



Trust and Health Service Use

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May 2004

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Submitted to the Florida Agency for Health Care
Administration as a deliverable under contract M0408.

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EXECUTIVE SUMMARY

The emergence of managed care into the health care system was intended to change the behaviors of both providers and patients to contain rising health care costs. These management strategies raise concerns about interference with professional trust relationships and its impact on access to care and quality of care, especially for disabled individuals with severe mental illness. Due to their vulnerability, they are less likely to advocate for themselves in receiving proper quality health care. In addition, distrust of health care systems is a prominent feature of this population because of their past experiences with systems of care and providers who have restricted their choices regarding treatment options. Many individuals with mental illness have experienced coercion in regard to treatment, resulting in mistrust in health care providers and an increased reluctance to use services (Regier, Narrow, Rae, & et al., 1993). With these preexisting negative, disadvantaged conditions, changes in the health care system could further limit utilization of health/mental health services among this vulnerable population and result in undesirable outcomes. Consequently, more expensive treatment modalities may be needed and may result in higher health care expenditures among this population.

Among individuals with serious mental illnesses (SMIs), 40% of them do not seek any treatment from either the general medical or specialty mental health providers. Only one-third of individuals who need mental health services received treatment from either general health or mental health care providers. In Florida, evaluation results of Medicaid health services indicate between 15% and 20% of individuals with SMI did not use any mental health services (Regier, Narrow, Rae, & et al., 1993). These findings lead us to question why individuals who likely should be receiving services do not use them. One theory is that the level of trust a person has in his or her provider is an important factor associated with disabled individuals' use of health/mental health services.

Few studies have investigated the effects of people's trust in their providers on their health care outcomes. Studies have found that people's trust in their health care providers has an important influence on various health care outcomes, including maintaining a therapeutic relationship, adherence to treatment recommendations, and more satisfaction with services received. These findings document the importance that a trusting relationship may have on individuals' health service utilization, and suggest that trust may also be indirectly related to their health care costs.

Purpose of the Study

The purpose of this study is to investigate the impact of Medicaid enrollees' trust in health care providers on the service utilization by answering the following questions:

1. Were individuals with a higher level of trust in their health care providers less likely to stop using low cost services compared to those who reported lower levels of trust in their health care providers?

2. Were individuals with a higher level of trust more likely to use low cost treatment modality such as outpatient care on a regular basis compared to those who have lower levels of trust in their health care providers?
3. Were individuals with lower levels of trust in their health care providers more likely to use high cost treatment modalities?

Design and Method

The study used a secondary data analysis approach. The data sources include self-report data of a population-based mail survey to evaluate Medicaid prepaid mental health services conducted by researchers of Louis de la Parte Florida Mental Health Institute (FMHI) in 2001 and Medicaid eligibility data and service utilization data six months before and after responding to the 2001 mail survey. The latter data included Medicaid claims data and services event data from the Florida Department of Children and Families (DCF). All service utilization data were recoded into low cost services (outpatient services) and high costs services (emergency services, day treatments, and inpatient/residential services).

Analytical Approach

A logistic regression model was used to analyze the relationship between trust and services used by three Medicaid health plans' (fee-for-services, prepaid mental health plan and HMO) enrollees.

Sample

The sample included the 2001 mail survey respondents of Medicaid beneficiaries who received Supplemental Security Income (SSI) due to disability conditions other than head injuries, maintained their Medicaid eligibilities, and lived in the same geographic area throughout the study period.

Results

The results of descriptive analyses indicated:

1. The HMO plan had significantly more Black and less White adult and children than either the FFS or PMHP plans.
2. Adult HMO enrollees had higher levels of mental health functioning ($p = .055$) compared to adult enrollees in either the FFS or PMHP plans.
3. Fewer adult HMO enrollees had switched health plans during the study period compared to the FFS or PMHP adult enrollees.
4. Adults enrolled in the HMO plan had a significant lower service penetration rate compared to adults enrolled in either FFS or PMHP plans. There were no significant differences found in service penetration rate among children enrolled across the three plans.
5. Trust was found only significantly related to discontinuation of low cost physical health services for children enrolled in PMHP plan and with use of high cost mental health services among adult enrolled in the FFS plan. Children of caregivers with higher levels of trust in the children's health care providers were

- less likely to discontinue the low cost services as predicted in Hypothesis 1. Among adult FFS enrollees with psychiatric disability conditions, respondents who had a higher level of trust in their health care providers were more likely to use the high cost mental health services, which did not support Hypothesis 3.
6. The type of health care provider's professional was repeatedly significantly associated with both discontinuation of low cost mental health services and regular usage of low cost health services. These findings suggest issues related to type of provider's professional background are important in relation to services use. Although we are not able to identify specific issues from this study, these issues may be related to organizational policy, such as availability of specialty professionals and the policy's effect on providers' professional behaviors (for example, treatment protocols, formulary, and gatekeeping). Further investigation of these findings is needed.
 7. Health condition was also found to be a significant predictor related to discontinuation of low cost physical and mental health services, and regular use of low cost physical and mental health services.

Conclusions and Implications

Trust is a primary concern of many scholars, researchers, and health care providers (Blumenthal, 1996; Mechanic, 1996 & 1997; Mechanic & Schlesinger, 1996). Results of this study indicated that trust was significant in predicting children's discontinuation of low cost physical health services as predicted. However, trust was related to the high cost mental health services used by adult respondents recipients in a different direction, which did not support the proposed hypothesis. The limited findings may be related to the limitation of the study design, such as a short study period, quality of claims data, and small sample size.

A health system that facilitates the trusting relationship is equally important. The results of this study suggest that the type of providers on whom respondents rated their trust repeatedly resulted as a significant predictor associated with service utilization. Whether this finding was related to the effects of health policy on providers' behaviors or their characteristics could not be determined from this study. However, the effect of a health care system's policy of patient allotted time has an undeniable impact on the availability of providers and providers' service behaviors (Mechanic, 2003).

The results of this study also indicated that minorities were more likely to discontinue the low cost services and less likely to use high cost services. This study was unable to determine whether or not this service choice was related to health disparity. Further investigation to understand factors contributing to Medicaid enrollees' service utilization behaviors is recommended.

Limitations of the study

There are several limitations of this study. The effect of a trusting relationship was only examined over a short time period, six months after trust was measured. With such a short period of time, we may not be able to detect a significant change in enrollees' health seeking behaviors, such as discontinuation of use of low cost services, which was defined

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in this study as not using the services continuously for period of six months. In addition, the effect of the trusting relationship on health care quality and health outcomes may not be able to reveal any significant changes within such a constrained timeframe.

Use of secondary data analysis has limited our sample size. Having a small number of subjects in the two managed care plans is another limitation of this study. With small sample sizes for the PMHP and HMO plans, we were not able to identify significant predictors related to service utilization behaviors of several subgroups enrolled in these plans.

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Background Significance

The emergence of managed care into the health care system was intended to change the behaviors of both providers and patients to contain rising health care costs. Many studies have found that managed care has reduced health care cost significantly through different management mechanisms, such as prospective utilization review, case management, and physician gate-keeping (Wickizer & Lessler, 2002). However, these management strategies also raise concerns about interference with professional trust relationships and its impact on access to care and quality of care (Blumenthal, 1996; Mechanic, 1996 & 1997; Mechanic & Schlesinger, 1996). This is especially true for disabled individuals in general and persons with mental illness specifically, who are more likely to be in a disadvantaged state and unable to advocate for themselves. They are typically poor and have complex co-morbid physical/substance abuse health conditions that result in excess mortality (Bazemore, 1996; Berren, Hill, Merikle, & et al., 1994; Black, Warrack, & Winoker, 1995; Newman & Bland, 1991). Due to their vulnerability, they are less likely to advocate for themselves in receiving proper quality health care. In addition, distrust of health care systems may be a prominent feature of this population because of their past experiences with systems of care and providers who have restricted their choices regarding treatment options. Many individuals with mental illness have experienced coercion in regard to treatment, which resulted in mistrust in health care providers and increased their reluctance to use services (Regier, Narrow, Rae, & et al., 1993). With these preexisting negative, disadvantaged conditions, changes in the health care system could further limit utilization of health/mental health services among this vulnerable population and result in undesirable outcomes. Consequently, more expensive treatment modalities may be needed and could result in higher health care expenditures among this population.

According to the results of the 1990 National Co-morbidity Survey, mental disorders affect an estimated 20% of the U.S. population during a given year. Approximately 5.4% of adults are considered to have a serious mental illness that interferes with their social function, and half of them suffer from severe and persistent mental illnesses (SMI) (Kessler, Berglund, Zhao, & et al., 1996; Kessler, McGonagle, Zhao, & et al., 1994). However, among those individuals with SMI, 40% of them do not seek any treatment from either the general medical or specialty mental health providers. Only one-third of individuals who need mental health services received treatment from either general health or mental health care providers. In Florida, evaluation results of Medicaid health services indicate between 15% and 20% of individuals with SMI did not use any mental health services (Regier, Narrow, Rae, & et al., 1993). These findings lead us to question why individuals who likely should be receiving services do not use them. One theory is that the level of trust a person has in his or her provider is an important factor associated with disabled individuals' use of health/mental health services.

Literature Review and Hypotheses

Regular and consistent source of care is important for both patients and providers in relation to health care outcomes (Sweeney & Gray, 1995). Studies have found that this relationship can increase both patients' and providers' satisfaction, decrease hospitalization, and lower costs (Bostrom, Tisnado, Zimmerman, & Lazar, 1994; Ettner, 1996; and Weiss & Blustein, 1996). Trust is the cornerstone for developing this therapeutic relationship. Direct health care providers, such as physicians and nurses, serve as agents for their patients within the health care system. Patients rely on their health care providers to advocate and prioritize their health needs and services. This is particularly true when patients are disadvantaged. Few studies have investigated the effects of people's trust in their providers on their health care outcomes. Kao and his colleagues found that individuals with higher levels of trust in their health care providers were more likely to maintain their relationships with these providers and less likely to switch health care plans compared to individuals with lower levels of trust (Kao, Green, David, & et al., 1998a). Valey and his colleagues also found that trust, honesty, and respect are essential ingredients for successful treatment (Valey, Krone, & Gerbino, 1998). Other investigators have found that people's trust in their health care providers has an important influence on various health care outcomes.

In their study on the effect of professional relationships on health care outcomes in primary care settings, Thom and Campbell (1997) found that individuals with higher levels of trust in their providers were more likely to follow treatment recommendations and expressed greater satisfaction with the services they received. Similar results regarding the importance of trust have been found among disabled individuals (Chen, 2001). Using mail survey techniques to examine the relationship between adult Medicaid recipients' trust in their health care providers and their health outcomes, Chen (2001) found that individuals who were more trusting of their health care providers were less likely to discontinue prescribed medication without consulting their health professionals and reported greater satisfaction with the services they received compared to individuals with lower levels of trust in their providers. These findings document the importance that a trusting relationship may have on individuals' health service utilization, and suggest that trust may also be indirectly related to their health care costs. However, the studies conducted to date have been primarily cross sectional and only focused on individuals who have used services. Therefore, these studies provide limited empirical evidence to draw conclusions about whether trust has a direct impact on individuals' service utilization patterns and costs.

Purpose of the Study and Specific Aims

In 2001, we conducted a population-based mail survey and asked Medicaid recipients in three areas of Florida about their levels of trust in their health care providers as well as health care outcomes, including general health and mental health status and levels of satisfaction with services received. After linking these self-reported data with the Medicaid claims data and the DCF integrated data sources (IDS), we examined the relationship between respondents' levels of trust in their health care providers and

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health/mental health service penetration rates among the Medicaid recipients enrolled in one of the three different financing conditions (fee-for-service plan, prepaid mental health plan, and HMOs) during the year prior to responding to the questionnaire. The results indicated that respondents' levels of trust in health care providers were significantly related to their use of services among both adults and children. Adult service users and the caregivers of children who used services during the year preceding the mail survey reported significantly higher levels of trust in their health care providers compared to enrollees who did not use any services. In addition, the type of health care plans (i.e., managed versus non-managed) in which individuals enrolled was also a significant predictor related to trust in health care professionals among adult enrollees. Adults enrolled in a managed physical health plan were less likely to use services and had significantly lower levels of trust in their health care providers compared to adult enrollees in a non-managed plan. However, this finding did not hold for children. Rather, a child's age was a significant predictor of caregivers' levels of trust in their children's health care providers. Caregivers with younger children were significantly more likely to trust their children's health care providers compared to caregivers with older children.

To continue investigating the impact of enrollees' trust on the service utilization among the vulnerable population, this year's study was designed to answer the following questions:

1. Were individuals with a higher level of trust in their health care providers less likely to stop using low cost services compared to those who reported lower levels of trust in their health care providers?
2. Were individuals with a higher level of trust more likely to use low cost treatment modality such as outpatient care on a regular basis compared to those who have lower levels of trust in their health care providers?
3. Were individuals with lower levels of trust in their health care providers more likely to use high cost treatment modalities?

Design and Method

Data Sources

Five existing data sources were used to conduct analyses to answer the identified research questions. First, self-report data collected from Medicaid recipients in AHCA areas 1, 4 and 6 who responded to the 2001 population-based mail survey conducted as part of the evaluation of AHCA's prepaid mental health plan evaluation were identified. As part of this survey, respondents completed a scale assessing their trust in their health care providers.

The mail survey responses were then linked to the following administrative datasets:

- (1) Medicaid eligibility files provided by the Agency for Health Care Administration of Florida (AHCA) to provide demographic information

including age, gender, and race/ethnicity, health plans enrolled, and to verify participants' eligibility status.

- (2) Service utilization data between July 2000 and June 2002 from various sources that included information of service date, identification for grouping type of service used:
 - a. Medicaid claims data: these data provided information related to service used and paid by FFS plans.
 - b. IDS service event data (due to residential treatment is not paid by Medicaid) to capture service used and not paid by Medicaid plans.
 - c. Health and/or mental health service encounter data from managed care organizations (FHP and HMOs) to include services used and paid by either PMHP or HMOs. These data are crucial for understanding how health plan financing conditions affect the trust relationship and service use which we were unable to accomplish in the previous year's analysis due to lack of managed care data.

Service utilization information was extracted from three service event data sources for six months prior to completion of the survey and six months post completion of the survey. These data were used to examine the relationship of service utilization and respondents' trust in their health professionals.

Analytic Approach

The ultimate analytic plan was designed to examine the effect of Medicaid enrollees' trust in their health care professionals on their service utilization after responding to the 2001 mail survey. Although the survey was conducted between March 2001 and June 2001, some participants did not respond until several months after they received the survey. In the previous years' report we summarized the relationship between respondents' service utilization in the year prior to completing the mail survey and its relationship to respondents' level of trust in their health care providers. Given that the administrative claims data available for analysis at Louis de la Parte Florida Mental Health Institute (FMHI) were only inclusive through June 30, 2002 and that the claims data needed to conduct the one-year post survey service utilization analysis requires that data be available through the latter part of 2002, the analyses summarized in this report only include service utilization data for a six month period before and after individuals responded to the 2001 mail survey. Additionally, concerning the differences in the service encounter reporting requirements among the three health plans, which may result in incompatible data quality, analyses were conducted within each health plan to examine the effect of trust on health services utilization by Medicaid SSI recipients. No plan comparison was performed in this study.

Services or events that occurred during the study period were identified from data files and grouped into four categories: outpatient services, day treatment services,

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inpatient/residential services and emergency/crisis intervention services. These categories were based on Catcaid¹ code developed by Policy and Services Research Data Center at FMHI (Appendix A) to recode Medicaid data sets (both data received from AHCA and managed care claims), and cost center code of Florida Department of Children & Family Pamphlet 155-2 (2001) was used to classify service event category of IDS data.

For the purpose of this analysis, outpatient services were considered to be low cost treatment options while inpatient/residential care, emergency services, and day treatment were considered to be high cost treatment modalities. Individuals who did not use any of these defined services for a continuous period of six months or more during the study period (counting from two months before responding to the mail survey) were considered to have discontinued service use. When individuals used low cost services at least three out of six month period, they were considered to be regular low cost service users.

