyses in Areas 4 and 6
    - Costs to AHCA

Part I: Definitions

Diagnostic Definitions

I. Carve-Out Diagnosis

Carve-Out diagnoses are for those people with claims with the following primary diagnoses (ICD-9): 290-290.43; 293-298.9; 300-301.9; 302.7; 306.51-312.4; 312.81-314.9; 315.3; 315.31; 315.5; 315.8; 315.9.

The following definitional labels cover the total range of Carve-Out diagnoses.

Adult Depression

Age greater than or equal to 21 with a primary diagnosis range 296.2 through 296.39 which includes all sub-types of major depressive disorder both single and recurrent episodes.

Adult Bipolar

Age greater than or equal to 21 and a primary diagnosis within the 296-296.1 ranges, which includes manic disorder single and recurrent episodes, or a primary diagnosis within the range 296.4-296.89 which includes all the bipolar disorders and the manic-depressive psychoses.

Adult Schizophrenia

Age greater than or equal to 21 and a primary diagnosis within the 295.0 through 295.3 ranges which includes simple, disorganized, catatonic, and paranoid schizophrenia or a primary diagnosis within the 295.9 range which is designated as unspecified schizophrenia.

Child/Adolescent Depression

Age less than 21 with a primary diagnosis range 296.2 through 296.39 which includes all sub-types of major depressive disorder both single and recurrent episodes, or a primary diagnosis within the 309-309.9 range excluding 309.21 and 309.81 which includes all the adjustment reactions except for separation anxiety and prolonged post-traumatic stress disorder.

Child/Adolescent Disruptive

Age less than 21 with a specific primary diagnosis in the following list: 312.8 (Specified disturbances of conduct not), 312.81 (Childhood onset conduct disorder), 312.82 (Adolescent onset conduct disorder), and 312.9 (Unspecified disturbance of conduct).

Child/Adolescent ADHD

Age less than 21 with a primary diagnosis anywhere in the 314 ranges which includes all types of hyperkinetic syndromes of childhood.

Other Possible SMI (Other 295, 296, 311, 312 in Primary Diagnosis)
Any age with a primary diagnosis within the ranges covered by schizophrenic disorders, major affective psychoses, depressive disorders and conduct disorders not specified above.

Other Carve-Out MH (All other primary diagnoses meeting Carve-Out definition)
Any age with a primary diagnosis within the ranges covered by the carve-out diagnoses but not listed with the SMI disorders. These would include specific senile dementias, organic psychotic conditions, delusional disorders, and non-organic psychoses, neurotic disorders, hysteria, psycho-sexual dysfunction, some psychogenic physiological problems, sleep disorders of non-organic origin, acute reactions to stress, adjustment reactions not SMI, nonpsychotic mental disorders due to organic brain damage, emotional disturbances, and developmental speech and language disorders or other unspecified and non-specific developmental disorders that result in the need for a carve-out service.

II. Non-Carve Out Diagnoses

These are diagnoses within the 290-314 ranges that may result in the need for a behavioral health service not covered by the Carve-Out. Specific definitions are listed below:

Substance Abuse
Primary diagnosis in the range of 291 (alcoholic psychoses), 292 (drug psychoses), 303 (alcohol dependence), 304 (drug dependence), or 305 (non-dependent abuse of drugs), or a non-mental health primary diagnosis and a secondary diagnosis in the substance abuse ranges.

Possible Secondary SMI
Primary diagnosis is not a carve-out or substance abuse diagnosis but secondary diagnosis in the 295, 296, 311, 312, 314 ranges.

Other Non-Carve Out Diagnoses
Anything else not covered by an above definition in the 290-314 range.

All claims are placed in one of the above classes or are labeled as "Non-MH Diagnosis". Claims in this category may have either no diagnosis or a non-MH diagnosis. Those claims with a non-MH diagnosis have met one of the other MH criteria.

Mental Health Service Definitions

Total Mental Health Services

- Encounter reported by Florida Health Partners (FHP) or reported by a Behavioral Health Organization or Provider for an Area 6 HMO.

- Any Specialty Mental Health procedure code as defined by the CPT manual or the AHCA Community Mental Health or Targeted Case Management Handbooks.

- Has a diagnosis between 290. And 314.99

- Service provided by MH practitioner

- Has a MH appropriations code

Carve-Out Mental Health Services

- Inpatient MH with Carve-Out Diagnoses
  - Includes Adult with more than 45-days per fiscal year, as the period here crosses fiscal years.

- Outpatient Hospital with Carve-Out Diagnoses
  - Excludes Lab/Pathology services
  - Does not exclude other services outside of revenue code range (do not have revenue codes)

- Psychiatric/Physician's Services with Specialty Code= 42,43,44 and Carve-Out Diagnoses

- Community Mental Health Services
  - Excluding Comprehensive Assessment, Specialized Therapeutic Foster Care, and Behavioral Health Overlay

- Targeted and Intensive Targeted Case Management

Note: This definition may include more FFS in PMHP than HMO due to incomplete removal of non-carve-out services that the HMO provides but PMHP does not- but should have a comparable service mix to MP4.

Specialty Mental Health Services

- All services with a 290-314 primary diagnosis specifically excluding Primary Substance Abuse Diagnoses and Secondary Substance Abuse Diagnoses without a Primary MH diagnosis

- Includes all of the following services within the Spec MH Diagnosis range or missing a diagnosis but with other MH criterion
  - Inpatient Services
  - Outpatient Hospital and Emergency Services
  - Physician/Psychiatrist Services
  - Community Mental Health Services
  - Targeted Case Management

Differs from Carve-Out Services in that a broader range of diagnoses and services include all mental health services provided in the five categories listed- no exclusions or limitations.

Definitions for the Standard Costs Tables

Carve-Out Mental Health

- For HMO and PMHP conditions, the standard costs for services provided by the Managed Care Organization (MCO) for the services below. For MediPass conditions, the standard costs for the services below (FFS providers).
  - Inpatient: Inpatient days, and downward substitution days (residential, acute inpatient, respite care) and physicians services within one of these settings for both children and adults.
  - Hospital Outpatient: All emergency and hospital outpatient care including physician services.
  - Physician Care: All care in an office, clinic, or home setting
  - Therapy: Individual, group, or family psychotherapy
  - ITOS/HBRS: Intensive Therapy On-Site Services and Home/Community-Based Rehabilitative Services
  - Day Treatment: Mental Health Day Treatment or Rehabilitation Day Treatment
  - Targeted Case Management: Intensive Case Management or Case Management for Mentally Ill Children or Adults
  - Other CMH: Evaluation, Treatment Planning, or Rehabilitation Services
  - Other Services Provided by the PMHP or through a BHO.

Mental Health Services in the Health Sector

- For the HMO conditions, the standard costs for these services when provided through the HMO plan. For PMHP and MediPass conditions the standard costs for these services provided through FFS providers. The major difference between Inpatient, Hospital Outpatient, and Physician Care categories is that the primary diagnosis is in the MH range but not a Carve-Out or Substance Abuse diagnosis.
    - Inpatient: Inpatient days, and downward substitution days (residential, acute inpatient, respite care) and physicians services within one of these settings for both children and adults.
    - Hospital Outpatient: All emergency and hospital outpatient care including physician services.
    - Physician Care: All care in an office, clinic, or home setting Speech/Hearing Therapy for Mental Health diagnoses
    - Lab/Pathology work for Mental Health diagnoses
    - Occupational/Physical Therapy for Mental Health diagnoses
    - All Other Mental Health services

Substance Abuse Services Paid by MCO

Services provided through HMO or PMHP with a primary substance abuse diagnosis.

Total Non-Pharmacy MH/SA Expenditures in Plan.

For the HMO condition, the sum of the three lines above. For the PMHP condition, the sum of Carve-Out Mental Health and Substance Abuse services paid by the MCO.

Pharmacy

Actual costs for all pharmacy expenditures that meet our mental health definition. In the HMO condition, costs are the paid claims amount provided by the HMO. In the other conditions, costs are the amount paid by AHCA for the pharmaceuticals (see definitions for SMI Pharmacy Analysis and Other MH Pharmacy below).

Fee for Service MH Services Outside of Carve-Out

- STFC: Specialized Therapeutic Foster Care
- BHOS: Behavioral Health Overlay Services
- Comprehensive Assessment
- In HMO and PMHP conditions, any Carve-Out[1] definition services provided FFS.
- In the HMO condition, any Health Sector definition services provided FFS.

Fee for Service SA

All claims paid by AHCA for services with a primary substance abuse diagnosis.

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[1] Carve-Out is defined by an algorithm that can be overly inclusive for Inpatient, Emergency, and Out-patient hospital categories, as we are not supplied with revenue code data that more clearly define Carve-Out services.

Total Mental Health
Sum of all lines in the column.

Mental Health Pharmaceutical Definitions

SMI Pharmacy Analysis
The presence of any claim for a person in an SMI group with an NDC code that corresponds to the following agents (brand names or ingredients) are used to define pharmacy penetration in a particular drug class.

Atypical Agent List	SSRI Agent List
CLOZAPINE CLOZARIL (CLOZAPINE) GEODON (ZIPRASIDONE HCL) RISPERDAL (RISPERIDONE) SEROQUEL (QUETIAPINE FUMARATE) ZYPREXA (OLANZAPINE)	CELEXA (CITALOPRAM HYDROBROMIDE) FLUOXETINE (FLUOXETINE HCL) FLUVOXAMINE MALEATE LUVOX (FLUVOXAMINE MALEATE) PAXIL (PAROXETINE HCL) PROZAC (FLUOXETINE HCL) SARAFEM (FLUOXETINE HCL) ZOLOFT (SERTRALINE HCL)

Definition of Other Mental Health Pharmacy
In addition to the atypical and SSRI Agents, the following pharmaceutical agents are used as a definition for MH Drug in calculating MH Pharmacy costs.