Mail survey respondents' levels of trust in their health providers were used to predict three service utilization variables: (1) regular usage of low cost service on regular basis, (2) usage of high cost services, and (3) discontinuation of services. A logistic regression model was used to examine how individuals' level of trust in their health care providers related to their services use within each health plan by controlling covariates, including physical health and mental health conditions, demographic variables including gender, race/ethnicity difference, the type of providers on whom respondents rated their trust, and any switching of plans during 6 months period following response to the mail survey.

Given that previous studies found individuals with higher levels of trust in their health care providers were more likely to continue and adhere to treatment recommendations and receive quality of care (Chen, 2001; Kao, Green, David, & et al, 1998a; Kao, Green, Zaslavsky, & et al, 1998b; and Thom & Campbell, 1997), we predicted that individuals who had higher levels of trust in their health care providers would be more likely to use the low cost treatment modality on a regular basis and would be less likely to stop using health services when factors such as health status were controlled. Furthermore, we predicted that individuals with lower levels of trust would be less likely to use the low cost services until their conditions became critical. As a result of this behavior, we predicted that individuals with lower levels of trust in their health care providers would be more likely to end up using higher cost services, such as emergency services, day treatment, and/or inpatient services.

Sample

Subjects were selected among Medicaid beneficiaries who received SSI due to physical and/or psychiatric disabilities and had responded to the mail survey conducted in 2001 based on the following study criteria: (1) maintain Medicaid eligibility without dual eligibility for Medicare throughout the study period, six months before and six months after responding to the trust survey; (2) lived in the same areas; (3) completed the mail survey in 2001, and (4) enrolled in a fee-for-service plan (FFS), prepaid mental health plan (PMHP), or an health maintenance organization (HMO) plan. Final subjects included in this analysis were 622 children of caregivers and 860 adults who responded to the mail survey and met the study criteria.

Characteristics of Adult Subjects

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Nearly 70% of the adult respondents were female. Respondents' ages ranged from 21 to 67 years old, with an average age of 46.7 (SD = 12.0). No significant differences were found in the gender or age distribution of enrollees across the three health care plans. Over 60% (519) of the respondents were enrolled in a FFS plan, 21.0% (158) were enrolled in a PMHP plan, and 18.6% (160) were enrolled in an HMO plan.

Table 1. Characteristics of Adult Respondents

| | | FFS | PMHP | HMO | Total | |
|-------------------------|--------------------------|-------|-------|-------|-------|----------|
| N | | 519 | 181 | 160 | 860 | <i>p</i> |
| Age | Mean | 46.85 | 46.82 | 45.74 | 46.64 | > .05 |
| | SD | 12.09 | 12.50 | 11.25 | 12.02 | |
| Female | % | 67.24 | 73.48 | 74.38 | 69.88 | > .05 |
| Race | White % | 67.24 | 57.46 | 50.62 | 62.09 | < .05 |
| | Black % | 20.81 | 18.78 | 33.12 | 22.67 | |
| | Hispanic and Others % | 11.95 | 13.76 | 16.26 | 15.24 | |
| | | | | | | |
| Level of Trust | Mean | 40.80 | 40.12 | 39.76 | 40.46 | > .05 |
| | SD | 9.52 | 9.69 | 8.26 | 9.34 | |
| Physical Functioning | Mean | 32.74 | 33.81 | 33.64 | 33.15 | > .05 |
| | SD | 10.44 | 10.62 | 10.25 | 10.44 | |
| Psychotic Symptoms | Mean | 32.99 | 31.70 | 33.61 | 32.84 | > .05 |
| | SD | 12.80 | 12.49 | 14.37 | 13.04 | |
| Mental Functioning | Mean | 39.01 | 38.38 | 39.99 | 39.06 | = .055 |
| | SD | 6.19 | 5.96 | 6.30 | 6.18 | |
| Any Plan Change | % | 7.90 | 7.18 | 1.88 | 6.63 | < .05 |

Table 2. Characteristics of Child Respondents

| | | FFS | PMHP | HMO | Total | |
|----------------------|-----------------------|-------|-------|-------|-------|----------|
| N | | 396 | 124 | 102 | 622 | <i>p</i> |
| Age | Mean | 13.50 | 12.96 | 14.08 | 13.49 | > .05 |
| | SD | 3.96 | 3.96 | 3.66 | 3.92 | |
| Female | % | 33.33 | 23.39 | 30.39 | 30.87 | > .05 |
| Race | White % | 56.57 | 36.29 | 32.35 | 48.55 | < .05 |
| | Black % | 32.07 | 44.35 | 48.04 | 37.14 | |
| | Hispanic and Others % | 11.4 | 19.4 | 19.6 | 14.3 | |
| Level of Trust | Mean | 41.25 | 40.21 | 40.27 | 40.88 | > .05 |
| | SD | 9.88 | 9.36 | 8.95 | 9.63 | |
| Physical Functioning | Mean | 66.14 | 65.00 | 67.44 | 66.32 | > .05 |
| | SD | 7.81 | 7.31 | 7.01 | 7.59 | |
| Psychiatric Symptoms | Mean | 33.30 | 33.38 | 32.84 | 33.24 | > .05 |
| | SD | 14.12 | 13.21 | 13.38 | 13.80 | |
| Any Plan Change | % | 5.81 | 8.06 | 4.90 | 5.81 | > .05 |

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With respect to race/ethnicity, 62.1% (534) of these adults were Caucasian, 22.7% (195) were African-American, and 15.2% (131) were Hispanic or from other minority group. Enrollees in the FFS and PMHP plans were significantly more likely to be Caucasian and less likely to be African-American compared to enrollees in the HMO and HMO/FFS plans ($p < .05$) (Table 1).

Characteristics of Child Subjects

Among 622 child Medicaid recipients, 69.1% (430) were boys and 30.9% (192) girls with an average age of 14 (SD = 3.92, ranging from 5 to 21). There were no significant differences in the children's gender or age across the three health plans. Their racial/ethnicity distributions were 46.8% (302) Caucasian, 37.1% (231) African-American, 14.4% (89) Hispanic and other minorities. Nearly 64% (396) were enrolled in a FFS plan, 19.9% (124) were enrolled in the PMHP, and 16.4% (102) were enrolled in an HMO plan. Detailed characteristic comparisons of children in the three plans are listed in Table 2.

Instruments

Five previously developed and psychometrically tested measures were used to collect information regarding respondents' level of trust in their health care provider, health status, and mental health status. Each of these measures is briefly described below.

Trust

The Trust in Health Care Provider Scale (TIHCPS) is a 10-item, self-report measure designed to assess respondents' level of trust in their health care providers. The measure was specifically adapted for use with a disabled population (Chen, 1999). The measure has high internal consistency ranging between .85 and .90. Higher scores on the TIHCPS indicate respondents have a greater level of trust in their health professionals.

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Health Status

For adult respondents, the SF-12, a 12-item self-report measure, was used to assess their physical and mental health functional status. This measure has a high level of test-retest reliability and validity (Brazier, Jones, & Kind, 1993; McHorney, Kosinski, & Ware, 1993; Ware, Baylies, Roger, Kosinski, & Tarlov, 1996; Ware, Kosinski, & Keller, 1995 & 1996). A higher score on the SF-12 reflects a greater level of functioning.

For child respondents, a subset of items from the Child Health Questionnaire (Landgraf, Abetz, & Ware, 1999) was used to measure their physical health functioning as reported by their caregivers.

Mental Health Status

The Colorado Symptom Index (CSI) was used to assess the mental health status of adult respondents. The CSI is a 14-item self-report measure of psychiatric symptoms with a high level of internal consistency (Alpha = .87) (Shern, Lee, & Coen, 1997).

Children's mental status was assessed using the Pediatric Symptom Checklist (Jellinek, Murphy, & Burns, 1986), a 35-item caregiver self-report measure.

Protection of Human Subjects and Data Management

An Access database with a password to ensure confidentiality was applied for security purposes. The administrative data was stored in the password secured database for data linkage. Social security numbers were used to link different data sets. After the linkage of these different sources of data, a dummy ID code was created and the social security number was deleted from the linked data set. The linked data set, which now had without any personal identification, was exported to SPSS, the Statistical Package for the Social Sciences, for data analysis.

Results

Because of concerns regarding the under reporting of service events and claims to AHCA by managed care entities relative to the FFS condition (due to different financing contractual conditions), we examined the effect of the trust relationship on service use within each plan rather than compare the effect of the trust relationship on service use among the three plans. However, we did compare characteristics of study subjects of the three plans as reported in the section A. Descriptive results.

In this section, we present descriptive results, including health conditions and caregivers' levels of trust, followed by an analysis of the relationship between service use and trust of both adults and children of each plan. Even though all subjects were Medicaid SSI recipients, not every subject needed both physical and mental health services. Therefore, use of physical health services and use of mental health services in relation to trust were examined separately. Subjects who indicated they received SSI due to physical disabilities or needed physical services from self-report data were included in the analyses for examining physical health services and their relation to trust. Meanwhile, individuals who indicated that they needed mental health services or received SSI due to a mental disability condition were included in the analysis for examining mental health services use and their relation to trust.

A. Descriptive Results

Physical Health Condition

Table 1 provides a detailed comparison of adult enrollees' physical health functioning across the three plans. There were no differences found in the physical health of adults enrolled in the four health plans ($p > .05$).

Meanwhile, no significant differences were found in the physical health status of children enrolled in the three different plans (Table 2).

Mental Health Condition

There were no significant differences found in either psychiatric symptoms or mental health functioning levels of adults enrolled in the three plans (Table 1).

No significant differences in psychiatric symptoms were found among children enrolled in the three health plans (Table 2).

Level of Trust in Health Care Providers

The results of analysis of variance revealed no significant differences in the level of trust in health care providers reported by adults in the three plans, regardless the professional specialties of their providers. The mean level of trust in providers was 40.46 (SD=9.34) (Table 1).

There were 622 caregivers who rated their level of trust in their children's health care providers. The results of analysis of variance also revealed no significant differences in caregivers' level of trust in their children's health care providers across the three health care plans, with average level of trust of 40.88 (SD=9.63) for caregivers of children in the three plans (Table 2).

Switching Health Plan during the Study Period

Among 860 adult subjects, the HMO enrollees were significantly less likely to change their health plan (1.9%) compared to adults enrolled in either a FFS plan (7.9%) or PMHP plan (7.2%) within the study period (Table 1).

In contrast, there were no significant differences found in changing health plans by the caregivers of the children enrolled in the three plans (5.81%, 8.06%, and 4.9% by children of FFS, PMHP, and HMO plans, respectively) (Table 2).

Overall Health and Mental Health Services Use

Based on a combination of self-reported service use and administrative data sources of service use, 4.2% (39/860) of the adult enrollees reported that they used neither physical nor mental health services during the study period. Adult FFS and PMHP enrollees had similar service penetration rates and both are significantly higher than the HMO enrollees (Figure 1-a).

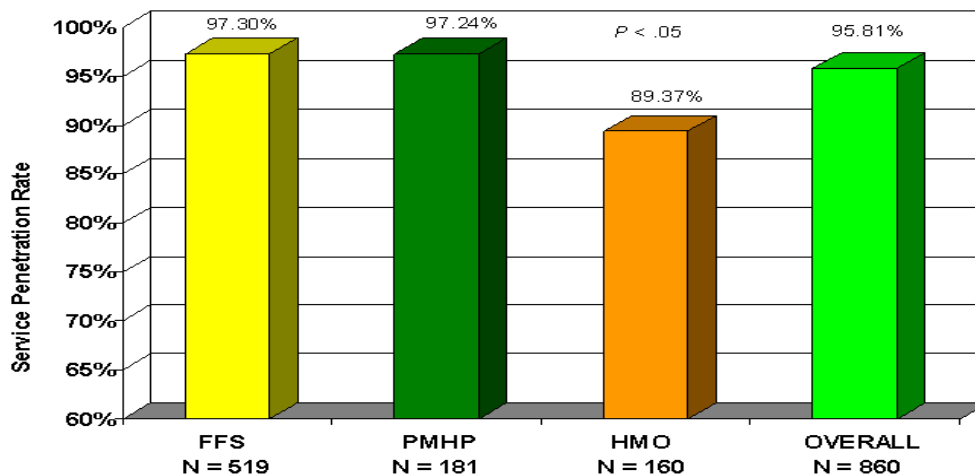


Figure 1-a. Service Penetration Rates of Adults Enrolled in the Three Health Plans

Trust and Health Service Use

Among child Medicaid SSI recipients, 5.79% (36/622) did not use any services based on a combination of caregiver self reports and Medicaid and IDS claims data. No significant differences were found in the service penetration rates among children enrolled in the three health care plans (Figure 1-b).

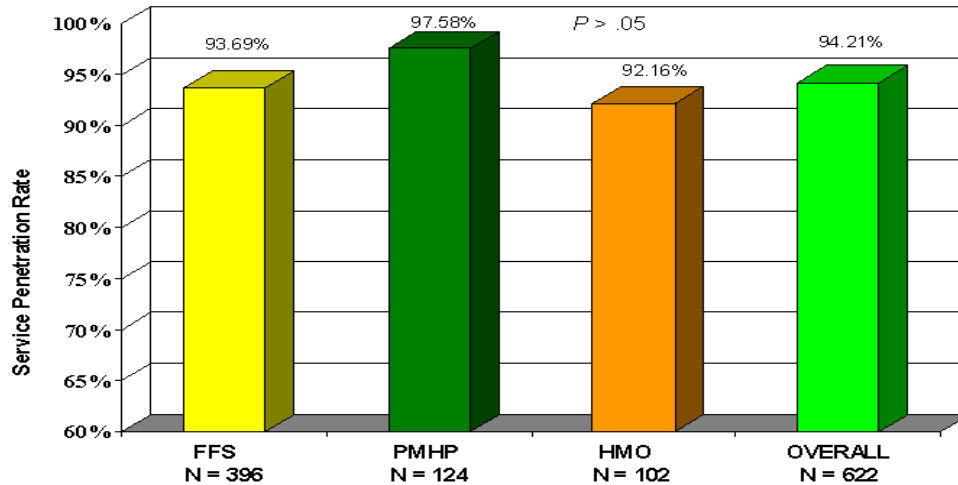


Figure 1-b. Service Penetration Rates of Children Enrolled in the Three Health Plans

Physical Health Services Use

There were a total of 835 adult respondents included in examining the relationship between level of trust in their health care providers and their use of physical health services. Similar to any health service use, approximately 4.2% (35/835) of adult respondents used physical health services during the study period. Adult FFS and PMHP enrollees had similar physical health services penetration rates, which are significantly higher than adult HMO enrollees (Figure 2-a).

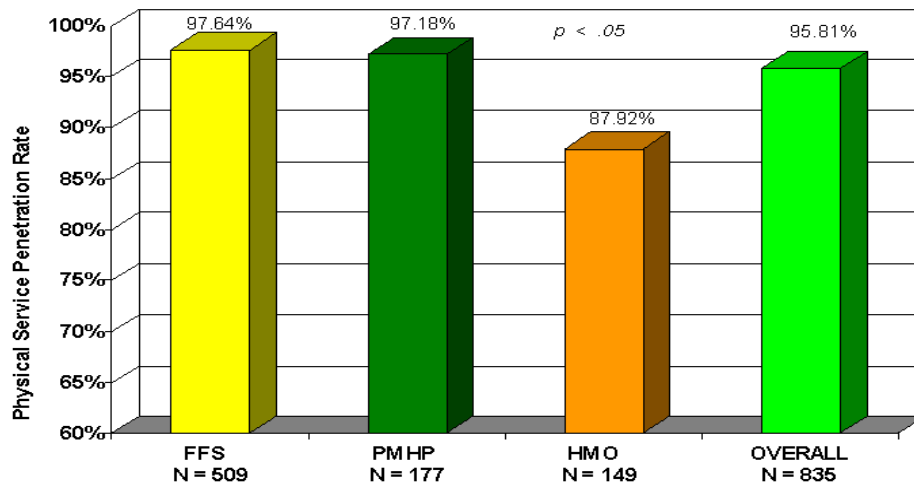


Figure 2-a. Physical Health Service Penetration Rates of Adults Enrolled in the Three Health Plans

Trust and Health Service Use

Among 564 children who had physical disability conditions, 5% (28/564) did not use any physical health services. There were no significant differences in penetration rate of physical health services among children enrolled in the three plans (Figure 2-b).