MH Drug Class	Pharmaceutical Agents
Newer Antidepressant	BUPROPION HCL (NDRI) DESYREL (TRAZODONE HCL-SARI) EFFEXOR (VENLAFAXINE HCL-SNRI) REMERON (MIRTAZAPINE-Alpha-2 Reuptake Inhibitor) SERZONE (NEFAZODONE HCL-SARI) TRAZODONE (TRAZODONE HCL-SARI) WELLBUTRIN (BUPROPION HCL-NDRI)
Other Antidepressant	ADAPIN (DOXEPIN HCL (Tricyclic) AMITRIPTYLINE (AMITRIPTYLINE HCL Trycyclic) AMITRIP/CDP (AMITRIP HCL/CHLORDIAZEPOXIDE (Tricyclic anti-anxiety combination) AMOXAPINE (AMOXAPINE (Tricyclic) ANAFRANIL (CLOMIPRAMINE HCL (Tricyclic) ASENDIN (AMOXAPINE (Tricyclic) AVENTYL (NORTRIPTYLINE HCL (Tricyclic) CLOMIPRAMINE (CLOMIPRAMINE HCL (Tricyclic) DESIPRAMINE (DESIPRAMINE HCL (tricyclic) DOXEPIN (DOXEPIN HCL (Tricyclic) ELAVIL (AMITRIPTYLINE HCL (Trycyclic) ENDEP (AMITRIPTYLINE HCL (Trycyclic) IMIPRAMINE (IMIPRAMINE HCL (Tricyclic) LIMBITROL (AMITRIP HCL/CHLORDIAZEPOXIDE (Anti-

	depressant/Anti-anxiety) LUDIOMIL (MAPROTILINE HCL (Tricyclic) MAPROTILINE (MAPROTILINE HCL (Tricyclic) MARPLAN (ISOCARBOXAZID (MAOI) NARDIL (PHENELZINE SULFATE (MAOI) NORPRAMIN (DESIPRAMINE HCL (tricyclic) NORTRIPTYLINE (NORTRIPTYLINE HCL (Tricyclic) PAMELOR (NORTRIPTYLINE HCL (Tricyclic) PARNATE (TRANYLCYPROMINE SULFATE (MAOI) SINEQUAN (DOXEPIN HCL (Tricyclic) SURMONTIL (TRIMIPRAMINE MALEATE (Tricyclic) TOFRANIL (IMIPRAMINE HCL (Tricyclic) TOFRANIL-PM (IMIPRAMINE PAMOATE (Tricyclic) VANATRIP (AMITRIPTYLINE HCL (Trycyclic) VIVACTIL (PROTRIPTYLINE HCL (Tricyclic)
Other Anti-psychotics	ADGAN (PROMETHAZINE HCL (Phenothiazine) ANERGAN (PROMETHAZINE HCL (Phenothiazine) BACLOFEN (D-METHORPHAN HB/PROMETH HCL (Phenothiazine) CHLORPROMAZINE (CHLORPROMAZINE HCL (Phenothiazine) COMPAZINE (PROCHLORPERAZINE MALEATE (Phenothiazine) COMPRO (PROCHLORPERAZINE MALEATE (Phenothiazine) DROPERIDOL (DROPERIDOL (Non-phenothiazine) FLUPHENAZINE (FLUPHENAZINE HCL (Phenothiazine) FLUPHENAZINE (FLUPHENAZINE DECANOATE(Phenothiazine) HALDOL (HALOPERIDOL (Non-Phenothiazine) HALDOL (HALOPERIDOL LACTATE (Non-Phenothiazine) HALDOL DECANOATE (HALOPERIDOL DECANOATE (Non-Phenothiazine) HALOPERIDOL (Non-Phenothiazine) HALOPERIDOL (HALOPERIDOL LACTATE (Non-Phenothiazine) HALOPERIDOL (HALOPERIDOL DECANOATE (Non-Phenothiazine) HALOPERIDOL POWDER (HALOPERIDOL (Non-Phenothiazine) INAPSINE (DROPERIDOL (Non-Phenothiazine) LEVOPROME (METHOTRIMEPRAZINE HCL (Phenothiazine) LOXAPINE (LOXAPINE SUCCINATE (Non-Phenothiazine) LOXITANE (LOXAPINE SUCCINATE (Non-Phenothiazine) LOXITANE C (LOXAPINE HCL (Non-phenothiazine) MEDERGAN (PROMETHAZINE HCL (Phenothiazine) MELLARIL (THIORIDAZINE HCL (Phenothiazine) MEPERGAN (MEPERIDINE HCL/PROMETH HCL (Phenothiazine) MEPERIDINE/PROMETHAZINE (Phenothiazine) MEPROZINE (MEPERIDINE HCL/PROMETH HCL (Phenothiazine) MOBAN (MOLINDONE HCL (Non-Phenothiazine) M-PHEN SYRUP (PHENYLEPHRINE HCL/COD/PROMETH (Phenothiazine) NAVANE (THIOTHIXENE (Non-Phenothiazine) NAVANE (THIOTHIXENE HCL (Non-Phenothiazine) ORAP (PIMOZIDE (Non-Phenothiazine) ORMAZINE (CHLORPROMAZINE HCL (Phenothiazine)

	PERMITIL (FLUPHENAZINE HCL (Phenothiazine) PERPHENAZINE (PERPHENAZINE (Phenothiazine) PHEN-50 (PROMETHAZINE HCL (Phenothiazine) PHENAZINE (PROMETHAZINE HCL (Phenothiazine) PHENERGAN (PHENYLEPHRINE HCL/PROMETH HCL (Phenothiazine) PHENERZINE (PROMETHAZINE HCL (Phenothiazine) PHEN-TUSS SYRUP (PROMETHAZINE HCL (Phenothiazine) PROCHLORPERAZINE (PROCHLORPERAZINE MALEATE (Phenothiazine) PROCHLORPERAZINE (PROCHLORPERAZINE EDISYLATE (Phenothiazine) PROLIXIN (FLUHENAZINE HCL (Phenothiazine) PROLIXIN DECANOATE (FLUPHENAZINE DECANOATE (Phenothiazine) PROLIXIN ENANTHATE (FLUPHENAZINE ENANTHATE (Phenothiazine) PROMACOT (PROMETHAZINE HCL (Phenothiazine) PROMAZINE (PROMAZINE HCL (Phenothiazine) PROMETHAZINE (PROMETHAZINE HCL (Phenothiazine) PROREX (PROMETHAZINE HCL (Phenothiazine) ROMAZINE W/CODEINE (KG/COD/PROMETH/SODIUM CIT (Phenothiazine) SERENTIL (MESORIDAZINE BESYLATE (Phenothiazine) SPARINE (PROMAZINE HCL (Phenothiazine) STELAZINE (TRIFLUOPERAZINE HCL (Phenothiazine) THIORIDAZINE (THIORIDAZINE HCL (Phenothiazine) THIOTHIXENE (THIOTHIXENE (Non-Phenothiazine) THIOTHIXENE (THIOTHIXENE HCL (Non-Phenothiazine) THORAMED (CHLORPROMAZINE HCL (Phenothiazine) THORAZINE (CHLORPROMAZINE HCL (Phenothiazine) TORECAN (THIETHYLPERAZINE MALEATE (Phenothiazine) TRIFLUOPERAZINE (TRIFLUOPERAZINE HCL (Phenothiazine) TRILAFON (PERPHENAZINE (Phenothiazine) VESPRIN (TRIFLUPROMAZINE HCL (Phenothiazine) V-GAN (PROMETHAZINE HCL (Phenothiazine)
Anti-depressant/ Anti-psychotic combination	AMITRIP/PERPHEN (AMITRIPTYLINE HCL/PERPHENAZINE) ETRAFON (AMITRIPTYLINE HCL/PERPHENAZINE) ETRAFON FORTE (AMITRIPTYLINE HCL/PERPHENAZINE) TRIAVIL (AMITRIPTYLINE HCL/PERPHENAZINE)
Anti-mania	ESKALITH (LITHIUM CARBONATE) ESKALITH CR (LITHIUM CARBONATE) LITHIUM CARBONATE (LITHIUM CARBONATE) LITHIUM CIT (LITHIUM CITRATE) LITHOBID (LITHIUM CARBONATE) LITHONATE (LITHIUM CARBONATE) LITHOTABS (LITHIUM CARBONATE)
Anti-anxiety	ALPRAZOLAM () ATIVAN (LORAZEPAM) BUSPAR (BUSPIRONE HCL) BUSPIRONE HCL (BUSPIRONE HCL)

	CDP (CHLORDIAZEPOXIDE HCL) CHLORDIAZEPOXIDE (CHLORDIAZEPOXIDE HCL) CLIDINIUM/CDP (CLIDINIUM BR/CHLORDIAZEPOXIDE) CLIDINIUM/CDP (CLIDINIUM/CHLORDIAZEPOXIDE) CLORAZEPATE (CLORAZEPATE DIPOTASSIUM) DALMANE (FLURAZEPAM HCL) DIASTAT (DIAZEPAM) DIAZEPAM (DIAZEPAM) DI-TRAN (DIAZEPAM) DIZAC (DIAZEPAM/SOYBEAN OIL) DORAL (QUAZEPAM) EQUAGESIC (ASPIRIN/MEPROBAMATE) EQUANIL (MEPROBAMATE) ESTAZOLAM (ESTAZOLAM) FLURAZEPAM (FLURAZEPAM HCL) GEN-XENE (CLORAZEPATE DIPOTASSIUM) H TRAN (CLIDINIUM BR/CHLORDIAZEPOXIDE) HALCION (TRIAZOLAM) H-TRAN (CHLORDIAZEPOXIDE HCL) LIBRAX (CLIDINIUM BR/CHLORDIAZEPOXIDE) LIBRAX (CLIDINIUM/CHLORDIAZEPOXIDE) LIBRITABS (CHLORDIAZEPOXIDE) LIBRIUM (CHLORDIAZEPOXIDE HCL) LIDOX (CLIDINIUM BR/CHLORDIAZEPOXIDE) LORAZEPAM () MB-TAB (MEPROBAMATE) MEPROBAMATE (MEPROBAMATE) MEPROBAN (MEPROBAMATE) MICRAININ (ASPIRIN/MEPROBAMATE) MIDAZOLAM (MIDAZOLAM HCL) MILTOWN (MEPROBAMATE) MITRAN (CHLORDIAZEPOXIDE HCL) OXAZEPAM (OXAZEPAM) PAXIPAM (HALAZEPAM) PMB (ESTROGENS,CONJUGATED/MEPROBAM) POXI (CHLORDIAZEPOXIDE HCL) PROSOM (ESTAZOLAM) RESTORIL (TEMAZEPAM) SERAX (OXAZEPAM) SPAZ-10 (CHLORDIAZEPOXIDE HCL) SPAZMATE (CLIDINIUM BR/CHLORDIAZEPOXIDE) TEMAZEPAM (TEMAZEPAM) TRANCOPAL (CHLORMEZANONE) TRANXENE SD (CLORAZEPATE DIPOTASSIUM) TRIAZOLAM (TRIAZOLAM) VALIUM (DIAZEPAM) VANSPAR (BUSPIRONE HCL) VERSED (MIDAZOLAM HCL) XANAX (ALPRAZOLAM) X-O'SPAZ (DIAZEPAM) ZETRAN (DIAZEPAM)

Anti-hyper-kinesis	CONCERTA (METHYLPHENIDATE HCL) DNZ-2 (DEANOL) METADATE ER (METHYLPHENIDATE HCL) METHYLIN 1 (METHYLPHENIDATE HCL) METHYLPHENIDATE METHYLPHENIDATE ER (METHYLPHENIDATE HCL) NEURO-PLUS (DMAE/GKB/GOTK/ASGD/BRAHM/K-GIN) PROVIGIL (MODAFINIL) RITALIN (METHYLPHENIDATE HCL) RITALIN-SR (METHYLPHENIDATE HCL)

Part II: Methods

General Rules of the Administrative Data Analysis

- Use implementation analysis created for the previous year's report to inform definitions of costs and to determine rates not directly paid by AHCA

- If changes are made in definitions of variables or case mix from year to year, then entire analysis is re-run beginning with March 1995 for the Area 4 and 6 analysis and from July 1999 for the Area 1 analysis.

- Database that forms basis of reports contains the same variables in all years.

    - Sources:
        - FFS , Eligibility, and Capitation payment data comes from the AHCA cap files kept historically and provided to the PSRDC on an annual basis for this analysis.
        - Managed Care Encounter data from the Area 1 and Area 6 HMOs and PMHPs are provided in response to a data request issued each year of the evaluation and covers the encounters reported in both Behavioral Health (for PMHP and HMOs), General Health and Pharmacy (HMOs) for all Medicaid Eligibles during the period from March of the previous year through February of the current year.

- Keep a constant mix of services and service definitions across conditions.

- Any measure that is included in one group, is included in all- even if it should be null in group.

- All definitions are applied equally across groups- except ones that are part of the definition of the group, as in cost to plan.

Monthly Enrollment

- To qualify as a member in this analysis, must meet all the following conditions:
    - Age 1 through 64 on first day of month (AHCA Age Groups 2-6 excluding 65 and older)
    - Eligible in condition (HMO or MP) as determined by the AHCA Eligibility Cap file.
    - Have monthly cap payment greater than $0 in payment condition in the AHCA claims files.
        - Medipass capitation payment (W9893)
            - March 1995- February 1996 in Area 6
            - March 1995- February 2002 in Areas 4 (for comparisons with Area 6)
            - March 2000-February 2002 in Area 7
            - July 1999- October 2001 in Area 1

            - July 1999-February 2002 in Area 2 and Area 4 (for comparisons with Area 1).
        - HMO capitation payment (W9600)
            - March 95- February 2002 Area 6
            - July 1999- February 2002 Area 1
        - PMHP capitation payment (W1078)
            - March 1996- February 2002 in Area 6
            - November 2001-February 2002 in Area 1
    - Be in TANF, SSI, Foster Care, or SOBRA. Due to variations in these definitions over the years, we have adopted the following algorithm for determining eligibility program based on eligibility code that remains constant across all analyses:
        - TANF='MA I', 'MA R', 'MA U', 'MCE', 'ME C', 'ME I', 'ME T', 'MN', 'MO A', 'MO D', 'MO P', 'MO S', 'MO T', 'MO U', 'MO Y', 'MP C', 'MP N', 'MP U'
        - SSI='MI A', 'MS', 'MT A', 'MT C', 'MT D', 'MT S', 'MT W'
        - FC='MCAE', 'MCAN','MCFE','MCFN'
        - SOBRA='MM C', 'MM I'
        - Foster Care and SOBRA limited to under age 21
    - Assignment to HMO provider based on provider ID on capitation payment for a given month in an analysis. All HMO capitation payments to people eligible in Area 1 and Area 6 that have payments to providers outside the network for that area are eliminated.

- Average Monthly Enrollment is simply the number of member months (persons that meet all membership definitions for a given month within the year) added together in a fiscal year(FY) within any condition, divided by 12.
    - For Areas 4 and 6, the FY is from March through February
    - For Area 1, the FY is from July through June
        - For the intervention year, this was broken down into July-Oct and Nov-February

- Figure 4: Areas 4 & 6: Proportion of SSI Enrollment is the number of member months for SSI enrollees divided by the total number of member for all enrollees in the studies.

Case Mix Adjustment

Case-mix adjustment is a method for combining and weighting statistics obtained from subgroups of data into a single group statistic that mirrors a case-mix from a defined population. It equates the groups for factors that may cause population-level statistics to differ. Each subgroup mean or percentage in the following reports is weighted by the percentages below.

Case Mix Weights for Penetration and Cost Analyses in Area 6
These weights are based on the total case mix of the three groups in this analysis for March 2000. Merged cells reflect low population totals in some years requiring the merging of PMPM (per member per month) denominators. In these cases, the case mix weights were also merged so that there were no undefined statistics. Once a case mix weight is merged, it remains merged throughout the analysis.

Case Mix Weights for Penetration and Cost Analyses in Areas 4 and 6		TANF/Wages	SSI- No Medicare	Foster Care Children	SOBRA Children
Ages 1-5	Caucasian	0.040091	0.001184	0.00307	0.039877
	African-American	0.052897	0.001715		0.02477
	Other	0.023964	0.00915	0.002838	0.029647
Ages 6-13	Caucasian	0.057036	0.008472	0.008344	0.047703
	African-American	0.079175	0.015242		0.040622
	Other	0.032107	0.026211	0.008247	0.029659
Ages 14-20	Caucasian	0.025954	0.015455	0.004889	0.018251
	African-American	0.036172	0.019948		
	Other	0.014222	0.007899	0.004328	0.028719
Child Totals		0.36162	0.10528	0.03172	0.25925
Ages 21-54	Caucasian	0.041519	0.050395	N/A	N/A
	African-American	0.039743	0.034677		
	Other	0.019405	0.021626		
Ages 55-64	Caucasian	0.000378	0.01606		
	African-American	0.000513	0.00843		
	Other	0.000336	0.009058		
Adult totals		0.10189	0.14024		
Totals for Eligibility Plan		0.46351	0.24552	0.03172	0.25925

Case Mix Weights for Penetration and Cost Analyses in Area 1
Case mix weights for these analyses are based on the population totals for November 2001 for the four groups in this analysis.

Case Mix Weights for Penetration and Cost Analyses in Area 1 analysis		TANF/Wages	SSI- No Medicare	Foster Care Children	SOBRA Children
Ages 1-5	Caucasian	0.056473	0.00124	0.002786	0.055985
	African-American	0.057537	0.001572		0.024868
	Other	0.007828	0.006215	0.002372	0.019303
Ages 6-13	Caucasian	0.07013	0.004636	0.006473	0.068788
	African-American	0.076434	0.008493		0.038512
	Other	0.008649	0.02053	0.005348	0.013847
Ages 14-20	Caucasian	0.038322	0.013183	0.005049	0.032669
	African-American	0.040335	0.017304		0.021825
	Other	0.004406	0.006147	0.004521	0.005626
Child Totals		0.360112	0.079321	0.026549	0.281422
Ages 21-54	Caucasian	0.068659	0.050197	N/A	N/A
	African-American	0.046428	0.034675		
	Other	0.005415	0.013752		
Ages 55-64	Caucasian	0.000651	0.016335		
	African-American	0.000535	0.009482		
	Other	0.000129	0.006337		
Adult totals		0.121818	0.130778		
Totals for Eligibility Plan		0.481930	0.210099	0.026549	0.281422

Annual Penetration

Definition of Penetration

Recipient has penetrated if they have received at least one service in a given fiscal year, while eligible within plan, eligibility type, and age group. The numerator is the number of eligible months for recipients that penetrated service category while eligible in plan eligibility type and age group. For the HMO group, each HMO is considered a separate plan, and HMO totals are summed across all HMOs. If a person penetrated only one HMO but was eligible in multiple HMOs, the eligible months for only the HMO where they penetrated would be counted. If they penetrated multiple HMOs, all HMO provider totals would be considered. The denominator is the number of eligible months for all eligible recipients within a plan, eligibility type, gender, race, and age group. All penetration analyses are case mix adjusted using weights pertinent to the analyses listed under the appropriate case mix.