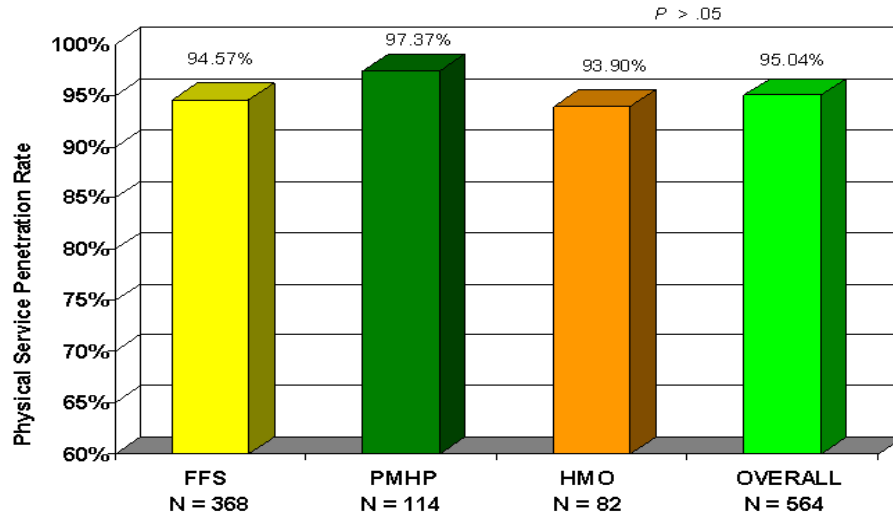


Figure 2-b. Physical Health Service Penetration Rates of Children Enrolled in the Three Health Plans

Mental Health Services Use

A total of 458 adults with mental health disability conditions were included in examining the relationship between trust in health care providers and mental health services used among adults enrolled in the three plans. However, 19.7% (90/458) did not use any mental health services during the study period. Adults enrolled in an HMO plan were less likely to use any mental health services (73.1%) compared to adults enrolled in either a FFS or PMHP plan (83.4% and 78.4%, respectively) with a statistical significance level of .1 (Figure 3-a).

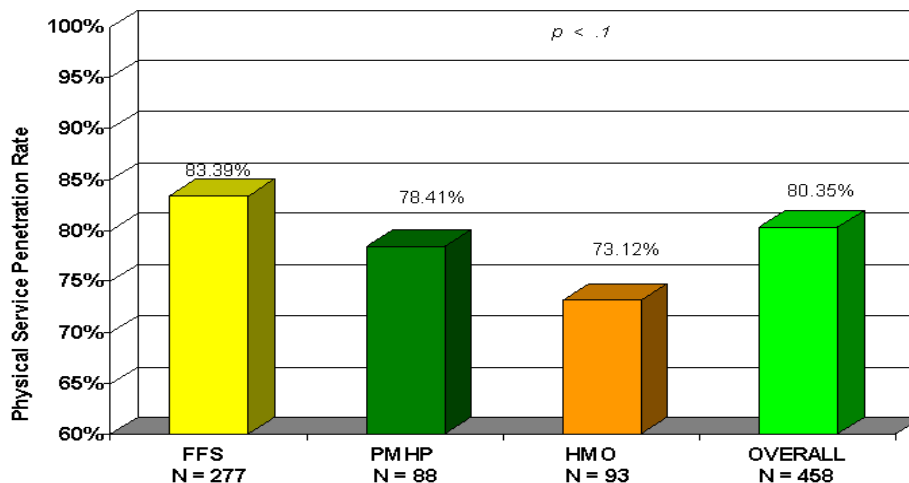


Figure 3-a. Mental Health Service Penetration Rates of Adults Enrolled in the Three Health Plans

Among 417 children with physical disability conditions, 14.1% (59/417) did not use any mental health services during the study period. Children enrolled in the PMHP and HMO plans were equal in likelihood of not using mental health services (18.7% and 19.7%, respectively). Children enrolled in the FFS plan had the lowest rate of not using any mental health services (11.6%). However, the differences in not using any mental health services were not statistically significant (Figure 3-b).

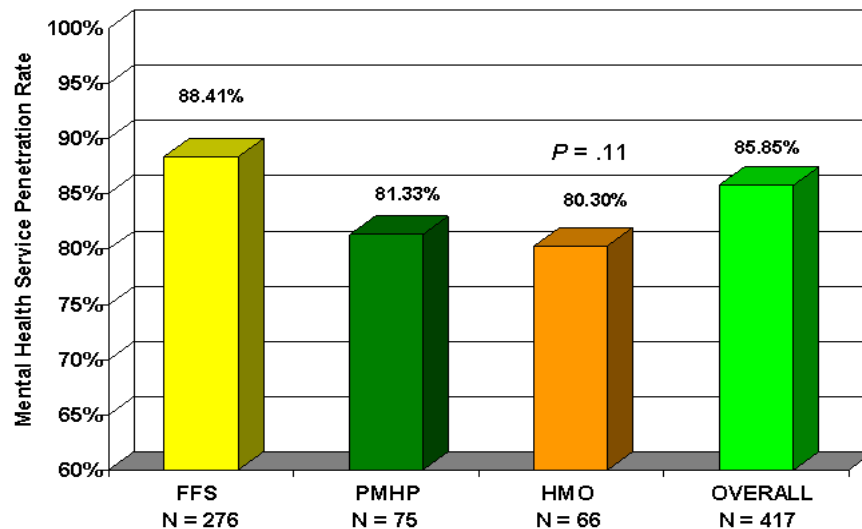


Figure 3-b. Mental Health Service Penetration Rates of Children Enrolled in the Three Health Plans

B. Trust in Health Care Providers and Service Use

I. Were individuals with a higher level of trust less likely to stop using low cost services on a regular basis than those who have a lower level of trust in their health care providers?

Trust and Discontinuation of Physical Health Services

a. Fee-for-Service (FFS)

Among adults enrolled in the FFS plan, 11.1% (54/488) discontinued low cost physical health services during the study period. The results of logistic regression analysis indicated that the FFS adult enrollees' levels of trust in their health care providers was not a significant indicator related to discontinuation of low cost physical health services. Gender and level of physical health function were the two significant predictors related to their discontinuation of physical health services. Female adults who had higher levels of physical health functioning were more likely to discontinue low cost physical health services compared to male adult enrollees with lower levels of physical functioning among adult FFS enrollees (Table 3-a).

| N = 488 | B | Std. Error | Wald | df | Sig. | Exp(B) | 95% Confidence Interval for Exp(B) | |
|--|---------------|--------------|---------------|----------|--------------|--------------|------------------------------------|--------------|
| | | | | | | | Lower Bound | Upper Bound |
| Level of Trust | -0.024 | 0.016 | 2.080 | 1 | 0.149 | 0.976 | 0.945 | 1.009 |
| Psychiatric Symptom ^o | 0.017 | 0.013 | 1.719 | 1 | 0.190 | 1.017 | 0.992 | 1.042 |
| Mental Health Functioning ^d | 0.006 | 0.025 | 0.068 | 1 | 0.794 | 1.006 | 0.959 | 1.057 |
| Physical Health Functioning ^d | 0.060 | 0.017 | 12.636 | 1 | 0.000 | 1.062 | 1.027 | 1.097 |
| Age | 0.009 | 0.014 | 0.365 | 1 | 0.546 | 1.009 | 0.981 | 1.037 |
| Male | -0.696 | 0.309 | 5.060 | 1 | 0.024 | 0.499 | 0.272 | 0.914 |
| White | 0.116 | 0.487 | 0.056 | 1 | 0.812 | 1.123 | 0.432 | 2.919 |
| Black | -0.305 | 0.528 | 0.335 | 1 | 0.563 | 0.737 | 0.262 | 2.073 |
| Rated Trust in Physical Health Care Provider | 0.521 | 0.317 | 2.707 | 1 | 0.100 | 1.684 | 0.905 | 3.132 |
| Change Health Plan | 0.486 | 0.649 | 0.559 | 1 | 0.454 | 1.625 | 0.455 | 5.800 |
| Constant | -4.510 | 2.022 | 4.974 | 1 | 0.026 | 0.011 | | |

a. Variable(s) entered on step 1: trust, CSI, MCS12, PCS12, age, Male, White, Black, physical health provider, plan change. b. Plan = FFS
 c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 3-a. Level of Trust and Stop Usage of Physical Health Services by Adult FFS Enrollees

Among children enrolled in the FFS plan, 27.9% (94/337) discontinued use of low cost physical health services some time during the study period. The results of logistic regression analysis indicated that caregivers’ levels of trust in health care providers were not significantly related to discontinuation of low cost physical health service among the FFS child enrollees. Race and physical health function were the two significant predictors related to discontinuation of low cost physical health services. Other minority children were more likely to discontinue low cost physical health services compared to White or Black children (Table 3-b).

| N = 337 | B | Std. Error | Wald | df | Sig. | Exp(B) | 95% Confidence Interval for Exp(B) | |
|--|---------------|--------------|--------------|----------|--------------|--------------|------------------------------------|--------------|
| | | | | | | | Lower Bound | Upper Bound |
| Stop use medical OPD ps8m(a) | | | | | | | | |
| Level of Trust | -0.013 | 0.014 | 0.900 | 1 | 0.343 | 0.987 | 0.981 | 1.014 |
| Psychiatric Symptom ^o | 0.015 | 0.010 | 2.221 | 1 | 0.136 | 1.015 | 0.995 | 1.035 |
| Physical Health Functioning ^d | 0.033 | 0.017 | 3.747 | 1 | 0.053 | 1.034 | 1.000 | 1.069 |
| Age | 0.007 | 0.033 | 0.040 | 1 | 0.842 | 1.007 | 0.944 | 1.074 |
| Male | -0.522 | 0.281 | 3.449 | 1 | 0.063 | 0.594 | 0.342 | 1.029 |
| White | -0.669 | 0.481 | 1.935 | 1 | 0.164 | 0.512 | 0.199 | 1.315 |
| Black | -1.486 | 0.500 | 8.818 | 1 | 0.003 | 0.226 | 0.085 | 0.603 |
| Rated Trust in Physical Health Care Provider | 0.219 | 0.276 | 0.631 | 1 | 0.427 | 1.245 | 0.725 | 2.138 |
| Change Health Plan | 0.183 | 0.571 | 0.102 | 1 | 0.749 | 1.200 | 0.392 | 3.676 |
| Constant | -2.023 | 1.712 | 1.397 | 1 | 0.237 | 0.132 | | |

a. Variable(s) entered on step 1: trust, PSC, CHQ, age, Male, White, Black, physical health provider, plan change. b. plan = FFS
 c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 3-b. Level of Trust and Stop Usage of Regular Physical Health Services by FFS Child Enrollees

b. Prepaid Mental Health Plan

Among adults enrolled in the PMHP plan, 10.4% (17/164) discontinued low cost physical health services some time during the study period. The results of this analysis indicated that adults' levels of trust in health care providers was not a significant predictor of discontinuation of low cost physical health service use among PMHP adult enrollees. Age and change in health plans were the two significant predictors related to their discontinuation of low cost physical health services. Younger adults who did not change their health plans were more likely to discontinue using low cost physical health services compared to older adults who did change their plans (Table 4-a).

| N = 164 | B | Std. Error | Wald | df | Sig. | Exp(B) | 95% Confidence Interval for Exp(B) | |
|--|--------|------------|-------|----|-------|--------|------------------------------------|-------------|
| | | | | | | | Lower Bound | Upper Bound |
| Level of Trust | -0.028 | 0.032 | 0.788 | 1 | 0.375 | 0.972 | 0.914 | 1.034 |
| Psychiatric Symptom ^e | -0.008 | 0.025 | 0.112 | 1 | 0.737 | 0.992 | 0.945 | 1.041 |
| Mental Health Functioning ^d | 0.041 | 0.056 | 0.524 | 1 | 0.469 | 1.042 | 0.933 | 1.163 |
| Physical Health Functioning ^d | 0.000 | 0.031 | 0.000 | 1 | 0.991 | 1.000 | 0.942 | 1.062 |
| Age | -0.055 | 0.026 | 4.359 | 1 | 0.037 | 0.946 | 0.899 | 0.997 |
| Male | -0.047 | 0.685 | 0.005 | 1 | 0.945 | 0.954 | 0.249 | 3.651 |
| White | -0.441 | 0.893 | 0.244 | 1 | 0.621 | 0.643 | 0.112 | 3.700 |
| Black | -1.574 | 1.003 | 2.462 | 1 | 0.117 | 0.207 | 0.029 | 1.480 |
| Rated Trust in Physical Health Care Provider | -1.531 | 1.159 | 1.744 | 1 | 0.187 | 0.216 | 0.022 | 2.098 |
| Change Health Plan | -2.463 | 0.837 | 8.658 | 1 | 0.003 | 0.085 | 0.017 | 0.439 |
| Constant | 3.702 | 3.630 | 1.040 | 1 | 0.308 | 40.534 | | |

a. Variable(s) entered on step 1: tsstot, csi201, MCS12, PCS12, age, Male, White, Black, mhpridr, planchg. b. Plan = PMHP
 c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 4-a. Level of Trust and Stop Usage of Physical Health Services by Adult PMHP Enrollees

Among children enrolled in the PMHP plan, 25.2% (26/103) stopped using low cost physical health services some time during the study period. The results of this analysis indicated that caregivers' levels of trust in health care providers were significantly related to discontinuation of low cost physical health services. Gender was another significant predictor related to their discontinuation of low cost physical health services. Girls whose caregivers had lower levels of trust in their health care providers were more likely to discontinue low cost physical health services compared to boys whose caregivers had higher level of trust in their health care providers (Table 4-b).

| N = 103 | B | Std. Error | Wald | df | Sig. | Exp(B) | 95% Confidence Interval for Exp(B) | |
|--|---------------|--------------|--------------|----------|--------------|--------------|------------------------------------|--------------|
| | | | | | | | Lower Bound | Upper Bound |
| Level of Trust | -0.059 | 0.029 | 4.028 | 1 | 0.045 | 0.943 | 0.890 | 0.999 |
| Psychiatric Symptom ^c | 0.009 | 0.019 | 0.219 | 1 | 0.640 | 1.009 | 0.972 | 1.047 |
| Physical Health Functioning ^d | 0.011 | 0.037 | 0.096 | 1 | 0.757 | 1.011 | 0.941 | 1.087 |
| Age | 0.050 | 0.067 | 0.547 | 1 | 0.460 | 1.051 | 0.922 | 1.198 |
| Male | -1.604 | 0.751 | 4.557 | 1 | 0.033 | 0.201 | 0.046 | 0.877 |
| White | 0.327 | 0.670 | 0.238 | 1 | 0.626 | 1.387 | 0.373 | 5.160 |
| Black | 0.292 | 0.683 | 0.182 | 1 | 0.669 | 1.339 | 0.351 | 5.106 |
| Rated Trust in Physical Health Care Provider | -0.295 | 0.567 | 0.270 | 1 | 0.603 | 0.745 | 0.245 | 2.261 |
| Change Health Plan | -0.911 | 0.770 | 1.397 | 1 | 0.237 | 0.402 | 0.089 | 1.821 |
| Constant | 0.413 | 3.208 | 0.017 | 1 | 0.898 | 1.511 | | |

a. Variable(s) entered on step 1: trust, PSC, CHQ, age, Male, White, Black, physical health provider, plan change b. plan = PMHP
 c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 4-b. Level of Trust and Stop Usage of Physical Health Services by Child PMHP Enrollees

c. HMO Plan

Among adults enrolled in the HMO plan, 37.7% (49/130) stopped using low cost physical health services some time during the study period. The results of this analysis indicated that adults’ levels of trust in health care providers were not significantly related to discontinuation of low cost physical health service use. Mental health function was the only significant predictor related to their discontinuation of low cost physical health services. Enrollees with higher levels of mental health functioning were more likely to discontinue low cost physical health services compared to adult enrollees who had lower levels of mental health functioning (Table 5-a).