Access to Pharmaceuticals

These are the methods for this analysis:

- First all claims meeting the diagnostic definition for Adult Schizophrenia, Adult Depression, or Adult Bipolar were isolated.

- All persons that have at least one claim for one of the three diagnostic groups without any claims for the other two diagnostic groups in the fiscal year were included in the analysis.

  - For persons in the HMO and PMHP group that may have switched plan groups in the year, the criterion was applied separately to their claims while a member of a particular group. While in the HMO group, a claim for service or pharmacy while in the PMHP group would not affect their diagnostic classification or pharmacy penetration for the HMO group. This is in keeping with the general rule that people are counted as separate people while in the HMO and PMHP plans.

Costs to AHCA

There is a separate analysis for Carve-Out, Specialty MH (Including Carve Out) and All Mental Health Services. To obtain the raw cost to AHCA, the following method is used:

- For each group, sum of all MH service payments found in AHCA claims files for each member month for all eligible persons (as defined in Methods: Monthly Enrollment section).

- For PMHP Carve-Out, obtain the sum of PMHP capitation payments found in member months.

- ❖ For HMO (Carve-Out Only), multiply member months by average PMHP payment for each eligibility type, and age group. The HMO payment for other types of mental health services cannot be determined with available data.
- ❖ For MP4, multiply 38 cents per MP capitation payment to obtain the estimate for the First Mental Health management fee per eligible month.
- ❖ Sum across cost components for service type definition.
- ❖ Divide by member months for each case-mix adjustment subgroup (see Methods: Case Mix Adjustment).
- ❖ Case mix adjust the PMPM for each subgroup using weights for that subgroup.
- ❖ Add up the case-mix portions to get the case-mix adjusted PMPM cost.

<u>Expenditure Estimates (Estimated Service Rates)</u>

- ❖ Find the total member months for each AHCA age group, eligibility plan, payment plan, and race group.
- ❖ Multiply the number of units by the standard rate for that service CATCAID.
- ❖ Add all standard rates within a broad service category
- ❖ Divide by member months for that subgroup
- ❖ Case mix adjust the PMPM for each subgroup using weights for that subgroup
- ❖ Add up the case-mix portions to get the case-mix adjusted PMPM cost

Service rates were derived via the following method:

- ❖ For all HMO services that had units greater than 0 and costs greater than 0, the average cost per procedure code within a broad service category was calculated. These were calculated for a given procedure code within a broad cost category.
- ❖ For PMHP procedure codes, Florida Health Partners provided a standard service cost table for the period July 1, 2000- June 1, 2001 which was used in the Area 6 analysis. ABH provided a similar table for the Area 1 analysis (sent March 2003).
- ❖ For services provided by HMO/FHP that had a procedure code in the AHCA maximum rate tables (Physician and Hospital Rates Schedules effective 1/1/2002, Community Mental Health Handbook April 2000, Targeted Case Management Handbook July 1999) applicable rates were examined.
- ❖ For every procedure code within a broad service category, all available standard rates were examined from all three sources, and the highest expenditure rate

available was applied. Thus, for equivalent procedure codes within a service category, the PMHP and HMO condition had equivalent expenditure estimates.

- For FFS services, averages calculated from direct cost to AHCA was used.
- One rate was assigned to each procedure code, and was incorporated into the standard rate table for each analysis in the following order
    - All procedure codes identified in the AHCA maximum rate tables were assigned the highest AHCA maximum rate found. These rates were identical in both areas
    - All remaining procedure codes with an average FFS rate that could be calculated from Area 4 FFS data for the time period in the analysis were assigned next
    - Of those that remained, the procedure codes that could be assigned with an average FFS rate from the alternate comparison area for the time period were assigned
    - Of those that remained, the procedure codes that could be assigned with an average FFS rate for the study area for the time period were assigned (now all rates for FFS procedures have been assigned).
    - Of those that remained, there was no overlap between local codes assigned by HMO providers and PMHP providers. For PMHP providers the rates came from the provider rate table. For HMO providers the rates came from average costs for those claims that were assigned costs.
    - Of the very few procedure codes that remained, the rate assigned was the average rate across all rates for procedure codes within the same service category code.
- This year, we weighted each estimate for each procedure code by the number of claims using that procedure code, then obtained the weighted average cost estimate for each service type defined by MH CATCAID[2] definitions. These average cost estimates then equate the cost of each service type.

Pharmaceutical Service Costs

MH costs are defined as the payments for any claims that had NDC codes that matched the pharmaceutical agents contained in the MH pharmacy definition.

- For each group, sum of all MH pharmacy payments found in AHCA claims files for each member month for all eligible persons (as defined in Methods: Monthly Enrollment section).

- For HMO, sum of all HMO MH pharmacy payments found in HMO pharmacy files for each member month for all eligible persons.

- Sum across cost components for service type definition.

[2] Definitions for CATCAID categories may be found at: http://psrdc.fmhi.usf.edu/Documents/PSRDC_Catcaids.pdf

- Divide by member months for each case-mix adjustment subgroup (eliminate member months for the one HMO that did not submit pharmacy costs)
- Case mix adjust the PMPM for each subgroup using weights for that subgroup
- Add up the case-mix portions to get the case-mix adjusted PMPM cost

Appendix 3:

Representativeness of Outcome Data

Outcomes Comparison Group Analysis

Data used	Medicaid eligibility data from AHCA for FY 2000-2001. Measures data from DCF ADM Data Warehouse for FY 2000-2001.
Study Population	All PMHP eligible clients between July 2001_Feburary 2002 in AHCA Areas 1,6, 2 , 4 and 7.
Study Group	All PMHP eligible clients who had outcomes indicators in ADM between July 2001_Feburary 2002
Comparison Group	All PMHP eligible clients who did not have outcomes indicators in ADM between July 2001_Feburary 2002

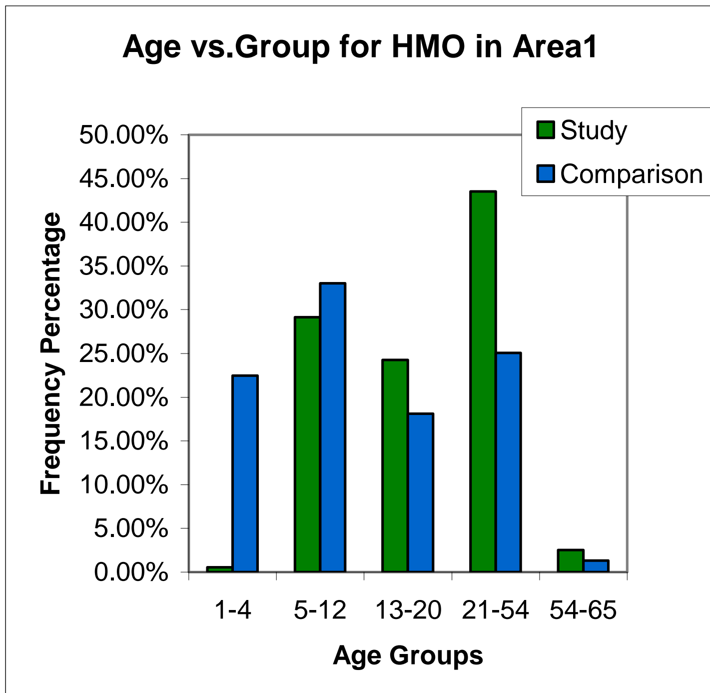
For the purpose of this comparison, PMHP eligible clients are characterized into three different categories, PMHP, HMO and Medipass, based on three financing and management arrangements for mental health services used in Florida.

Tables 1 through 6 summarize the demographics of the study and comparison groups in the three financing conditions.

Results: In Areas 1 and 6, the study group demonstrated a higher proportion of eligibles between ages 21-54 than the comparison group. Also, the study group had a lower percentage of eligibles than the comparison group for ages 1 to 4. Other age group differences were present but less pronounced. No meaningful differences were noted in Areas 1 and 6 regarding race and gender. Due to large sample sizes present in the study many subtle differences obtained a significant p value. However, it is questionable as to whether any of the differences denoted a meaningful pattern. Regarding race, the study group had more Caucasians than African-Americans while the comparison group had more African-Americans than Caucasians for both Areas 1 and 6.