| N = 130 | B | Std. Error | Wald | df | Sig. | Exp(B) | 95% Confidence Interval for Exp(B) | |
|--|--------------|--------------|--------------|----------|--------------|--------------|------------------------------------|--------------|
| | | | | | | | Lower Bound | Upper Bound |
| Level of Trust | -0.024 | 0.024 | 0.993 | 1 | 0.319 | 0.977 | 0.932 | 1.023 |
| Psychiatric Symptom ^c | 0.019 | 0.015 | 1.480 | 1 | 0.224 | 1.019 | 0.989 | 1.050 |
| Mental Health Functioning^d | 0.077 | 0.035 | 4.877 | 1 | 0.027 | 1.080 | 1.009 | 1.156 |
| Physical Health Functioning ^d | 0.022 | 0.024 | 0.827 | 1 | 0.363 | 1.022 | 0.975 | 1.072 |
| Age | -0.021 | 0.020 | 1.130 | 1 | 0.288 | 0.979 | 0.941 | 1.018 |
| Male | -0.184 | 0.473 | 0.151 | 1 | 0.698 | 0.832 | 0.329 | 2.104 |
| White | -0.325 | 0.578 | 0.316 | 1 | 0.574 | 0.723 | 0.233 | 2.244 |
| Black | -0.908 | 0.584 | 2.417 | 1 | 0.120 | 0.403 | 0.128 | 1.267 |
| Rated Trust in Physical Health Care Provider | -0.315 | 0.463 | 0.462 | 1 | 0.497 | 0.730 | 0.295 | 1.808 |
| Change Health Plan | -0.102 | 1.462 | 0.005 | 1 | 0.944 | 0.903 | 0.051 | 15.864 |
| Constant | -2.008 | 2.845 | 0.498 | 1 | 0.480 | 0.134 | | |

a. Variable(s) entered on step 1: trust, CSI, MCS12, PCS12, age, Male, White, Black, physical care provider, plan change b. Plan = HMO
 c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 5-a. Level of Trust and Stop Usage of Physical Health Services by Adult HMO Enrollees

Among children enrolled in the HMO plan, 45.9% (34/74) stopped using low cost physical health services some time during the study period. None of the identified predictors were significantly related to discontinuation of low cost physical health services among HMO child enrollees. These results may be due to a low number of subjects in the analysis (Table 5-b).

| N = 74 | B | Std. Error | Wald | df | Sig. | Exp(B) | 95% Confidence Interval for Exp(B) | |
|--|--------|------------|-------|----|-------|--------|------------------------------------|-------------|
| | | | | | | | Lower Bound | Upper Bound |
| Level of Trust | 0.028 | 0.032 | 0.763 | 1 | 0.382 | 1.029 | 0.966 | 1.095 |
| Psychiatric Symptom ^c | 0.001 | 0.021 | 0.003 | 1 | 0.955 | 1.001 | 0.961 | 1.043 |
| Physical Health Functioning ^d | -0.001 | 0.037 | 0.001 | 1 | 0.980 | 0.999 | 0.929 | 1.074 |
| Age | 0.043 | 0.070 | 0.375 | 1 | 0.540 | 1.044 | 0.909 | 1.199 |
| Male | -0.382 | 0.556 | 0.473 | 1 | 0.492 | 0.682 | 0.230 | 2.027 |
| White | 0.519 | 0.760 | 0.467 | 1 | 0.494 | 1.681 | 0.379 | 7.454 |
| Black | 0.279 | 0.647 | 0.186 | 1 | 0.666 | 1.322 | 0.372 | 4.693 |
| Rated Trust in Physical Health Care Provider | -0.182 | 0.603 | 0.091 | 1 | 0.762 | 0.833 | 0.256 | 2.715 |
| Change Health Plan | -0.415 | 1.104 | 0.141 | 1 | 0.707 | 0.660 | 0.076 | 5.747 |
| Constant | -1.819 | 3.438 | 0.280 | 1 | 0.597 | 0.162 | | |

a. Variable(s) entered on step 1: trust, PSC, CHQ, age, Male, White, Black, physical health provider, plan change b. Plan = HMO
 c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 5-b. Level of Trust and Stop Usage of Physical Health Services by Child HMO Enrollees

Trust and Discontinuation of Low Cost Mental Health Services

a. Fee-For-Service Plan

Among adults enrolled in the FFS plan, 22.8% (52/228) stopped using low cost mental health services some time during the study period. The results of this analysis indicated that level of trust in health care providers was not a significant indicator related to discontinuation of low cost mental health services. The type of providers the individuals rated on their levels of trust and physical functioning level were two significant predictors related to their discontinuation of low cost mental health services. The FFS adult enrollees who had lower levels of physical functioning and rated their trust on their mental health care providers were more likely to discontinue low cost mental health services compared to FFS adult enrollees who rated their trust on non-mental health care providers and had higher physical function levels (Table 6-a).

| N = 228 | | | | | | | 95% Confidence Interval for Exp(B) | |
|--|---------------|--------------|--------------|----------|--------------|--------------|------------------------------------|---------------|
| | B | Std. Error | Wald | df | Sig. | Exp(B) | Lower Bound | Upper Bound |
| Level of Trust | 0.005 | 0.019 | 0.074 | 1 | 0.785 | 1.005 | 0.969 | 1.042 |
| Psychiatric Symptom ^c | -0.026 | 0.014 | 3.503 | 1 | 0.061 | 0.974 | 0.948 | 1.001 |
| Mental Health Functioning ^d | 0.025 | 0.032 | 0.583 | 1 | 0.445 | 1.025 | 0.962 | 1.092 |
| Physical Health Functioning ^d | -0.045 | 0.020 | 4.929 | 1 | 0.026 | 0.956 | 0.919 | 0.995 |
| Age | -0.006 | 0.018 | 0.110 | 1 | 0.741 | 0.994 | 0.961 | 1.029 |
| Male | 0.376 | 0.426 | 0.782 | 1 | 0.377 | 1.457 | 0.632 | 3.357 |
| White | 0.258 | 0.539 | 0.230 | 1 | 0.632 | 1.295 | 0.450 | 3.722 |
| Black | 0.408 | 0.667 | 0.374 | 1 | 0.541 | 1.504 | 0.407 | 5.565 |
| Rated Trust in Mental Health Care Provider | 1.567 | 0.565 | 7.702 | 1 | 0.006 | 4.790 | 1.584 | 14.484 |
| Change Health Plan | 0.631 | 0.679 | 0.863 | 1 | 0.353 | 1.879 | 0.497 | 7.112 |
| Constant | -2.251 | 2.607 | 0.745 | 1 | 0.388 | 0.105 | | |

a. Variable(s) entered on step 1: trust, CSI, MCS12, PCS12, age, Male, White, Black, mental health provider, plan change. b. Plan = FFS
 c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 6-a. Level of Trust and Stop Usage of Mental Health Services by Adult FFS Enrollees

A total of 237 children enrolled in the FFS plan were included in the subgroup for examining the effect of their caregivers' levels of trust in the children's health care providers on discontinuation of low cost mental health services. Among these children, 20.3% (48/237) discontinued low cost mental health services during the study period. Caregivers' levels of trust in their children's health providers were not significantly related to children's discontinuation of low cost mental health services. Like adult FFS enrollees, the type of providers that caregivers rated on their level of trust was one of the significant indicators. Additionally, a child's psychiatric symptoms and physical health functioning were also significant predictors of discontinuation of low cost mental health services. Children who had fewer psychiatric symptoms, lower levels of physical functioning, and whose caregivers rated their trust on their children's mental health care providers were more likely to discontinue low cost mental health services compared to those FFS child enrollees who had more psychiatric symptoms, higher levels of physical functioning, and whose caregivers rated their trust on non-mental health care providers (Table 6-b).

| N = 237 | B | Std. Error | Wald | df | Sig. | Exp(B) | 95% Confidence Interval for Exp(B) | |
|--|--------|------------|-------|----|-------|--------|------------------------------------|-------------|
| | | | | | | | Lower Bound | Upper Bound |
| Level of Trust | -0.008 | 0.019 | 0.177 | 1 | 0.674 | 0.992 | 0.957 | 1.029 |
| Psychiatric Symptom ^a | -0.034 | 0.014 | 6.101 | 1 | 0.014 | 0.966 | 0.940 | 0.993 |
| Physical Health Functioning ^d | -0.045 | 0.023 | 3.873 | 1 | 0.049 | 0.956 | 0.915 | 1.000 |
| Age | 0.066 | 0.048 | 1.934 | 1 | 0.164 | 1.069 | 0.973 | 1.173 |
| Male | -0.091 | 0.379 | 0.058 | 1 | 0.810 | 0.913 | 0.434 | 1.919 |
| White | 0.373 | 0.550 | 0.459 | 1 | 0.498 | 1.452 | 0.494 | 4.265 |
| Black | 0.020 | 0.591 | 0.001 | 1 | 0.973 | 1.020 | 0.321 | 3.248 |
| Rated Trust in Mental Health Care Provider | 2.192 | 0.753 | 8.468 | 1 | 0.004 | 8.953 | 2.045 | 39.191 |
| Change Health Plan | 0.463 | 0.832 | 0.310 | 1 | 0.578 | 1.588 | 0.311 | 8.105 |
| Constant | -0.294 | 2.432 | 0.015 | 1 | 0.904 | 0.745 | | |

a. Variable(s) entered on step 1: trust, PSC, CHQ, age, Male, White, Black, mental health provider, plan change. b. Plan = FFS
c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 6-b. Level of Trust and Stop Usage of Mental Health Services by Child FFS Enrollees

b. Prepaid Mental Health Plan

Among adults enrolled in the PMHP plan, 32.8% (21/64) stopped using low cost mental health services some time during the study period. The results of analysis indicated that adult enrollees’ levels of trust in health care providers was not a significant indicator related to discontinuation of low cost mental health services. Again, type of providers individuals rated on their levels of trust was the only significant predictor related to discontinuation of low cost mental health services. Adult PMHP enrollees who rated their trust on their mental health care providers were more likely to discontinue low cost mental health services compared to those who rated their trust on non-mental health care providers (Table 7-a).

| N = 64 | B | Std. Error | Wald | df | Sig. | Exp(B) | 95% Confidence Interval for Exp(B) | |
|--|---------|------------|-------|----|-------|-----------|------------------------------------|-------------|
| | | | | | | | Lower Bound | Upper Bound |
| Level of Trust | -0.019 | 0.038 | 0.244 | 1 | 0.621 | 0.981 | 0.911 | 1.057 |
| Psychiatric Symptom ^a | -0.014 | 0.029 | 0.223 | 1 | 0.637 | 0.986 | 0.932 | 1.044 |
| Mental Health Functioning ^d | 0.054 | 0.069 | 0.616 | 1 | 0.433 | 1.056 | 0.922 | 1.209 |
| Physical Health Functioning ^d | -0.044 | 0.036 | 1.448 | 1 | 0.229 | 0.957 | 0.891 | 1.028 |
| Age | -0.055 | 0.034 | 2.628 | 1 | 0.105 | 0.946 | 0.885 | 1.012 |
| Male | 1.240 | 0.881 | 1.983 | 1 | 0.159 | 3.456 | 0.615 | 19.417 |
| White | -0.899 | 0.994 | 0.818 | 1 | 0.366 | 0.407 | 0.058 | 2.854 |
| Black | -0.627 | 1.220 | 0.264 | 1 | 0.607 | 0.534 | 0.049 | 5.834 |
| Rated Trust in Mental Health Care Provider | 1.419 | 0.701 | 4.094 | 1 | 0.043 | 4.133 | 1.045 | 16.337 |
| Change Health Plan | 20.421 | 2.683E+04 | 0.000 | 1 | 0.999 | 7.389E+08 | 0.000 | . |
| Constant | -18.827 | 2.683E+04 | 0.000 | 1 | 0.999 | 0.000 | | |

a. Variable(s) entered on step 1: trust, CSI, MCS12, PCS12, age, Male, White, Black, mental health provider, plan change. b. Plan = PMHP
c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 7-a. Level of Trust and Stop Usage of Mental Health Services by Adult PMHP Enrollees

Trust and Health Service Use

Only 55 children enrolled in the PMHP plan were included in the subgroup for examining the effect of their caregivers' levels of trust in health care providers on discontinuation of low cost mental health services among these children. Among these PMHP child enrollees, 27.3% (15/55) discontinued the low cost mental health services sometime during the study period. Caregivers' level of trust in their children's professional health providers was not a significant predictor of children's discontinuation of low cost mental health services. However, children's physical functioning was the only significant predictor related to the PMHP child enrollees' discontinuation of low cost mental health services. Children who had higher levels of physical functioning were more likely to discontinue low cost mental health services compared to the PMHP child enrollees who had lower levels of physical functioning (Table 7-b).

| N = 55 | B | Std. Error | Wald | df | Sig. | Exp(B) | 95% Confidence Interval for Exp(B) | |
|--|---------|------------|-------|----|-------|-----------|------------------------------------|-------------|
| | | | | | | | Lower Bound | Upper Bound |
| Level of Trust | -0.033 | 0.042 | 0.629 | 1 | 0.428 | 0.967 | 0.891 | 1.050 |
| Psychiatric Symptom ^c | -0.006 | 0.033 | 0.039 | 1 | 0.844 | 0.994 | 0.931 | 1.060 |
| Physical Health Functioning ^d | 0.136 | 0.069 | 3.937 | 1 | 0.047 | 1.146 | 1.002 | 1.311 |
| Age | 0.126 | 0.111 | 1.285 | 1 | 0.257 | 1.134 | 0.912 | 1.411 |
| Male | -0.163 | 0.872 | 0.035 | 1 | 0.852 | 0.850 | 0.154 | 4.689 |
| White | 1.003 | 1.077 | 0.868 | 1 | 0.352 | 2.727 | 0.330 | 22.505 |
| Black | 0.507 | 0.937 | 0.292 | 1 | 0.589 | 1.660 | 0.264 | 10.426 |
| Rated Trust in Mental Health Care Provider | -1.523 | 0.894 | 2.903 | 1 | 0.088 | 0.218 | 0.038 | 1.257 |
| Change Health Plan | 22.058 | 15,515.632 | 0.000 | 1 | 0.999 | 3.797E+09 | 0.000 | . |
| Constant | -31.920 | 15,515.633 | 0.000 | 1 | 0.998 | 0.000 | | |

a. Variable(s) entered on step 1: trust, PSC, CHQ, age, Male, White, Black, mental health provider, plan change. b. Plan = PMHP
c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 7-b. Level of Trust and Stop Usage of Mental Health Services by Child PMHP Enrollees

c. HMO Plan

Among adults enrolled in the HMO plan, 27.3% (18/66) stopped using low cost mental health services during the study period. Like FFS and PMHP enrollees, discontinuation of low cost mental health service use was not significantly related to adults' levels of trust in their health care providers. None of the identified predictors were significantly related to discontinuation of low cost mental health services among the HMO adult enrollees (Table 8-a). This result may be related to the small sample size for this analysis.