Table 1: Comparing Medicaid Enrollees with Measures and Those Without Measures: Table of Age vs. Group by Type in Area 1

Financial Condition	Groups	Age Groups 1-4	5-12	13-20	21-54	54-65	Total	Chi_Square (DF) (p-value)
HMO1	Study	6 0.56%	312 29.13%	260 24.28%	466 43.51%	27 2.52%	1071	
	Comparison	3733 22.47%	5484 33.01%	3009 18.11%	4168 25.09%	218 1.31%	16612	372.20(4) (<.0001)
PMHP1	Study	61 1.86%	954 29.15%	737 22.52%	1331 40.67%	190 5.81%	3273	
	Comparison	9709 25.24%	12052 31.33%	7032 18.28%	8577 22.29%	1101 2.86%	38471	1208 (<.0001)
MP2	Study	54 2.61%	696 33.61%	492 23.76%	730 35.25%	99 4.78%	2071	
	Comparison	12657 24.63%	15962 31.07%	9454 18.40%	11669 22.71%	1638 3.19%	51380	582.69 (4) (0.0001)
MP4	Study	95 2%	1780 36%	1328 27%	1520 30%	267 5%	4990	
	Comparison	19516 26%	23478 32%	13997 19%	15024 20%	2235 3%	74250	111.41(4) (<.0001)
	Total	45831	60718	36309	43485	5775	192118	



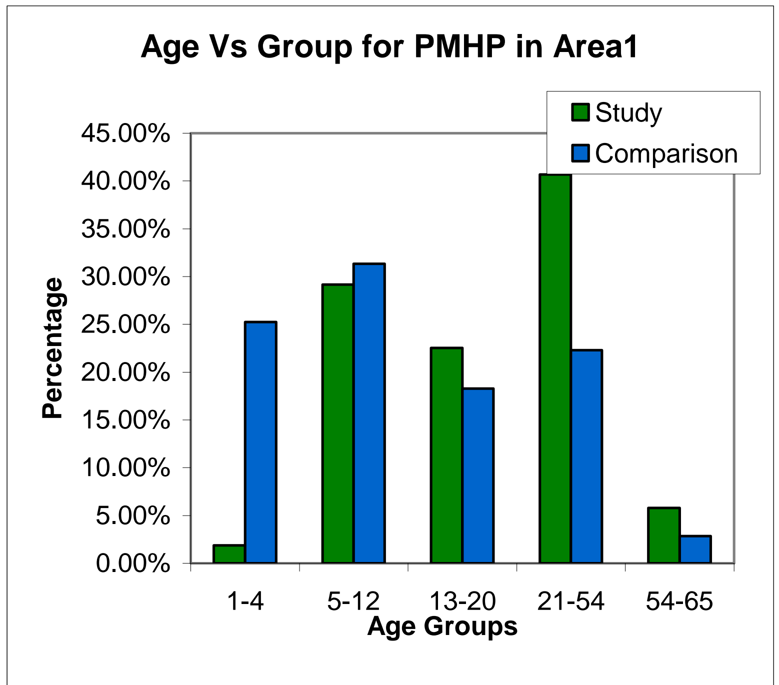
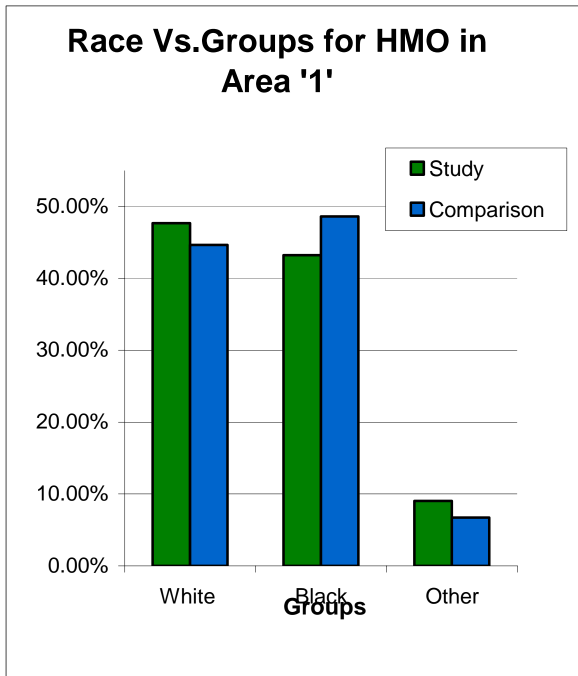


Table 2: Comparing Medicaid Enrollees with Measures and Those Without Measures: Table of Race vs. Group by Type in Area 1

Financial Condition	Groups	Race White	Race Black	Race Other	Total	Chi_Square, (DF) (p-value)
HMO	Study	511 47.71%	463 43.23%	97 9.06%	1071	
	Comparison	7420 44.67%	8077 48.62%	1115 6.71%	16612	10.62(2) (0.0049)
PMHP	Study	2019 61.69%	862 26.34%	392 11.98%	3273	
	Comparison	22084 57.40%	12681 32.96%	3706 9.63%	38471	20.41 (2) (<.0001)
MP2	Study	1083 52.29%	731 35.30%	257 12.41%	2071	
	Comparison	26687 51.94%	20079 39.08%	4614 8.98%	51380	53.95 (2) (<.0001)
MP4	Study	2627 52.65%	1603 32.12%	760 15.23%	4990	
	Comparison	34577 46.57%	27752 37.38%	11921 16.06%	74250	15.76(2) (0.0004)
	Total	97008	72248	22862	192118	



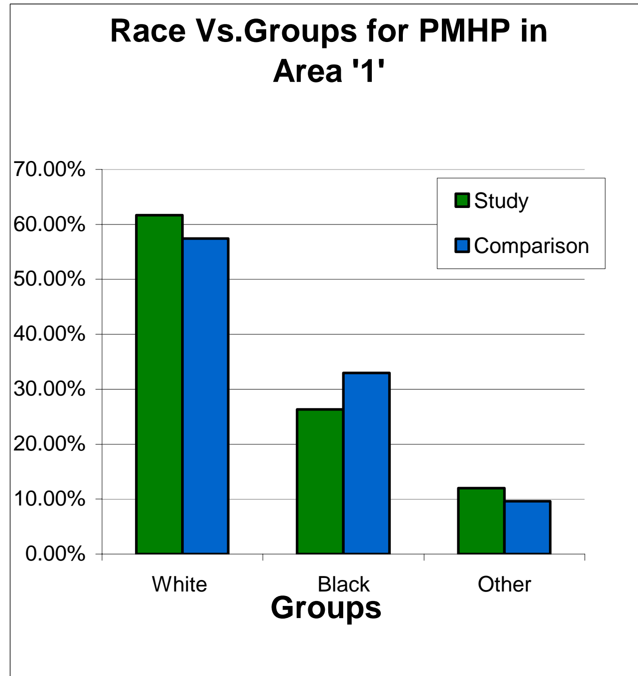
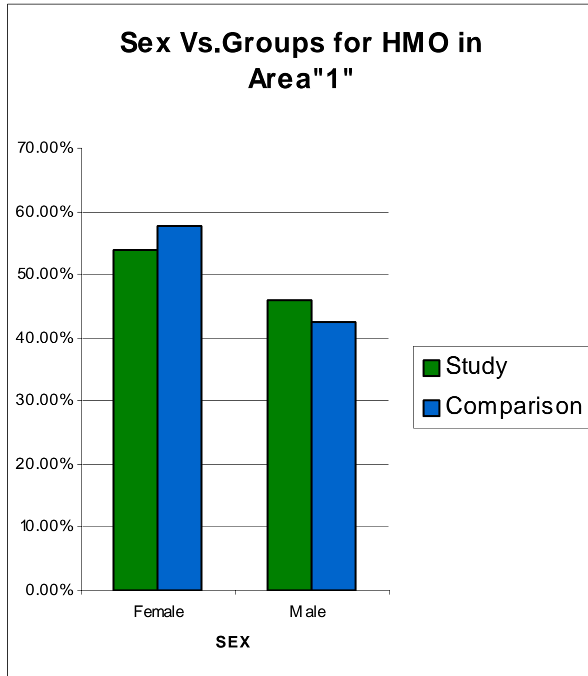


Table 3: Comparing People with Measures and those Without Measures: Table of Sex vs. Group by Type in Area 1

Type	Groups	Sex: Female	Sex: Male	Total	Chi_Square,(DF) (p-value)
HMO1	Study	578 53.97%	493 46.03%	1071	3.98(1) (0.0460)
	Comparison	9561 57.55%	7051 42.45%	16612	
PMHP1	Study	1770 54.08%	1503 45.92%	3273	3.92 (1) (0.0478)
	Comparison	21459 55.78%	17012 44.22%	38471	
MP2	Study	1002 48.38%	1069 51.62%	2071	37.24(1) (<0.0001)
	Comparison	28439 55.35%	22941 44.65%	51380	
MP4	Study	2321 46.51%	2669 53.49%	4990	128.27(1) (<0.0001)
	Comparison	40651 54.75%	33599 45.25%	74250	
	Total	105781	86337	192118	



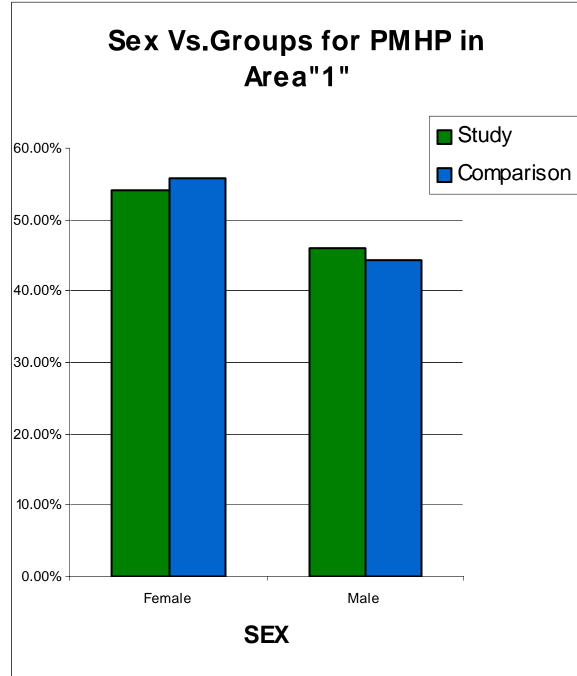
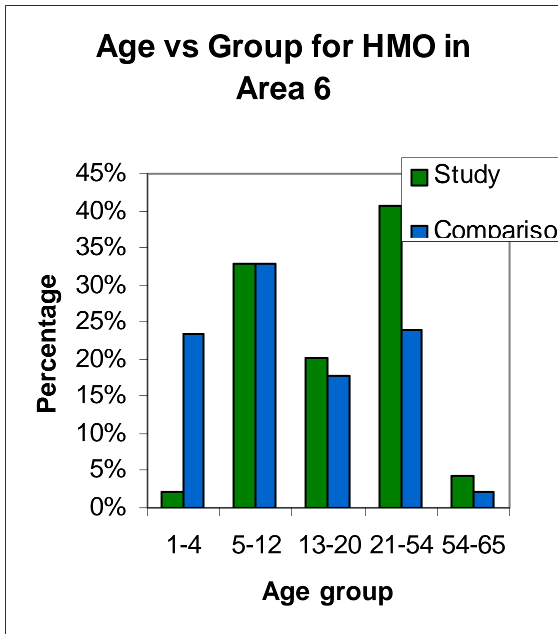