| N = 66 | | | | | | | 95% Confidence Interval for Exp(B) | | |
|--------|--|------------|-----------|-------|------|--------|------------------------------------|-------------|--------|
| | B | Std. Error | Wald | df | Sig. | Exp(B) | Lower Bound | Upper Bound | |
| | Level of Trust | 0.012 | 0.042 | 0.078 | 1 | 0.781 | 1.012 | 0.932 | 1.099 |
| | Psychiatric Symptom ^e | -0.001 | 0.027 | 0.001 | 1 | 0.981 | 0.999 | 0.948 | 1.053 |
| | Mental Health Function ^d | 0.134 | 0.069 | 3.788 | 1 | 0.052 | 1.143 | 0.999 | 1.308 |
| | Physical Health Function ^d | -0.018 | 0.041 | 0.182 | 1 | 0.669 | 0.983 | 0.906 | 1.065 |
| | Age | -0.020 | 0.038 | 0.280 | 1 | 0.597 | 0.980 | 0.910 | 1.056 |
| | Male | -0.911 | 0.754 | 1.457 | 1 | 0.227 | 0.402 | 0.092 | 1.764 |
| | White | 0.113 | 0.939 | 0.015 | 1 | 0.904 | 1.120 | 0.178 | 7.052 |
| | Black | -0.935 | 0.988 | 0.895 | 1 | 0.344 | 0.393 | 0.057 | 2.724 |
| | Rated Trust in Mental Health Care Provider | 1.305 | 0.861 | 2.297 | 1 | 0.130 | 3.686 | 0.682 | 19.918 |
| | Change Health Plan | 17.145 | 2.678E+04 | 0.000 | 1 | 0.999 | 2.791E+07 | 0.000 | . |
| | Constant | -22.121 | 2.678E+04 | 0.000 | 1 | 0.999 | 0.000 | | |

a. Variable(s) entered on step 1: trust, CSI, MCS12, PCS12, age, Male, White, Black, mental health provider, plan change. b. Plan = HMO
 c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 8-a. Level of Trust and Stop Usage of Mental Health Services by Adult HMO Enrollees

A total of 51 children enrolled in the HMO plan were included in the subgroup to examine the effect of their caregivers' levels of trust in the children's health care providers on discontinuation of low cost mental health services among the HMO child enrollees. Among these children, 13.7% (7/51) had stopped using low cost mental health service during the study period. There were no significant indicators related to the children's discontinuation of low cost mental health services from this analysis (Table 8-b).

| N = 51 | | | | | | | 95% Confidence Interval for Exp(B) | | |
|--------|--|------------|------------|-------|------|--------|------------------------------------|-------------|---------|
| | B | Std. Error | Wald | df | Sig. | Exp(B) | Lower Bound | Upper Bound | |
| | Level of Trust | 0.018 | 0.073 | 0.065 | 1 | 0.799 | 1.019 | 0.883 | 1.175 |
| | Psychiatric Symptom ^e | -0.020 | 0.044 | 0.197 | 1 | 0.657 | 0.981 | 0.899 | 1.069 |
| | Physical Health Functioning ^d | -0.106 | 0.085 | 1.526 | 1 | 0.217 | 0.900 | 0.761 | 1.064 |
| | Age | 0.304 | 0.164 | 3.422 | 1 | 0.064 | 1.355 | 0.982 | 1.869 |
| | Male | -0.208 | 1.491 | 0.019 | 1 | 0.889 | 0.812 | 0.044 | 15.100 |
| | White | 2.268 | 1.441 | 2.476 | 1 | 0.116 | 9.656 | 0.573 | 162.750 |
| | Black | 1.012 | 1.180 | 0.736 | 1 | 0.391 | 2.751 | 0.273 | 27.766 |
| | Rated Trust in Mental Health Care Provider | 0.494 | 1.588 | 0.097 | 1 | 0.756 | 1.639 | 0.073 | 36.816 |
| | Change Health Plan | 17.061 | 19,321.151 | 0.000 | 1 | 0.999 | 2.567E+07 | 0.000 | . |
| | Constant | -19.212 | 19,321.153 | 0.000 | 1 | 0.999 | 0.000 | | |

a. Variable(s) entered on step 1: trust, PSC, CHQ, age, Male, White, Black, mental health provider, plan change. b. Plan = HMO
 c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 8-b. Level of Trust and Stop Usage of Mental Health Services by Child HMO Enrollees

II. Would individuals with a higher level of trust use low cost treatment modality such as outpatient care on a regular basis compared to those who have a lower level of trust in their health care providers?

Trust and Regular Use of Low Cost Physical Health Services

a. Fee-For-Service Plan

Among adults enrolled in the FFS plan, 75.9% (375/489) used low cost physical health services on a regular basis. The results of this analysis indicated that regular use of low cost physical health services was not significantly related to adults' levels of trust in health care providers. Both physical and mental health functioning levels were significant predictors related to the regular use of low cost physical health services. Adult FFS enrollees who had higher levels of physical and mental health functioning were less likely to use low cost physical health services on a regular basis compared with adult FFS enrollees who had lower levels of physical and mental health functioning (Table 9-a).

| N = 489 | B | Std. Error | Wald | df | Sig. | Exp(B) | 95% Confidence Interval for Exp(B) | |
|--|---------------|--------------|---------------|----------|--------------|--------------|------------------------------------|--------------|
| | | | | | | | Lower Bound | Upper Bound |
| Level of Trust | 0.010 | 0.012 | 0.699 | 1 | 0.403 | 1.010 | 0.986 | 1.034 |
| Psychiatric Symptom ^c | -0.007 | 0.009 | 0.562 | 1 | 0.453 | 0.993 | 0.975 | 1.011 |
| Mental Health Functioning ^d | -0.042 | 0.018 | 5.328 | 1 | 0.021 | 0.958 | 0.925 | 0.994 |
| Physical Health Functioning ^d | -0.053 | 0.012 | 18.418 | 1 | 0.000 | 0.948 | 0.925 | 0.971 |
| Age | 0.009 | 0.010 | 0.815 | 1 | 0.367 | 1.009 | 0.989 | 1.029 |
| Male | 0.374 | 0.234 | 2.548 | 1 | 0.110 | 1.454 | 0.918 | 2.301 |
| White | -0.044 | 0.357 | 0.015 | 1 | 0.902 | 0.957 | 0.475 | 1.927 |
| Black | 0.181 | 0.402 | 0.202 | 1 | 0.653 | 1.198 | 0.545 | 2.634 |
| Rated Trust in Physical Health Care Provider | -0.353 | 0.239 | 2.175 | 1 | 0.140 | 0.703 | 0.440 | 1.123 |
| Change Health Plan | -0.037 | 0.424 | 0.007 | 1 | 0.931 | 0.964 | 0.420 | 2.215 |
| Constant | 3.834 | 1.461 | 6.892 | 1 | 0.009 | 46.255 | | |

a. Variable(s) entered on step 1: trust, CSI, MCS12, PCS12, age, Male, White, Black, physical health provider, plan change. b. Plan = FFS
 c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 9-a. Trust and Regular Usage of Low Cost of Physical Health Services by Adult FFS Enrollees

Among 337 children enrolled in the FFS plan, 42.4% (143/337) used low cost physical health services on a regular basis. The results of this analysis indicated that caregivers' levels of trust in their children's health providers was not a significant predictor related to low cost physical health services use on a regular basis by children enrolled in the FFS plan. Gender, physical health functioning, and the type of providers the caregivers rated their levels of trust on were significant predictors related to regular use of low cost physical health services by the child FFS enrollees. Boys with lower physical functioning levels and their caregivers rated trust on providers of non-physical care providers were more likely to use low cost physical health services on a regular basis compared to girls with higher levels of physical functioning and their caregivers rated their levels of trust on care providers of physical health care professionals (Table 9-b).

| N = 337 | B | Std. Error | Wald | df | Sig. | Exp(B) | 95% Confidence Interval for Exp(B) | |
|--|---------------|--------------|---------------|----------|--------------|--------------|------------------------------------|--------------|
| | | | | | | | Lower Bound | Upper Bound |
| Level of Trust | -0.003 | 0.013 | 0.063 | 1 | 0.801 | 0.997 | 0.973 | 1.022 |
| Psychiatric Symptom ^c | -0.008 | 0.009 | 0.755 | 1 | 0.385 | 0.992 | 0.975 | 1.010 |
| Physical Health Functioning ^d | -0.052 | 0.015 | 11.432 | 1 | 0.001 | 0.950 | 0.922 | 0.979 |
| Age | -0.018 | 0.030 | 0.384 | 1 | 0.536 | 0.982 | 0.926 | 1.041 |
| Male | 0.584 | 0.245 | 5.673 | 1 | 0.017 | 1.793 | 1.109 | 2.900 |
| White | 0.128 | 0.363 | 0.124 | 1 | 0.725 | 1.136 | 0.557 | 2.316 |
| Black | 0.638 | 0.400 | 2.540 | 1 | 0.111 | 1.892 | 0.864 | 4.145 |
| Rated Trust in Physical Health Care Provider | -0.626 | 0.263 | 5.641 | 1 | 0.018 | 0.535 | 0.319 | 0.896 |
| Change Health Plan | -0.243 | 0.519 | 0.220 | 1 | 0.639 | 0.784 | 0.284 | 2.168 |
| Constant | 3.461 | 1.517 | 5.201 | 1 | 0.023 | 31.833 | | |

a. Variable(s) entered on step 1: trust, PSC, CHQ, age, Male, White, Black, physical care provider, plan change. b. Plan = FFS
 c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table9-b. Level of Trust and Regular Usage of Lower Cost Physical Health Services by Child FFS Enrollees

b. Prepaid Mental Health Plan

Among adults enrolled in the PMHP plan, 71.3% (117/164) used low cost physical health services on a regular basis. The results of this analysis indicated that individuals' levels of trust in their health care providers were not significantly related to regular use of low cost physical health services. Change in health plan was the only significant predictor related to the regular use of low cost physical health services. Adult PMHP enrollees who changed their health plans were more likely to use low cost physical health services on a regular basis compared to the PMHP adult enrollees who did not change their health plans (Table 10-a).

| N = 164 | B | Std. Error | Wald | df | Sig. | Exp(B) | 95% Confidence Interval for Exp(B) | |
|--|--------------|--------------|--------------|----------|--------------|---------------|------------------------------------|---------------|
| | | | | | | | Lower Bound | Upper Bound |
| Level of Trust | 0.022 | 0.021 | 1.170 | 1 | 0.279 | 1.023 | 0.982 | 1.065 |
| Psychiatric Symptom ^c | 0.029 | 0.016 | 3.185 | 1 | 0.074 | 1.030 | 0.997 | 1.064 |
| Mental Health Functioning ^d | -0.036 | 0.034 | 1.100 | 1 | 0.294 | 0.965 | 0.903 | 1.031 |
| Physical Health Functioning ^d | -0.015 | 0.019 | 0.564 | 1 | 0.453 | 0.986 | 0.949 | 1.024 |
| Age | 0.026 | 0.016 | 2.480 | 1 | 0.115 | 1.026 | 0.994 | 1.059 |
| Male | -0.135 | 0.445 | 0.092 | 1 | 0.762 | 0.874 | 0.365 | 2.092 |
| White | 0.118 | 0.485 | 0.059 | 1 | 0.808 | 1.125 | 0.435 | 2.909 |
| Black | 0.144 | 0.620 | 0.054 | 1 | 0.817 | 1.155 | 0.343 | 3.891 |
| Rated Trust in Physical Health Care Provider | -0.883 | 0.464 | 3.630 | 1 | 0.057 | 0.413 | 0.167 | 1.026 |
| Change Health Plan | 2.331 | 0.785 | 8.819 | 1 | 0.003 | 10.289 | 2.209 | 47.918 |
| Constant | -2.213 | 2.251 | 0.966 | 1 | 0.326 | 0.109 | | |

a. Variable(s) entered on step 1: trust, CSI, MCS12, PCS12, age, Male, White, Black, physical health provider, plan change. b. Plan = PMHP
 c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 10-a. Trust and Regular Usage of Low Cost Physical Health Services by Adult PMHP Enrollees

Trust and Health Service Use

One third, 33.0% (34/103), of children enrolled in the PMHP plan used low cost physical health services on a regular basis. The results of this analysis indicated that caregivers' levels of trust in their children's health providers were not significantly related to low cost physical health services use on a regular basis by children enrolled in the FFS plan. The type of provider on which the caregivers rated their levels of trust was the only significant predictor related to regular use of low cost physical health services the PMHP child enrollees. Children of caregivers who rated their trust on providers of non-physical care providers were more likely to use low cost physical health services on a regular basis compared to those whose caregivers rated their levels of trust on providers of physical health care professionals (Table 10-b).

| N = 103 | B | Std. Error | Wald | df | Sig. | Exp(B) | 95% Confidence Interval for Exp(B) | |
|--|--------|------------|-------|----|-------|--------|------------------------------------|-------------|
| | | | | | | | Lower Bound | Upper Bound |
| Level of Trust | 0.000 | 0.027 | 0.000 | 1 | 0.986 | 1.000 | 0.950 | 1.054 |
| Psychiatric Symptom ^a | -0.003 | 0.019 | 0.025 | 1 | 0.873 | 0.997 | 0.961 | 1.035 |
| Physical Health Functioning ^d | 0.030 | 0.033 | 0.799 | 1 | 0.371 | 1.030 | 0.965 | 1.099 |
| Age | -0.046 | 0.061 | 0.562 | 1 | 0.454 | 0.955 | 0.847 | 1.077 |
| Male | -0.483 | 0.569 | 0.720 | 1 | 0.396 | 0.617 | 0.202 | 1.881 |
| White | -1.394 | 0.767 | 3.302 | 1 | 0.069 | 0.248 | 0.055 | 1.116 |
| Black | -0.498 | 0.765 | 0.424 | 1 | 0.515 | 0.608 | 0.136 | 2.721 |
| Rated Trust in physical Health Care Provider | -1.567 | 0.603 | 6.761 | 1 | 0.009 | 0.209 | 0.064 | 0.680 |
| Change Health Plan | -0.309 | 0.797 | 0.150 | 1 | 0.699 | 0.735 | 0.154 | 3.506 |
| Constant | -0.069 | 3.135 | 0.000 | 1 | 0.982 | 0.933 | | |

a. Variable(s) entered on step 1: trust, PSC, CHQ, age, Male, White, Black, physical care provider, plan change. b. Plan = PMHP
c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 10-b. Level of Trust and Regular Usage of Low Cost Physical Health Services by Child PMHP Enrollees

c. HMO Plan

Nearly 50% of adults enrolled in the HMO plan, 40.4% (55/136) used low cost physical health services on a regular basis. The results of this analysis indicated that adults' levels of trust in health care providers were not significantly related to regular use of low cost physical health services. Mental health functioning was the only significant predictor related to the regular use of low cost physical health services. Adult HMO enrollees with higher mental health functioning levels were less likely to use low cost physical health services on a regular basis compared to adult HMO enrollees with lower mental health functioning levels (Table 11-a).

| N = 136 | | | | | | | 95% Confidence Interval for Exp(B) | |
|--|---------------|--------------|--------------|----------|--------------|--------------|------------------------------------|--------------|
| | B | Std. Error | Wald | df | Sig. | Exp(B) | Lower Bound | Upper Bound |
| Level of Trust | -0.010 | 0.023 | 0.217 | 1 | 0.642 | 0.990 | 0.947 | 1.034 |
| Psychiatric Symptom ^c | -0.007 | 0.014 | 0.212 | 1 | 0.645 | 0.993 | 0.966 | 1.022 |
| Mental Health Functioning ^d | -0.082 | 0.033 | 5.984 | 1 | 0.014 | 0.922 | 0.863 | 0.984 |
| Physical Health Functioning ^d | -0.013 | 0.023 | 0.347 | 1 | 0.556 | 0.987 | 0.944 | 1.032 |
| Age | -0.004 | 0.019 | 0.053 | 1 | 0.818 | 0.996 | 0.959 | 1.034 |
| Male | 0.361 | 0.457 | 0.625 | 1 | 0.429 | 1.435 | 0.586 | 3.517 |
| White | 0.528 | 0.512 | 1.065 | 1 | 0.302 | 1.695 | 0.622 | 4.621 |
| Black | 0.504 | 0.532 | 0.898 | 1 | 0.343 | 1.655 | 0.584 | 4.694 |
| Rated Trust in Physical Health Care Provider | -0.321 | 0.432 | 0.552 | 1 | 0.458 | 0.726 | 0.311 | 1.691 |
| Change Health Plan | 0.847 | 1.379 | 0.378 | 1 | 0.539 | 2.333 | 0.156 | 34.811 |
| Constant | 2.539 | 2.656 | 0.914 | 1 | 0.339 | 12.670 | | |

a. Variable(s) entered on step 1: trust, CSI, MCS12, PCS12, age, Male, White, Black, physical health provider, plan change. b. Plan = HMO
 c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 11-a. Trust and Regular Usage of Low Cost Physical Health Services by Adult HMO Enrollees

Only 23.0% (17/74) of children enrolled in the HMO plan used low cost physical health services on a regular basis. There were no significant predictors associated with regular use of low cost physical health services by children enrolled in the HMO plan (Table 11-b).

| N = 74 | | | | | | | 95% Confidence Interval for Exp(B) | |
|--|--------|------------|-------|----|-------|--------|------------------------------------|-------------|
| | B | Std. Error | Wald | df | Sig. | Exp(B) | Lower Bound | Upper Bound |
| Level of Trust | -0.030 | 0.039 | 0.603 | 1 | 0.438 | 0.970 | 0.899 | 1.047 |
| Psychiatric Symptom ^c | 0.022 | 0.026 | 0.742 | 1 | 0.389 | 1.023 | 0.972 | 1.076 |
| Physical Health Functioning ^d | 0.053 | 0.050 | 1.122 | 1 | 0.290 | 1.054 | 0.956 | 1.163 |
| Age | 0.046 | 0.084 | 0.308 | 1 | 0.579 | 1.048 | 0.889 | 1.234 |
| Male | 0.726 | 0.657 | 1.222 | 1 | 0.269 | 2.067 | 0.571 | 7.485 |
| White | -0.558 | 0.903 | 0.382 | 1 | 0.537 | 0.572 | 0.098 | 3.357 |
| Black | 0.222 | 0.826 | 0.072 | 1 | 0.788 | 1.249 | 0.247 | 6.304 |
| Rated Trust in Physical Health Care Provider | -1.436 | 0.846 | 2.884 | 1 | 0.089 | 0.238 | 0.045 | 1.248 |
| Change Health Plan | -0.519 | 1.327 | 0.153 | 1 | 0.696 | 0.595 | 0.044 | 8.027 |
| Constant | -4.140 | 4.541 | 0.831 | 1 | 0.362 | 0.016 | | |

a. Variable(s) entered on step 1: trust, P.S.C., CHQ, age, Male, White, Black, physical care provider, plan change. b. Plan = HMO
 c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 11-b. Level of Trust and Regular Usage of Low Cost Physical Health Services by Child HMO Enrollees

Trust and Regular Use of Low Cost Mental Health Services

a. Fee-For-Service Plan

Of adults enrolled in the FFS plan, 60.5% (138/228) used low cost mental health services on a regular basis. The results of this analysis indicated that adults' levels of trust in their health care providers were not significantly related to regular use of low cost physical health services. The type of provider respondents reported their trust on and physical functioning level were two significant predictors related to the regular use of low cost mental health services. Adult FFS enrollees with higher physical health functioning levels and rated their trust in providers of non-mental health professionals were more likely to use low cost mental health services on a regular basis compared to adult FFS enrollees with lower levels of physical function and rated their trust on mental health care providers (Table 12-a).

| N = 228 | B | Std. Error | Wald | df | Sig. | Exp(B) | 95% Confidence Interval for Exp(B) | |
|---|---------------|--------------|---------------|----------|--------------|--------------|------------------------------------|--------------|
| | | | | | | | Lower Bound | Upper Bound |
| Level of Trust | 0.004 | 0.017 | 0.068 | 1 | 0.795 | 1.004 | 0.971 | 1.039 |
| Psychiatric Symptom ^c | 0.024 | 0.013 | 3.476 | 1 | 0.062 | 1.025 | 0.999 | 1.051 |
| Mental Health Functioning ^d | -0.008 | 0.030 | 0.068 | 1 | 0.795 | 0.992 | 0.936 | 1.052 |
| Physical Health Functioning^d | 0.069 | 0.019 | 13.356 | 1 | 0.000 | 1.072 | 1.033 | 1.112 |
| Age | -0.010 | 0.016 | 0.391 | 1 | 0.532 | 0.990 | 0.959 | 1.022 |
| Male | -0.129 | 0.365 | 0.126 | 1 | 0.723 | 0.879 | 0.430 | 1.796 |
| White | -0.692 | 0.534 | 1.682 | 1 | 0.195 | 0.500 | 0.176 | 1.425 |
| Black | -0.448 | 0.616 | 0.527 | 1 | 0.468 | 0.639 | 0.191 | 2.139 |
| Rated Trust in Mental Health Care Provider | -1.537 | 0.416 | 13.635 | 1 | 0.000 | 0.215 | 0.095 | 0.486 |
| Change Health Plan | -1.171 | 0.620 | 3.565 | 1 | 0.059 | 0.310 | 0.092 | 1.046 |
| Constant | 0.760 | 2.341 | 0.106 | 1 | 0.745 | 2.139 | | |

a. Variable(s) entered on step 1: trust, CSI, MCS12, PCS12, age, Male, White, Black, mental health provider, plan change. b. Plan = FFS
 c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 12-a. Trust and Regular Usage of Low Cost Mental Health Services by Adult FFS Enrollees

Among 237 child FFS enrollees, 63.3% used low cost mental health services on a regular basis. Caregivers' levels of trust in their children's professional health providers were not significantly related to children's regular use of low cost mental health services. Provider type, psychiatric symptoms, and physical health functioning levels were significant predictors related to children's use of low cost mental health services on a regular basis. Children who had more psychiatric symptoms, higher physical functioning levels, and caregivers rating their trust with non-mental health care providers were more likely to use low cost mental health services on a regular basis compared to those children who had fewer psychiatric symptoms, lower levels of physical functioning, and rated level of trust on the child's mental health care providers (Table 12-b).

| N = 237 | | | | | | | 95% Confidence Interval for Exp(B) | |
|--|--------|------------|--------|----|-------|--------|------------------------------------|-------------|
| | B | Std. Error | Wald | df | Sig. | Exp(B) | Lower Bound | Upper Bound |
| Level of Trust | 0.013 | 0.015 | 0.690 | 1 | 0.406 | 1.013 | 0.983 | 1.044 |
| Psychiatric Symptom ^c | 0.046 | 0.012 | 14.334 | 1 | 0.000 | 1.047 | 1.023 | 1.073 |
| Physical Health Functioning ^d | 0.073 | 0.020 | 12.762 | 1 | 0.000 | 1.076 | 1.033 | 1.120 |
| Age | -0.041 | 0.039 | 1.114 | 1 | 0.291 | 0.959 | 0.888 | 1.036 |
| Male | 0.225 | 0.325 | 0.480 | 1 | 0.488 | 1.253 | 0.663 | 2.368 |
| White | -0.272 | 0.463 | 0.347 | 1 | 0.556 | 0.762 | 0.308 | 1.886 |
| Black | -0.391 | 0.509 | 0.589 | 1 | 0.443 | 0.677 | 0.249 | 1.835 |
| Rated Trust in Mental Health Care Provider | -0.759 | 0.377 | 4.058 | 1 | 0.044 | 0.468 | 0.224 | 0.980 |
| Change Health Plan | 0.059 | 0.622 | 0.009 | 1 | 0.924 | 1.061 | 0.314 | 3.587 |
| Constant | -5.023 | 2.059 | 5.953 | 1 | 0.015 | 0.007 | | |

a. Variable(s) entered on step 1: trust, PSC, CHQ, age, Male, White, Black, mental health provider, plan change. b. Plan = FFS
 c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 12-b. Level of Trust and Regular Usage of Low Cost Mental Health Services by Child FFS Enrollees

b. Prepaid Mental Health Plan

Less than half (45.3%, 29/64) of PMHP adult enrollees used low cost mental health services on a regular basis. There were no significant predictors related to regular use of low cost mental health service by adult PMHP enrollees (Table 13-a).

| N = 64 | | | | | | | 95% Confidence Interval for Exp(B) | |
|--|--------|------------|-------|----|-------|--------|------------------------------------|-------------|
| | B | Std. Error | Wald | df | Sig. | Exp(B) | Lower Bound | Upper Bound |
| Level of Trust | -0.047 | 0.036 | 1.706 | 1 | 0.192 | 0.954 | 0.889 | 1.024 |
| Psychiatric Symptom ^c | 0.025 | 0.026 | 0.895 | 1 | 0.344 | 1.025 | 0.974 | 1.079 |
| Mental Health Functioning ^d | -0.104 | 0.061 | 2.941 | 1 | 0.086 | 0.901 | 0.800 | 1.015 |
| Physical Health Functioning ^d | 0.045 | 0.036 | 1.593 | 1 | 0.207 | 1.046 | 0.975 | 1.122 |
| Age | 0.027 | 0.032 | 0.712 | 1 | 0.399 | 1.027 | 0.965 | 1.093 |
| Male | -0.605 | 0.749 | 0.651 | 1 | 0.420 | 0.546 | 0.126 | 2.372 |
| White | 0.147 | 0.791 | 0.035 | 1 | 0.852 | 1.159 | 0.246 | 5.464 |
| Black | -1.247 | 1.030 | 1.465 | 1 | 0.226 | 0.287 | 0.038 | 2.164 |
| Rated Trust in Mental Health Care Provider | -0.660 | 0.658 | 1.004 | 1 | 0.316 | 0.517 | 0.142 | 1.879 |
| Change Health Plan | 0.584 | 1.782 | 0.107 | 1 | 0.743 | 1.794 | 0.055 | 59.025 |
| Constant | 3.017 | 4.291 | 0.494 | 1 | 0.482 | 20.424 | | |

a. Variable(s) entered on step 1: trust, CSI, MCS12, PCS12, age, Male, White, Black, mental health provider, plan change. b. Plan = PMHP
 c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of functioning

Table 13-a. Trust and Regular Usage of Low Cost Mental Health Services by Adult PMHP Enrollees

Children enrolled in PMHP plan had a 65.5% (36/55) rate of using low cost mental health services on a regular basis. Like adult PMHP enrollees, there were no significant predictors related to children’s regular use of low cost mental health services (Table 13-b).

| N = 55 | B | Std. Error | Wald | df | Sig. | Exp(B) | 95% Confidence Interval for Exp(B) | |
|--|--------|------------|-------|----|-------|-----------|------------------------------------|-------------|
| | | | | | | | Lower Bound | Upper Bound |
| Level of Trust | -0.007 | 0.039 | 0.030 | 1 | 0.863 | 0.993 | 0.920 | 1.072 |
| Psychiatric Symptom ^c | 0.061 | 0.034 | 3.257 | 1 | 0.071 | 1.063 | 0.995 | 1.137 |
| Physical Health Functioning ^d | -0.097 | 0.066 | 2.148 | 1 | 0.143 | 0.907 | 0.797 | 1.033 |
| Age | -0.176 | 0.110 | 2.576 | 1 | 0.108 | 0.839 | 0.677 | 1.040 |
| Male | 1.490 | 1.083 | 1.894 | 1 | 0.169 | 4.438 | 0.532 | 37.057 |
| White | -0.017 | 0.979 | 0.000 | 1 | 0.986 | 0.983 | 0.144 | 6.696 |
| Black | -0.088 | 0.949 | 0.009 | 1 | 0.926 | 0.916 | 0.143 | 5.883 |
| Rated Trust in Mental Health Care Provider | -0.564 | 0.989 | 0.326 | 1 | 0.568 | 0.569 | 0.082 | 3.951 |
| Change Health Plan | -0.980 | 1.696 | 0.334 | 1 | 0.563 | 0.375 | 0.014 | 10.425 |
| Constant | 8.701 | 5.421 | 2.576 | 1 | 0.108 | 6,008.234 | | |

a. Variable(s) entered on step 1: trust, PSC, CHO, age, Male, White, Black, mental health provider, plan change. b. Plan = PMHP
 c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 13-b. Level of Trust and Regular Usage of Low Cost Mental Health Services by Child PMHP Enrollees

c. HMO Plan

Among 66 adult HMO s enrollees, 50% (33) used low cost mental health services on a regular basis during the study period. Like adult PMHP enrollees, no significant predictors were founded related to their use of low cost mental health services on a regular basis (14-a).

| N = 66 | B | Std. Error | Wald | df | Sig. | Exp(B) | 95% Confidence Interval for Exp(B) | |
|--|--------|------------|-------|----|-------|--------|------------------------------------|-------------|
| | | | | | | | Lower Bound | Upper Bound |
| Level of Trust | 0.006 | 0.034 | 0.035 | 1 | 0.852 | 1.006 | 0.941 | 1.077 |
| Psychiatric Symptom ^c | 0.018 | 0.023 | 0.633 | 1 | 0.426 | 1.018 | 0.974 | 1.064 |
| Mental Health Functioning ^d | -0.069 | 0.054 | 1.651 | 1 | 0.199 | 0.934 | 0.841 | 1.037 |
| Physical Health Functioning ^d | 0.030 | 0.033 | 0.789 | 1 | 0.374 | 1.030 | 0.965 | 1.100 |
| Age | 0.024 | 0.032 | 0.555 | 1 | 0.456 | 1.024 | 0.962 | 1.090 |
| Male | -0.179 | 0.659 | 0.073 | 1 | 0.786 | 0.836 | 0.230 | 3.046 |
| White | 0.382 | 0.731 | 0.273 | 1 | 0.602 | 1.465 | 0.350 | 6.139 |
| Black | 0.996 | 0.808 | 1.521 | 1 | 0.217 | 2.708 | 0.556 | 13.185 |
| Rated Trust in Mental Health Care Provider | -0.435 | 0.617 | 0.498 | 1 | 0.480 | 0.647 | 0.193 | 2.167 |
| Change Health Plan | 1.241 | 1.796 | 0.478 | 1 | 0.490 | 3.459 | 0.102 | 116.754 |
| Constant | -2.014 | 3.596 | 0.314 | 1 | 0.575 | 0.133 | | |

a. Variable(s) entered on step 1: trust, CSI, MCS12, PCS12, age, Male, White, Black, mental health provider, plan change. b. Plan = HMO
 c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 14-a. Level of Trust and Regular Usage of Low Cost Mental Health Services by Adult HMO Enrollees

Approximately 67% (32/51) of the children enrolled in the HMO plan used low cost mental health services on a regular basis. Again, no significant predictors were found related to use of low cost mental health services by these children (Table 14-b).

| N = 51 | B | Std. Error | Wald | df | Sig. | Exp(B) | 95% Confidence Interval for Exp(B) | |
|--|---------|------------|-------|----|-------|-----------|------------------------------------|-------------|
| | | | | | | | Lower Bound | Upper Bound |
| Level of Trust | 0.000 | 0.041 | 0.000 | 1 | 0.991 | 1.000 | 0.923 | 1.085 |
| Psychiatric Symptom ^c | 0.020 | 0.029 | 0.473 | 1 | 0.492 | 1.020 | 0.963 | 1.081 |
| Physical Health Functioning ^d | -0.011 | 0.055 | 0.041 | 1 | 0.840 | 0.989 | 0.888 | 1.102 |
| Age | -0.034 | 0.094 | 0.128 | 1 | 0.721 | 0.967 | 0.804 | 1.163 |
| Male | 0.983 | 0.981 | 1.004 | 1 | 0.316 | 2.673 | 0.391 | 18.285 |
| White | -0.956 | 0.831 | 1.323 | 1 | 0.250 | 0.384 | 0.075 | 1.960 |
| Black | -0.173 | 0.836 | 0.043 | 1 | 0.836 | 0.841 | 0.164 | 4.325 |
| Rated Trust in Mental Health Care Provider | 0.149 | 0.844 | 0.031 | 1 | 0.860 | 1.161 | 0.222 | 6.075 |
| Change Health Plan | -20.404 | 19,804.527 | 0.000 | 1 | 0.999 | 0.000 | 0.000 | . |
| Constant | 21.712 | 19,804.528 | 0.000 | 1 | 0.999 | 2.687E+09 | | |

a. Variable(s) entered on step 1: trust, PSC, CHQ, age, Male, White, Black, mental health provider, plan change. b. Plan = HMO
 c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 14-b. Level of Trust and Regular Usage of Low Cost Mental Health Services by Child HMO Enrollees

III. Were individuals with a lower level of trust in their health care providers more likely to use high cost treatment modalities?