Table 4: Comparing Medicaid Enrollees with Measures and Those Without Measures: Table of Age vs. Group by Type in Area 6

Financial Condition	Financial Condition	Age Groups					Total	Chi_Square,(DF) (p-value)
		1-4	5-12	13-20	21-54	54-65		
HMO	Study	129 2%	2033 33%	1255 20%	2522 41%	260 4%	6199	
	Comparison	27410 23%	38197 33%	20639 18%	27835 24%	2562 2%	116643	62.85 (4) (<.0001)
PMHP	Study	69 2%	1412 31%	1161 25%	1594 35%	345 8%	4581	
	Comparison	15349 26%	18720 32%	11122 19%	11393 19%	2253 4%	58837	83.43 (4) (<.0001)
MP7	Study	53 2%	1143 36%	973 31%	882 28%	113 4%	3164	
	Comparison	16986 26%	21542 33%	12377 19%	11692 18%	2116 3%	64713	1086.57(4) (<.0001)
MP4	Study	95 2%	1780 36%	1328 27%	1520 30%	267 5%	4990	
	Comparison	19516 26%	23478 32%	13997 19%	15024 20%	2235 3%	74250	111.41(4) (<.0001)
	Total	79607	108305	62852	72462	10151	333377	



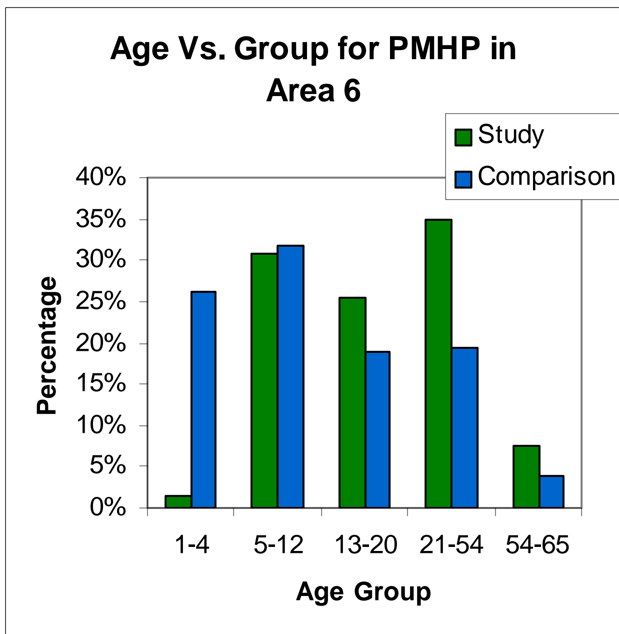
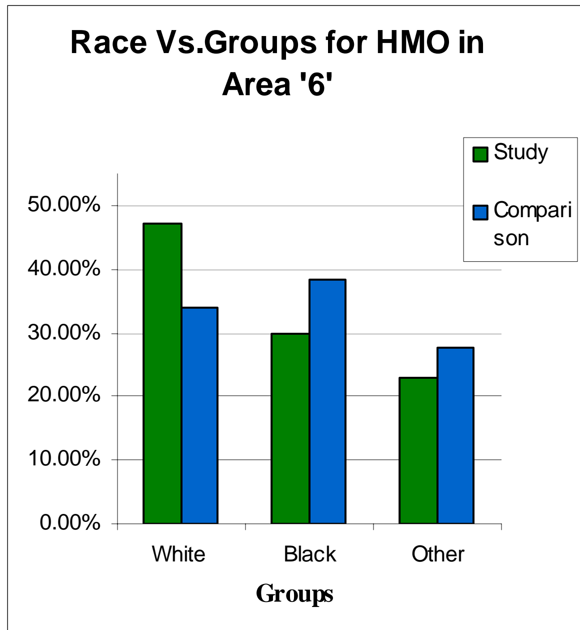


Table 5: Comparing Medicaid Enrollees with Measures and Those Without Measures: Table of Race vs. Group by Type in Area 6

Financial Condition	Groups	Race			Total	Chi_Square,(DF) (p-value)
		White	Black	Other		
HMO	Study	2926 47.20%	1857 29.96%	1416 22.84%	6199	
	Comparison	39653 34.00%	44585 38.22%	32405 27.78%	116643	36.36(2) (<.0001)
PMHP	Study	2440 53.26%	1065 23.25%	1076 23.49%	4581	
	Comparison	22136 37.62%	14625 24.86%	22076 37.52%	58837	10.83 (2) (0.0045)
MP7	Study	1509 47.69%	839 26.52%	816 25.79%	3164	
	Comparison	21798 33.68%	17595 27.19%	25320 39.13%	64713	17.35 (2) (0.0002)
MP4	Study	2627 52.65%	1603 32.12%	760 15.23%	4990	
	Comparison	34577 46.57%	27752 37.38%	11921 16.06%	74250	15.76(2) (0.0004)
	Total	127666	109921	95790	333377	



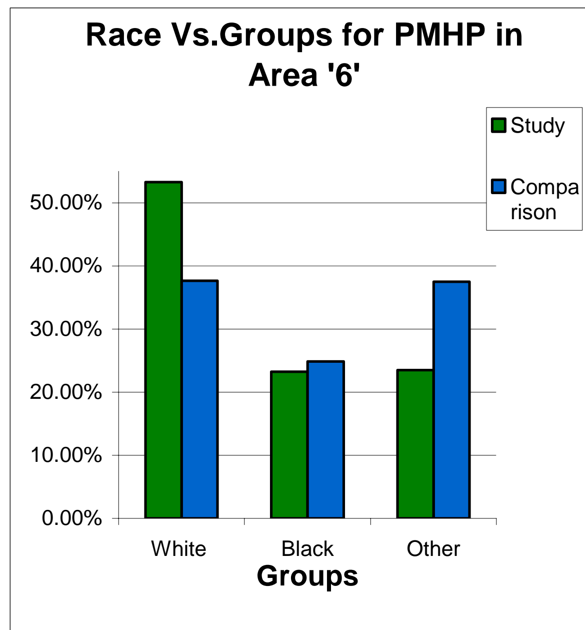
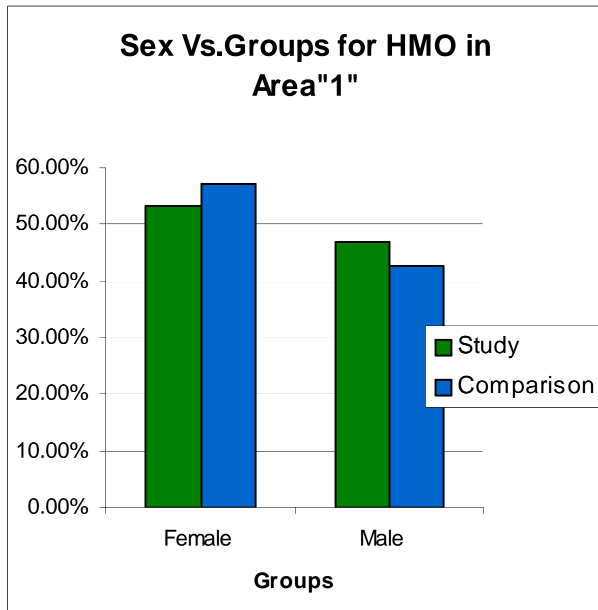
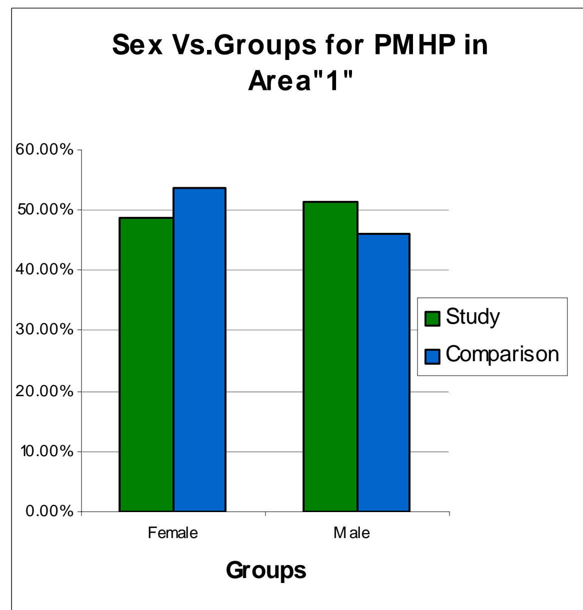


Table 6: Comparing Medicaid Enrollees with Measures and Those Without Measures: Table of Sex vs. Group by Type in Area 6

Type	Groups	Sex		Total	Chi_Square,(DF) (p-value)
		Female	Male		
HMO	Study	3298 53.20%	2901 46.80%	6199	
	Comparison	66650 57.14%	49993 42.86%	116643	38.28(1) (<0.0001)
PMHP	Study	2229 48.66%	2352 51.34%	4581	
	Comparison	31632 53.76%	27205 46.24%	58837	46.62 (1) (<0.0001)
MP7	Study	1452 45.89%	1712 54.11%	3164	
	Comparison	34197 52.84%	30516 47.16%	64713	59.39(1) (<0.0001)
MP4	Study	2321 46.51%	2669 53.49%	4990	
	Comparison	40651 54.75%	33599 45.25%	74250	128.27(1) (<0.0001)
	Total	182430	150947	333377	