Trust and High Cost Physical Health Services Use

a. Fee-For-Service Plan

Among the 488 adult FFS enrollees, 36.3% (177) used high cost physical health services. Individuals' levels of trust in their health care providers were not significantly related to their use of high cost physical health services. However, age, gender and physical health functioning were identified significant predictors of high cost physical service use among the FFS adult enrollees. Young male adult FFS enrollees with lower levels of physical functioning were more likely to use high cost physical health services compared with respondents who were older, female, and had higher levels of physical functioning (Table 15-a).

| N = 488 | B | Std. Error | Wald | df | Sig. | Exp(B) | 95% Confidence Interval for Exp(B) | |
|--|--------|------------|--------|----|-------|--------|------------------------------------|-------------|
| | | | | | | | Lower Bound | Upper Bound |
| Level of Trust | -0.016 | 0.010 | 2.337 | 1 | 0.126 | 0.984 | 0.964 | 1.004 |
| Psychiatric Symptom ^e | 0.008 | 0.008 | 1.082 | 1 | 0.298 | 1.008 | 0.993 | 1.024 |
| Mental Health Functioning ^d | -0.025 | 0.017 | 2.276 | 1 | 0.131 | 0.975 | 0.944 | 1.008 |
| Physical Health Functioning ^d | -0.049 | 0.012 | 16.957 | 1 | 0.000 | 0.952 | 0.930 | 0.974 |
| Age | -0.026 | 0.009 | 8.680 | 1 | 0.003 | 0.974 | 0.957 | 0.991 |
| Male | 0.541 | 0.225 | 5.758 | 1 | 0.016 | 1.718 | 1.104 | 2.672 |
| White | 0.376 | 0.302 | 1.546 | 1 | 0.214 | 1.456 | 0.805 | 2.631 |
| Black | 0.360 | 0.356 | 1.021 | 1 | 0.312 | 1.433 | 0.713 | 2.883 |
| Rated Trust in physical Health Care Provider | 0.359 | 0.218 | 2.704 | 1 | 0.100 | 1.432 | 0.933 | 2.196 |
| Change Health Plan | 0.173 | 0.373 | 0.214 | 1 | 0.644 | 1.188 | 0.572 | 2.468 |
| Constant | 2.526 | 1.280 | 3.893 | 1 | 0.048 | 12.498 | | |

a. Variable(s) entered on step 1: trust, CSI, MCS12, PCS12, age, Male, White, Black, physical health provider, plan change. b. Plan = FFS
 c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 15-a. Trust and High Cost of Physical Health Services Used by Adult FFS Enrollees

Of the children enrolled in the FFS plan, 25.5% (86/337) used high cost physical health services. Caregivers’ levels of trust in health care providers were not significantly related to these children’s use of high cost physical health services. Race was the only significant predictor. White children were more likely to use high cost physical health services compared to minority children enrolled in the FFS plan (Table 15-b).

| N = 337 | B | Std. Error | Wald | df | Sig. | Exp(B) | 95% Confidence Interval for Exp(B) | |
|--|--------|------------|-------|----|-------|--------|------------------------------------|-------------|
| | | | | | | | Lower Bound | Upper Bound |
| Level of Trust | -0.016 | 0.014 | 1.283 | 1 | 0.257 | 0.985 | 0.958 | 1.011 |
| Psychiatric Symptom ^e | 0.005 | 0.010 | 0.265 | 1 | 0.606 | 1.005 | 0.986 | 1.025 |
| Physical Health Functioning ^d | 0.007 | 0.017 | 0.200 | 1 | 0.654 | 1.008 | 0.975 | 1.041 |
| Age | 0.047 | 0.033 | 2.012 | 1 | 0.156 | 1.048 | 0.982 | 1.119 |
| Male | 0.494 | 0.269 | 3.373 | 1 | 0.066 | 1.638 | 0.967 | 2.775 |
| White | 0.997 | 0.378 | 6.958 | 1 | 0.008 | 2.710 | 1.292 | 5.685 |
| Black | 0.754 | 0.409 | 3.387 | 1 | 0.066 | 2.124 | 0.952 | 4.740 |
| Rated Trust in Physical Health Care Provider | -0.568 | 0.300 | 3.594 | 1 | 0.058 | 0.566 | 0.315 | 1.019 |
| Change Health Plan | 0.389 | 0.602 | 0.417 | 1 | 0.519 | 1.475 | 0.453 | 4.803 |
| Constant | -3.074 | 1.704 | 3.256 | 1 | 0.071 | 0.046 | | |

a. Variable(s) entered on step 1: trust, PSC, CHQ, age, Male, White, Black, physical health provider, plan change. b. Plan = FFS
 c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 15-b. Level of Trust and High Cost Physical Health Services Used by Child FFS Enrollees

b. Prepaid Mental Health Plan

Nearly 30% (49/164) of adult PMHP enrollees used high cost physical health services. Respondents' levels of trust in health care providers were not significantly related to their use of high cost physical health services. The type of providers adult PMHP enrollees rated on their trust was the only significant predictor associated with use of these high cost physical services. Adult PMHP enrollees who rated their levels of trust on physical care providers were less likely to use high cost physical health services compared to adult PMHP enrollees who rated their levels of trust on non-physical health care providers (Table 16-a).

| N = 164 | B | Std. Error | Wald | df | Sig. | Exp(B) | 95% Confidence Interval for Exp(B) | |
|--|--------|------------|-------|----|-------|--------|------------------------------------|-------------|
| | | | | | | | Lower Bound | Upper Bound |
| Level of Trust | 0.031 | 0.020 | 2.362 | 1 | 0.124 | 1.031 | 0.992 | 1.072 |
| Psychiatric Symptom ^c | 0.016 | 0.014 | 1.212 | 1 | 0.271 | 1.016 | 0.988 | 1.045 |
| Mental Health Function ^d | -0.029 | 0.031 | 0.856 | 1 | 0.355 | 0.971 | 0.913 | 1.033 |
| Physical Health Function ^d | -0.023 | 0.019 | 1.437 | 1 | 0.231 | 0.977 | 0.942 | 1.015 |
| Age | -0.022 | 0.016 | 1.817 | 1 | 0.178 | 0.979 | 0.948 | 1.010 |
| Male | -0.389 | 0.407 | 0.912 | 1 | 0.340 | 0.678 | 0.305 | 1.506 |
| White | 0.581 | 0.434 | 1.792 | 1 | 0.181 | 1.789 | 0.764 | 4.189 |
| Black | 0.182 | 0.547 | 0.111 | 1 | 0.739 | 1.200 | 0.411 | 3.506 |
| Rated Trust in Physical Health Care Provider | -1.212 | 0.558 | 4.719 | 1 | 0.030 | 0.298 | 0.100 | 0.888 |
| Change Health Plan | 0.845 | 0.858 | 0.971 | 1 | 0.325 | 2.329 | 0.433 | 12.518 |
| Constant | -0.438 | 2.192 | 0.040 | 1 | 0.842 | 0.646 | | |

a. Variable(s) entered on step 1: trust, CSI, MCS12, PCS12, age, Male, White, Black, physical health provider, plan change. b. Plan = PMHP
 c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 16-a. Trust and High Cost Physical Health Services Used by Adult PMHP Enrollees

Nearly 15% (14/103) of child PMHP enrollees used high cost physical health services. Caregivers' levels of trust were not significantly related to these children's use of high cost physical health services. Again, the type of providers on whom respondents rated their trust was the only significant predictor of these children's use of high cost physical health services. Children of caregivers who rated their trust on physical health care providers were more likely to use high cost physical health services compared to children of caregivers who rated their trust on non-physical health care providers (Table 16-b).

| N = 103 | B | Std. Error | Wald | df | Sig. | Exp(B) | 95% Confidence Interval for Exp(B) | |
|--|--------|------------|-------|----|-------|--------|------------------------------------|-------------|
| | | | | | | | Lower Bound | Upper Bound |
| Level of Trust | 0.017 | 0.036 | 0.236 | 1 | 0.627 | 1.018 | 0.948 | 1.092 |
| Psychiatric Symptom ^c | 0.021 | 0.026 | 0.632 | 1 | 0.427 | 1.021 | 0.970 | 1.074 |
| Physical Health Functioning ^d | -0.038 | 0.046 | 0.697 | 1 | 0.404 | 0.962 | 0.880 | 1.053 |
| Age | 0.019 | 0.087 | 0.046 | 1 | 0.830 | 1.019 | 0.859 | 1.209 |
| Male | -0.286 | 0.807 | 0.126 | 1 | 0.723 | 0.751 | 0.154 | 3.655 |
| White | -1.134 | 1.186 | 0.915 | 1 | 0.339 | 0.322 | 0.032 | 3.287 |
| Black | -2.258 | 1.190 | 3.599 | 1 | 0.058 | 0.105 | 0.010 | 1.078 |
| Rated Trust in Physical Health Care Provider | 1.468 | 0.679 | 4.667 | 1 | 0.031 | 4.339 | 1.146 | 16.429 |
| Change Health Plan | -0.831 | 0.878 | 0.896 | 1 | 0.344 | 0.436 | 0.078 | 2.434 |
| Constant | 1.092 | 4.043 | 0.073 | 1 | 0.787 | 2.979 | | |

a. Variable(s) entered on step 1: trust, PSC, CHQ, age, Male, White, Black, physical health provider, plan change. b. Plan = PMHP
 c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 16-b. Level of Trust and High Cost Physical Health Services Used by Child PMHP Enrollees

c. HMO Plan

Adult HMO enrollees had a penetration rate of 35.4% (46/130) with respect to the use of high cost physical health services. None of the predictors were significantly related to the use of high cost physical services by adult HMO enrollees (Table 17-a).

| N = 130 | B | Std. Error | Wald | df | Sig. | Exp(B) | 95% Confidence Interval for Exp(B) | |
|--|--------|------------|-------|----|-------|--------|------------------------------------|-------------|
| | | | | | | | Lower Bound | Upper Bound |
| Level of Trust | -0.002 | 0.023 | 0.012 | 1 | 0.913 | 0.998 | 0.954 | 1.043 |
| Psychiatric Symptom ^c | -0.008 | 0.015 | 0.281 | 1 | 0.596 | 0.992 | 0.963 | 1.022 |
| Mental Health Functioning ^d | -0.019 | 0.032 | 0.348 | 1 | 0.555 | 0.981 | 0.922 | 1.044 |
| Physical Health Functioning ^d | 0.005 | 0.022 | 0.057 | 1 | 0.811 | 1.005 | 0.962 | 1.051 |
| Age | 0.010 | 0.019 | 0.273 | 1 | 0.601 | 1.010 | 0.973 | 1.048 |
| Male | 0.244 | 0.474 | 0.265 | 1 | 0.607 | 1.276 | 0.504 | 3.227 |
| White | 0.010 | 0.514 | 0.000 | 1 | 0.985 | 1.010 | 0.369 | 2.763 |
| Black | 0.540 | 0.547 | 0.973 | 1 | 0.324 | 1.716 | 0.587 | 5.013 |
| Rated Trust in Physical Health Care Provider | 0.717 | 0.432 | 2.760 | 1 | 0.097 | 2.048 | 0.879 | 4.773 |
| Change Health Plan | 0.675 | 1.406 | 0.230 | 1 | 0.631 | 1.964 | 0.125 | 30.911 |
| Constant | -1.556 | 2.665 | 0.341 | 1 | 0.559 | 0.211 | | |

a. Variable(s) entered on step 1: trust, CSI, MCS12, PCS12, age, Male, White, Black, physical health provider, plan change. b. Plan = HMO
 c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 17-a. Trust and High Cost Physical Health Services Used by Adult HMO Enrollees

Children enrolled in the HMO plan had a 12.2% (9/74) penetration rate of high cost physical health services. Caregivers' levels of trust in health care provider were not significantly related to HMO child enrollees' use of high cost physical health services. Gender was the only significant predictor. Boys enrolled in the HMO plan were more likely to use high cost physical health services compared to girls enrolled in the HMO plan (Table 17-b).

| N = 74 | B | Std. Error | Wald | df | Sig. | Exp(B) | 95% Confidence Interval for Exp(B) | |
|--|---------|------------|-------|----|-------|-----------|------------------------------------|-------------|
| | | | | | | | Lower Bound | Upper Bound |
| Level of Trust | -0.065 | 0.053 | 1.501 | 1 | 0.220 | 0.937 | 0.844 | 1.040 |
| Psychiatric Symptom ^a | 0.030 | 0.038 | 0.621 | 1 | 0.431 | 1.030 | 0.957 | 1.109 |
| Physical Health Function ^d | -0.070 | 0.063 | 1.221 | 1 | 0.269 | 0.932 | 0.823 | 1.056 |
| Age | -0.154 | 0.123 | 1.567 | 1 | 0.211 | 0.858 | 0.674 | 1.091 |
| Male | 2.031 | 0.974 | 4.347 | 1 | 0.037 | 7.624 | 1.129 | 51.463 |
| White | -2.624 | 1.598 | 2.696 | 1 | 0.101 | 0.072 | 0.003 | 1.662 |
| Black | -1.680 | 1.554 | 1.169 | 1 | 0.280 | 0.186 | 0.009 | 3.918 |
| Rated Trust in Physical Health Care Provider | -0.674 | 0.991 | 0.463 | 1 | 0.496 | 0.510 | 0.073 | 3.552 |
| Change Health Plan | 19.091 | 1.907E+04 | 0.000 | 1 | 0.999 | 1.955E+08 | 0.000 | . |
| Constant | -10.899 | 1.907E+04 | 0.000 | 1 | 1.000 | 0.000 | | |

a. Variable(s) entered on step 1: trust, PSC, CHQ, age, Male, White, Black, physical health provider, plan change. b. Plan = HMO
 c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 17-b. Level of Trust and High Cost Physical Health Services Used by Child HMO Enrollees

Trust and High Cost Mental Health Services Use

a. Fee-For-Service Plan

Among adults enrolled in the FFS plan, 21.1% (48/228) used high cost mental health services. The results of this analysis indicated that adults' levels of trust in health care providers was the only significant predictor related to their use of high cost mental health services. Adult FFS enrollees with higher levels of trust in their health care providers were more likely to use high cost mental health services compared to adult FFS enrollees who had lower levels of trust in their health care providers (Table 18-a).

| N = 228 | | | | | | | 95% Confidence Interval for Exp(B) | | |
|---------|--|------------|-------|-------|------|--------|------------------------------------|-------------|--------|
| | B | Std. Error | Wald | df | Sig. | Exp(B) | Lower Bound | Upper Bound | |
| | Level of Trust | 0.052 | 0.021 | 6.100 | 1 | 0.014 | 1.053 | 1.011 | 1.097 |
| | Psychiatric Symptom ^c | 0.013 | 0.014 | 0.790 | 1 | 0.374 | 1.013 | 0.985 | 1.042 |
| | Mental Health Functioning ^d | -0.036 | 0.031 | 1.360 | 1 | 0.244 | 0.964 | 0.907 | 1.025 |
| | Physical Health Functioning ^d | 0.006 | 0.019 | 0.096 | 1 | 0.757 | 1.006 | 0.969 | 1.044 |
| | Age | -0.024 | 0.018 | 1.803 | 1 | 0.179 | 0.977 | 0.943 | 1.011 |
| | Male | -0.327 | 0.382 | 0.731 | 1 | 0.393 | 0.721 | 0.341 | 1.526 |
| | White | -0.003 | 0.636 | 0.000 | 1 | 0.996 | 0.997 | 0.287 | 3.464 |
| | Black | -0.444 | 0.694 | 0.410 | 1 | 0.522 | 0.641 | 0.165 | 2.499 |
| | Rated Trust in Mental Health Care Provider | -0.627 | 0.367 | 2.915 | 1 | 0.088 | 0.534 | 0.260 | 1.097 |
| | Change Health Plan | 1.086 | 0.796 | 1.864 | 1 | 0.172 | 2.964 | 0.623 | 14.096 |
| | Constant | -1.703 | 2.548 | 0.447 | 1 | 0.504 | 0.182 | | |

a. Variable(s) entered on step 1: trust, CSI, MCS12, PCS12, age, Male, White, Black, mental health provider, plan change. b. Plan = FFS
 c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 18-a. Level of Trust and High Cost Mental Health Services Used by Adult FFS Enrollees