Penetration Analysis

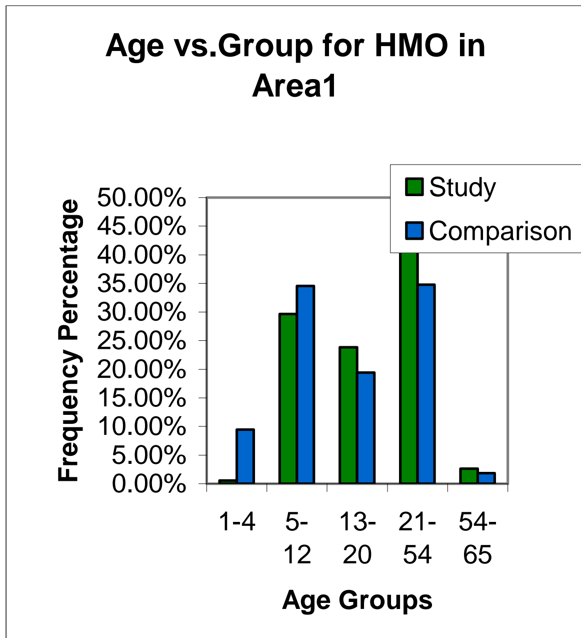
Study Population	All PMHP eligible clients who had at least one Medicaid claim between July 2001_Feburary 2002 in AHCA Areas 1,6, 2 , 4 and 7.
Study Group	All PMHP eligible clients who had at least one Medicaid claim and had outcomes indicators in ADM between July 2001_Feburary 2002
Comparison Group	All PMHP eligible clients who had at least one Medicaid claim and did not have outcomes indicators in ADM between July 2001_Feburary 2002

The penetration rate was between 71-83% for the study group and 5-12% for the comparison group. As indicated by the analysis, penetration rates were lower for the HMO group (5%-9%) than for the PMHP group (12%-15%).

Result: In Areas 1 and 6, the study group demonstrated a higher proportion of eligibles between the ages 21-54 than the comparison group. Also the study group had lower percentage of eligibles than the comparison group for ages 1 to 12. Other age group differences were present but less pronounced. In Areas 1 and 6, the differences between study group and comparison group for race and gender were small and no meaningful differences were noted. The study group and comparison group had more Caucasians than African-Americans for Areas1 and 6. Race differences between Study and Comparison groups were not significant for those who penetrated.

Table 7: Comparing Medicaid Enrollees with Measures and Those Without Measures of those who Penetrated in Medicaid: Table of Age vs. Group by Type in Area 1

Financial Condition	Groups	Age Groups 1-4	5-12	13-20	21-54	54-65	Total	Chi_Square,(DF) (p-value)
HMO	Study	4 0.58%	205 29.67%	165 23.88%	299 43.27%	18 2.60%	691	
	Comparison	88 9.44%	322 34.55%	181 19.42%	324 34.76%	17 1.82%	932	70.20 (4) (<0.0001)
PMHP	Study	54 2.01%	817 30.41%	573 21.32%	1087 40.45%	156 5.81%	2687	
	Comparison	520 10.41%	2492 49.89%	811 16.24%	1054 21.10%	118 2.36%	4995	636.98 (4) (<0.0001)
MP2	Study	47 2.43%	666 34.44%	484 25.03%	645 33.35%	92 4.76%	1934	
	Comparison	960 13.48%	2629 36.91%	1366 19.18%	1910 26.81%	258 3.62%	7123	216.19 (4) (<0.0001)
MP4	Study	94 1.91%	1754 35.72%	1305 26.57%	1493 30.40%	265 5.40%	4911	
	Comparison	80 2.25%	1273 35.77%	1178 33.10%	930 26.13%	98 2.75%	3559	416.86 (4) (<0.0001)
	Total	1847	10158	6063	7742	1022	26832	



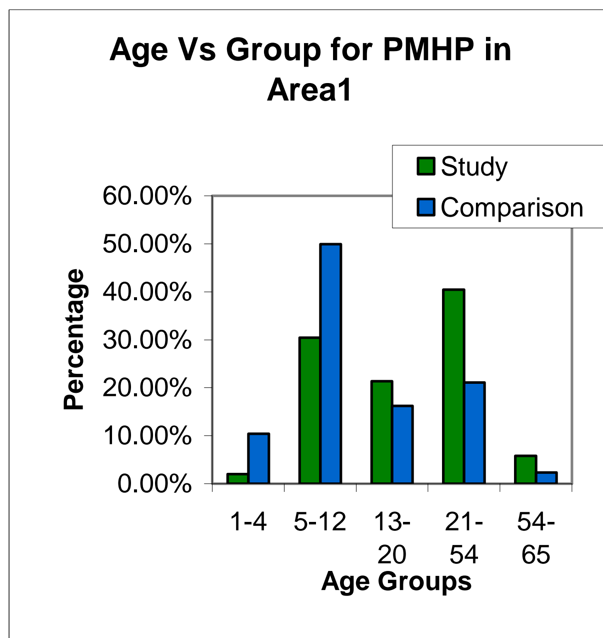
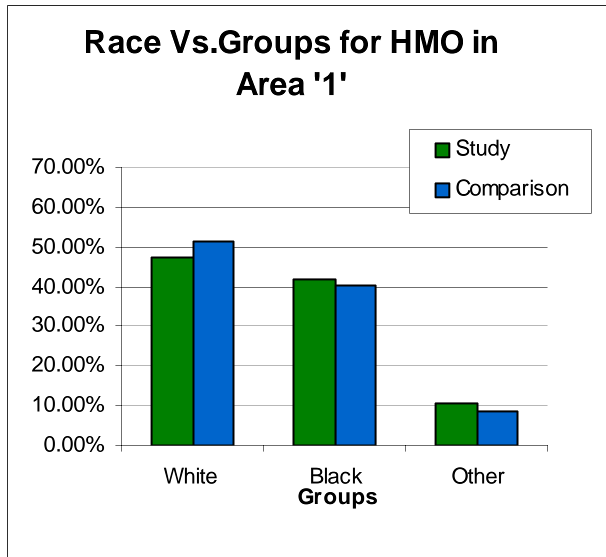


Table 8: Comparing Medicaid Enrollees with Measures and Those Without Measures of those who Penetrated in Medicaid: Table of Race vs. Group by Type in Area 1

Type	Groups	Race			Total	Chi_Square,(DF) (p-value)
		White	Black	Other		
HMO	Study	328 47.47%	289 41.82%	74 10.71%	691	
	Comparison	477 51.18%	374 40.13%	81 8.69%	932	3.07(2) (0.2150)
PMHP	Study	1646 61.26%	685 25.49%	356 13.25%	2687	
	Comparison	3157 63.20%	1266 25.35%	572 11.45%	4995	5.75 (2) (0.0565)
MP2	Study	991 51.78%	676 35.32%	247 12.90%	1914	
	Comparison	4171 58.56%	2016 28.30%	936 13.14%	7123	37.13 (2) (<.0001)
MP4	Study	2413 52.32%	1480 32.09%	719 15.59%	4612	
	Comparison	4838 55.34%	2303 26.34%	1602 18.32%	8743	53.26 (2) (<.0001)
	Total	18021	9089	4587	31697	



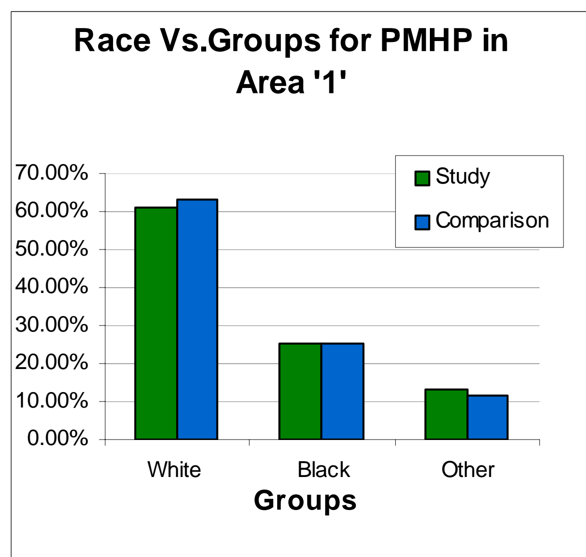
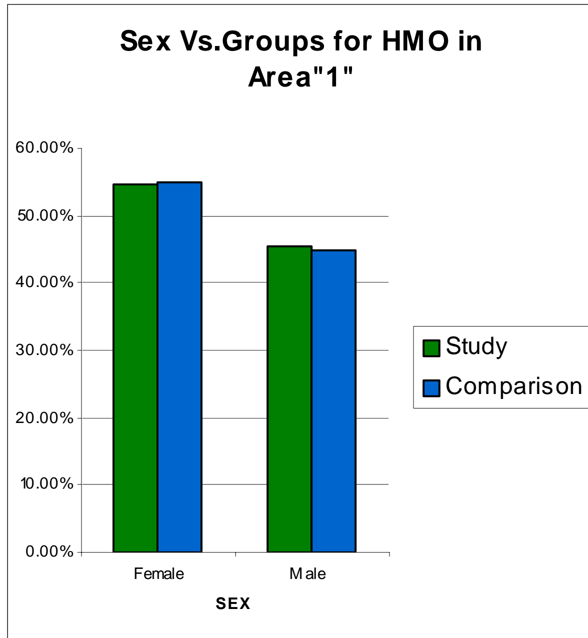


Table 9: Comparing Medicaid Enrollees With Measures and Those Without Measures of Those Who Penetrated in Medicaid: Table of Sex vs. Group by Type in Area 1

Type	Groups	Sex: Female	Sex: Male	Total	Chi_Square,(DF) (p-value)
HMO	Study	377 54.56%	314 45.44%	691	
	Comparison	513 55.04%	419 44.96%	932	0.03(1) (0.8463)
PMHP	Study	1438 53.52%	1249 46.48%	2687	
	Comparison	2538 50.81%	2457 49.19%	4995	5.12(1) (0.0236
MP2	Study	912 47.65%	1002 52.35%	1914	
	Comparison	3610 50.68%	3513 49.32%	7123	5.55 (1) (0.0185)
MP4	Study	2111 45.77%	2501 54.23%	4612	
	Comparison	4221 48.28%	4522 51.72%	8743	7.61(1) (0.0058)
	Total	15720	15977	31697	



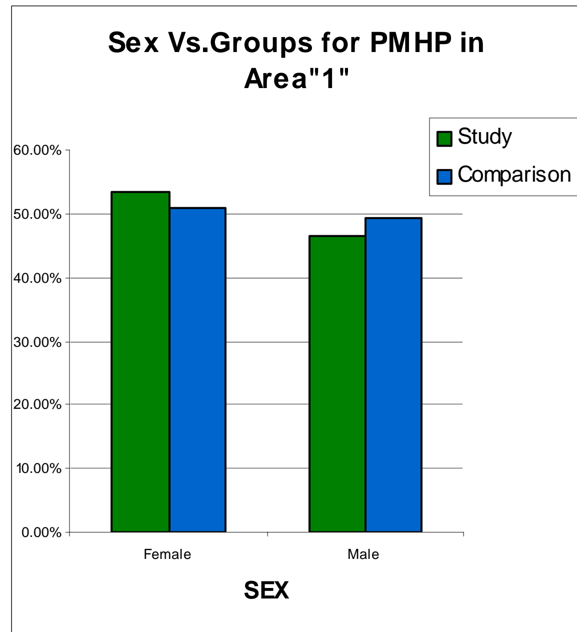
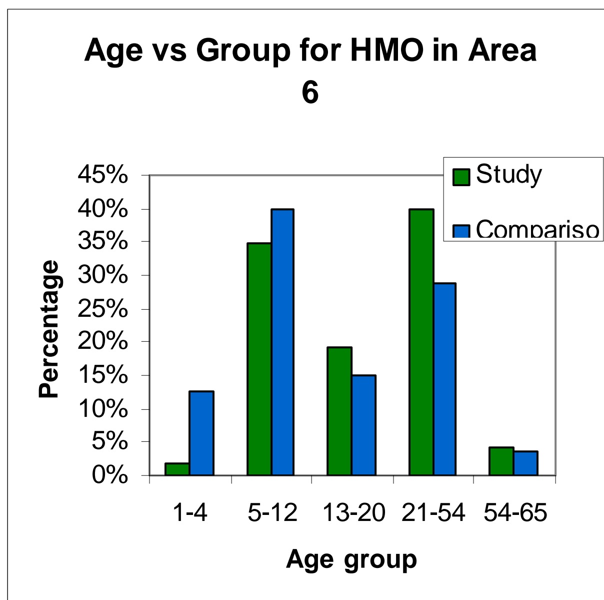


Table 10: Comparing Medicaid Enrollees With Measures and Those Without Measures of Those who Penetrated in Medicaid: Table of Age vs. Group by Type in Area 6

Type	Financial Condition	Age Groups 1-4	5-12	13-20	21-54	54-65	Total	Chi_Square,(DF) (p-value)
HMO	Study	82 2%	1617 35%	886 19%	1850 40%	196 4%	4631	
	Comparison	1223 13%	3869 40%	1462 15%	2775 29%	335 3%	9664	585.27 (4) (<0.0001)
PMHP	Study	54 1%	1196 31%	921 24%	1390 36%	313 8%	3874	
	Comparison	1126 17%	2799 41%	1224 18%	1317 19%	290 4%	6756	951.29 (4) (<.0001)
MP7	Study	53 2%	1089 37%	940 32%	736 25%	107 4%	2925	
	Comparison	1177 11%	4866 44%	2446 22%	2074 19%	387 4%	10950	370.96 (4) (0.008)
MP4	Study	94 1.91%	1754 35.72%	1305 26.57%	1493 30.40%	265 5.40%	4911	
	Comparison	80 2.25%	1273 35.77%	1178 33.10%	930 26.13%	98 2.75%	3559	416.86 (4) (<0.0001)
	Total	3889	18463	10362	12565	1991	47270	



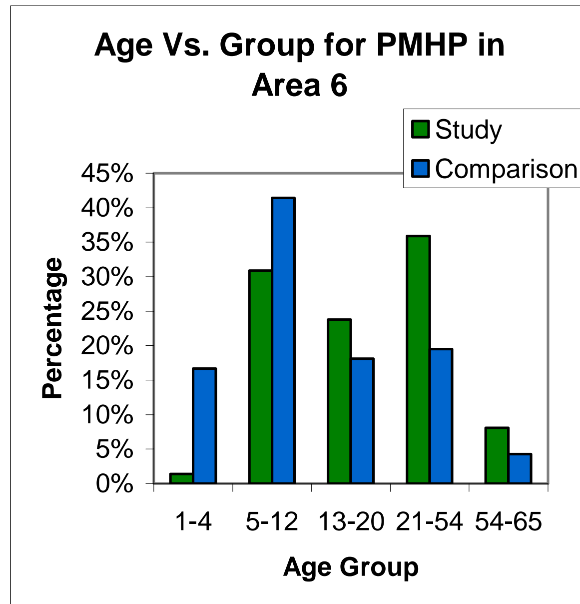
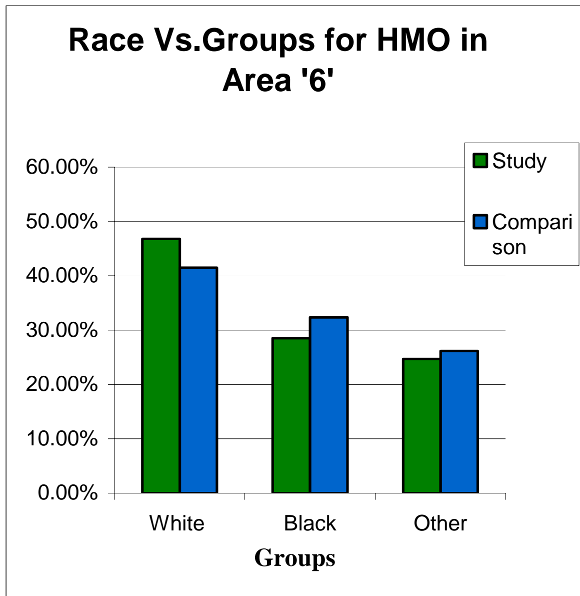


Table 11: Comparing Medicaid Enrollees With Measures and Those Without Measures of Those Who Penetrated in Medicaid: Table of Race vs. Group by Type in Area 6

Type	Groups	Race			Total	Chi_Square,(DF) (p-value)
		White	Black	Other		
HMO	Study	2168 46.81%	1320 28.50%	1143 24.68%	4631	
	Comparison	4010 41.49%	3127 32.36%	2527 26.15%	9664	38.08(2) (<.0001)
PMHP	Study	2054 53.02%	881 22.74%	939 24.24%	3874	
	Comparison	2980 44.11%	1358 20.10%	2418 35.79%	6756	153.47 (2) (<.0001)
MP7	Study	1397 47.76%	756 25.85%	772 26.39%	2925	
	Comparison	4216 38.50%	2626 23.98%	4108 37.52%	10950	133.40(2) (<0.0001)
MP4	Study	2413 52.32%	1480 32.09%	719 15.59%	4612	
	Comparison	4838 55.34%	2303 26.34%	1602 18.32%	8743	53.26 (2) (<.0001)
	Total	24076	13851	14228	52155	



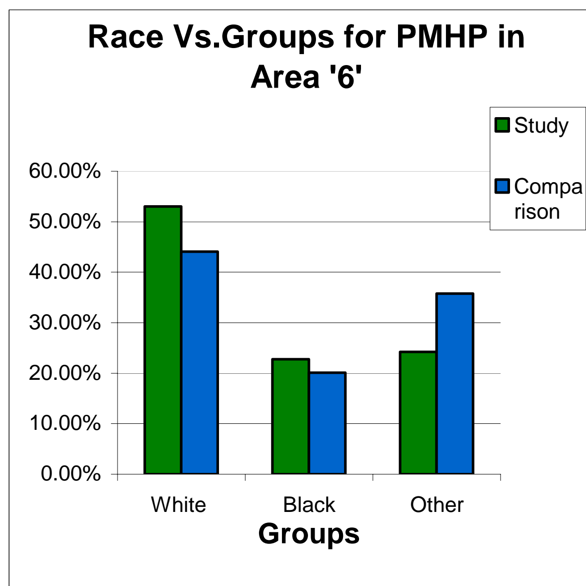


Table 12: Comparing Medicaid Enrollees With Measures and Those Without Measures of Those Who Penetrated in Medicaid: Table of Sex vs. Group by Type in Area 6

Type	Groups	Sex		Total	Chi_Square,(DF) (p-value)
		Female	Male		
HMO	Study	2454 52.99%	2177 47.01%	4631	
	Comparison	4850 50.19%	4814 49.81%	9664	9.85(1) 0.0017
PMHP	Study	1878 48.48%	1996 51.52%	3874	
	Comparison	3161 46.79%	3595 53.21%	6756	282 (1) (0.0933)
MP7	Study	1303 44.55%	1622 55.45%	2925	
	Comparison	4961 45.31%	5989 54.69%	10950	0. 54 (1) (0.4637)
MP4	Study	2111 45.77%	2501 54.23%	4612	
	Comparison	4221 48.28%	4522 51.72%	8743	7.61(1) (0.0058)
	Total	24939	27216	52155