Among 237 child FFS enrollees, 12.2% (29) used high cost mental health services. Caregivers’ level of trust in their children’s professional health providers was not a significant indicator related to these children’s use of high cost mental health services. There were no significant predictors found related to these children’s use of high cost mental health services (Table 18-b).

| N = 237 | | | | | | | 95% Confidence Interval for Exp(B) | | |
|---------|--|------------|-----------|-------|------|--------|------------------------------------|-------------|-------|
| | B | Std. Error | Wald | df | Sig. | Exp(B) | Lower Bound | Upper Bound | |
| | Level of Trust | -0.006 | 0.022 | 0.065 | 1 | 0.799 | 0.994 | 0.953 | 1.038 |
| | Psychiatric Symptom ^c | 0.026 | 0.017 | 2.305 | 1 | 0.129 | 1.026 | 0.992 | 1.062 |
| | Physical Health Functioning ^d | 0.047 | 0.034 | 1.977 | 1 | 0.160 | 1.048 | 0.982 | 1.120 |
| | Age | 0.109 | 0.056 | 3.709 | 1 | 0.054 | 1.115 | 0.998 | 1.245 |
| | Male | 0.192 | 0.464 | 0.170 | 1 | 0.680 | 1.211 | 0.488 | 3.009 |
| | White | -1.466 | 1.074 | 1.864 | 1 | 0.172 | 0.231 | 0.028 | 1.894 |
| | Black | -0.728 | 1.149 | 0.402 | 1 | 0.526 | 0.483 | 0.051 | 4.591 |
| | Rated Trust in Mental Health Care Provider | -0.660 | 0.460 | 2.054 | 1 | 0.152 | 0.517 | 0.210 | 1.275 |
| | Change Health Plan | 19.867 | 1.015E+04 | 0.000 | 1 | 0.998 | 4.246E+08 | 0.000 | . |
| | Constant | -25.761 | 1.015E+04 | 0.000 | 1 | 0.998 | 0.000 | | |

a. Variable(s) entered on step 1: trust, PSC, CHQ, age, Male, White, Black, mental health provider, plan change. b. Plan = FFS
 c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 18-b. Level of Trust and High Cost Mental Health Services Used by Child FFS Enrollees

b. Prepaid Mental Health Plan

Among the adult PMHP enrollees, 12.5% (8/64) had used high cost mental health services during the study period. There were no significant predictors related to use of high cost mental health services among adult PMHP enrollees (Table 19-a).

| N = 64 | B | Std. Error | Wald | df | Sig. | Exp(B) | 95% Confidence Interval for Exp(B) | |
|--|-----------|------------|-------|----|-------|-----------|------------------------------------|-------------|
| | | | | | | | Lower Bound | Upper Bound |
| Level of Trust | -0.113 | 0.060 | 3.523 | 1 | 0.061 | 0.893 | 0.794 | 1.005 |
| Psychiatric Symptom ^c | 0.002 | 0.040 | 0.002 | 1 | 0.963 | 1.002 | 0.926 | 1.084 |
| Mental Health Functioning ^d | -0.018 | 0.083 | 0.050 | 1 | 0.823 | 0.982 | 0.835 | 1.155 |
| Physical Health Functioning ^d | 0.068 | 0.054 | 1.595 | 1 | 0.207 | 1.071 | 0.963 | 1.191 |
| Age | 0.066 | 0.053 | 1.541 | 1 | 0.214 | 1.068 | 0.963 | 1.185 |
| Male | -1.513 | 1.038 | 2.127 | 1 | 0.145 | 0.220 | 0.029 | 1.683 |
| White | -1.061 | 1.295 | 0.671 | 1 | 0.413 | 0.346 | 0.027 | 4.378 |
| Black | 19.140 | 1.144E+04 | 0.000 | 1 | 0.999 | 2.053E+08 | 0.000 | . |
| Rated Trust in Mental Health Care Provider | 0.085 | 0.941 | 0.008 | 1 | 0.928 | 1.089 | 0.172 | 6.887 |
| Change Health Plan | 21.697 | 2.831E+04 | 0.000 | 1 | 0.999 | 2.649E+09 | 0.000 | . |
| Constant | 4.175E+01 | 3.054E+04 | 0.000 | 1 | 0.999 | 0.000 | . | . |

a. Variable(s) entered on step 1: trust, CSI, MCS12, PCS12, age, Male, White, Black, mental health provider, plan change. b. Plan = PMHP
 c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of functioning.

Table 19-a. Trust and High Cost Mental Health Services Used by Adult PMHP Enrollees

Only 7.3% (4/55) of the children enrolled in PMHP used high cost mental health services. No significant predictors were found related to use of high cost mental health services due to a small number of children using high cost mental health services (Table 19-b).

| N = 55 | B | Std. Error | Wald | df | Sig. | Exp(B) | 95% Confidence Interval for Exp(B) | |
|--|----------|-------------|-------|----|-------|-----------|------------------------------------|-------------|
| | | | | | | | Lower Bound | Upper Bound |
| Level of Trust | 2.226 | 994.738 | 0.000 | 1 | 0.998 | 9.262 | 0.000 | . |
| Psychiatric Symptom ^c | 0.648 | 446.150 | 0.000 | 1 | 0.999 | 1.913 | 0.000 | . |
| Physical Health Functioning ^d | -0.571 | 2,182.020 | 0.000 | 1 | 1.000 | 0.565 | 0.000 | . |
| Age | 4.239 | 3,225.495 | 0.000 | 1 | 0.999 | 69.305 | 0.000 | . |
| Male | -0.898 | 21,711.865 | 0.000 | 1 | 1.000 | 0.408 | 0.000 | . |
| White | 13.949 | 16,574.375 | 0.000 | 1 | 0.999 | 1.143E+06 | 0.000 | . |
| Black | 19.749 | 33,084.656 | 0.000 | 1 | 1.000 | 3.774E+08 | 0.000 | . |
| Rated Trust in Mental Health Care Provider | -6.899 | 26,644.794 | 0.000 | 1 | 1.000 | 0.001 | 0.000 | . |
| Change Health Plan | -11.931 | 35,307.868 | 0.000 | 1 | 1.000 | 0.000 | 0.000 | . |
| Constant | -175.415 | 162,027.845 | 0.000 | 1 | 0.999 | 0.000 | . | . |

a. Variable(s) entered on step 1: trust, PSC, CHQ, age, Male, White, Black, mental health provider, plan change. b. Plan = PMHP
 c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 19-b. Level of Trust and High Cost Mental Health Services Used by Child PMHP Enrollees

c. HMO Plan

Among the 66 adult HMO enrollees, 10.6% used high cost mental health services during the study period. Respondents' level of trust in health care providers was not a significant predictor associated with the use of high cost mental health services among these adults. The type of health care providers that adult HMO enrollees rated their trust on was the only significant predictor of their use of high cost mental health services. Adult HMO enrollees who rated their levels of trust on mental health professionals were less likely to use high cost mental health services compared to those who rated their levels of trust on non-mental health professionals (Table 20-a).

| N = 66 | B | Std. Error | Wald | df | Sig. | Exp(B) | 95% Confidence Interval for Exp(B) | |
|--|--------|------------|-------|----|-------|--------|------------------------------------|-------------|
| | | | | | | | Lower Bound | Upper Bound |
| Level of Trust | -0.070 | 0.078 | 0.822 | 1 | 0.365 | 0.932 | 0.800 | 1.085 |
| Psychiatric Symptom ^o | 0.080 | 0.062 | 1.685 | 1 | 0.194 | 1.083 | 0.960 | 1.222 |
| Mental Health Functioning ^d | 0.202 | 0.166 | 1.471 | 1 | 0.225 | 1.224 | 0.883 | 1.695 |
| Physical Health Functioning ^d | 0.009 | 0.061 | 0.021 | 1 | 0.884 | 1.009 | 0.895 | 1.137 |
| Age | -0.243 | 0.135 | 3.255 | 1 | 0.071 | 0.784 | 0.602 | 1.021 |
| Male | 1.725 | 1.702 | 1.027 | 1 | 0.311 | 5.614 | 0.200 | 157.827 |
| White | -1.241 | 1.412 | 0.773 | 1 | 0.379 | 0.289 | 0.018 | 4.599 |
| Black | 1.798 | 2.299 | 0.612 | 1 | 0.434 | 6.035 | 0.067 | 546.205 |
| Rated Trust in Mental Health Care Provider | -4.347 | 2.195 | 3.923 | 1 | 0.048 | 0.013 | 0.000 | 0.956 |
| Change Health Plan | -5.176 | 3.240 | 2.552 | 1 | 0.110 | 0.006 | 0.000 | 3.238 |
| Constant | 2.860 | 8.362 | 0.125 | 1 | 0.723 | 19.301 | | |

a. Variable(s) entered on step 1: trust, CSI, MCS12, PCS12, age, Male, White, Black, mental health provider, plan change. b. Plan = HMO
 c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 20-a. Level of Trust and High Cost Mental Health Services Used by Adult HMO Enrollees

Similar to children enrolled in PMHP plan, only 2 out of 51 children enrolled in the HMO plan used high cost mental health services. Given this, no significant predictors were found due to small number of high cost mental health service users (Table 20-b).

| N = 51 | B | Std. Error | Wald | df | Sig. | Exp(B) | 95% Confidence Interval for Exp(B) | |
|--|----------|-------------|-------|----|-------|-----------|------------------------------------|-------------|
| | | | | | | | Lower Bound | Upper Bound |
| Level of Trust | 0.400 | 968.383 | 0.000 | 1 | 1.000 | 1.492 | 0.000 | . |
| Psychiatric Symptom ^c | -0.270 | 928.612 | 0.000 | 1 | 1.000 | 0.763 | 0.000 | . |
| Physical Health Functioning ^d | 0.689 | 3,854.470 | 0.000 | 1 | 1.000 | 1.991 | 0.000 | . |
| Age | 3.458 | 2,423.757 | 0.000 | 1 | 0.999 | 31.751 | 0.000 | . |
| Male | -8.282 | 26,041.317 | 0.000 | 1 | 1.000 | 0.000 | 0.000 | . |
| White | -3.214 | 27,342.473 | 0.000 | 1 | 1.000 | 0.040 | 0.000 | . |
| Black | 21.701 | 36,377.813 | 0.000 | 1 | 1.000 | 2.659E+09 | 0.000 | . |
| Rated Trust in Mental Health Care Provider | -33.661 | 30,644.535 | 0.000 | 1 | 0.999 | 0.000 | 0.000 | . |
| Change Health Plan | -24.239 | 23,123.242 | 0.000 | 1 | 0.999 | 0.000 | 0.000 | . |
| Constant | -105.882 | 314,920.845 | 0.000 | 1 | 1.000 | 0.000 | | |

a. Variable(s) entered on step 1: trust, CSI, MCS12, PCS12, age, Male, White, Black, mental health provider, plan change. b. Plan = HMO
c. A higher score indicates more psychotic symptoms d. A higher score indicates a higher level of function

Table 20-b. Level of Trust and Regular High Cost Mental Health Services Used by Child HMO Enrollees

Summary

The results of descriptive analyses indicated that the HMO plan had significantly more Black and less White adults and children than either FFS or PMHP plan. There were no significant differences found in age, gender, psychiatric symptoms, or level of physical health functioning among enrollees (either adult or child enrollees) across the three plans. However, adult HMO enrollees had higher levels of mental health functioning ($p = .055$) compared to adult enrollees in either the FFS or PMHP plans. In addition, fewer adult HMO enrollees had switched health plans during the study period compared to the FFS or PMHP adult enrollees.

In terms of overall health services penetration rate (including both physical and mental health services) of defined categories (e.g., outpatient services, day treatment, emergency services, hospices/nursing home services and inpatient/residential services), adults enrolled in the HMO plan had a significant lower penetration rate compared to adults enrolled in either FFS or PMHP plans. There were no significant differences found in service penetration rate among children enrolled across the three plans.

In examining the effects of adults' and caregivers' levels of trust in health care providers on health services use, the results indicated that trust was significantly related to discontinuation of low cost physical health services for children enrolled in PMHP plan and with use of high cost mental health services among adult enrolled in the FFS plan. Among PMHP child enrollees, children of caregivers with higher levels of trust in the children's health care providers were less likely to discontinue the low cost services as predicted in Hypothesis 1. Among adult FFS enrollees with psychiatric disability conditions, respondents who had a higher level of trust in their health care providers were more likely to use the high cost mental health services, which did not support Hypothesis 3.

The type of health care provider was repeatedly significantly associated with both discontinuation of low cost mental health services and regular usage of low cost health

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services. These findings suggest issues related to type of provider’s professional background are important in relation to services use. Although we are not able to identify specific issues from this study, these issues can well be related to organizational policy, such as availability of specialty professionals and policy's effect on providers’ professional behaviors (for example, treatment protocols, formulary, and gatekeeping). Further investigation of these findings is needed.

Health condition was also found to be a significant predictor related to discontinuation of low cost physical and mental health services, and regular use of low cost physical and mental health services. Unfortunately, we did not have any measurement on change of health condition to examine the mediation effect of respondents’ levels of trust on this important health care outcome. Tables 21 - 23 summarize predictors related to health services use.

| | FFS | PMHP | HMO | |
|---|-------|--|---|--|
| Stop Use Low Cost Physical Health Service | Adult | Female High Physical Functioning | Younger Not Change Health Plan | Higher Mental Health Functioning Level |
| | Child | Non-Black Minorities | Girls Lower Level of Trust | - |
| Stop Use Low Cost Mental Health Services | Adult | Lower Physical Functioning Level Rated Level of Trust on Mental Health Professionals | Rated Level of Trust on Mental Health Professionals | - |
| | Child | Fewer psychiatric symptom Lower Physical Functioning Level Rated Level of Trust on Mental Health Professionals | Higher Physical Functioning | - |

Table 21. Significant Predictors Related to Discontinuation of Low Cost Health Services

Respondents’ level of trust in their health care providers was not significantly related to use of low cost health services on a regular basis. The type of health care providers that individuals rated their level of trust on was a significant predictor related to low cost health and mental health service used regularly by FFS enrollees and child PMHP enrollees (Table 22).

| | FFS | PMHP | HMO | |
|---|-------|---|---|---------------------------------|
| Regular Use of Low Cost Physical Health Service | Adult | Lower Physical and Mental Health Functioning | Change Health Plan | Lower Mental Health Functioning |
| | Child | Boys Lower Physical Functioning Rated Level of Trust on non-Physical Health Professionals | Rated Level of Trust on non-Physical Health Professionals | - |
| Regular Use of Low Cost Mental Health Services | Adult | Higher Physical Functioning Rated Level of Trust on Non-Mental Health Professionals | - | - |
| | Child | More psychiatric symptoms Higher Physical Functioning Rated Level of Trust on non-Mental Health Professionals | - | - |

Table 22. Significant Predictors Related to Regular Use of Low Cost Health Services

| | FFS | PMHP | HMO | |
|--|-------|--|---|---|
| Use of High Cost Physical Health Service | Adult | Younger Male Lower Physical Functioning | Rated Level of Trust on non-Physical Health Professionals | - |
| | Child | White | Rated Level of Trust on Physical Health Professionals | Boys |
| Use of High Cost Mental Health Services | Adult | Higher Level of Trust | - | Rated Level of Trust on Non-Mental Health Professionals |
| | Child | - | - | - |

Table 23. Significant Predictors Related to Use of High Cost Health Services

Conclusions and Implications

Trust is a primary concern of many scholars, researchers, and health care providers (Blumenthal, 1996; Mechanic, 1996 & 1997; Mechanic & Schlesinger, 1996). Results of this study indicated that trust was significant in predicting children's discontinuation of low cost physical health services as predicted. However, it was related to high cost mental health services used by adult respondents in a different direction. Adult with higher level of trust in their providers were more likely to use high cost mental health services, which did not support the proposed hypothesis. The limited finding may be related to limitation of the study design, such as the short study period, quality of claims data, and small sample size, which suggests that further investigation with a more rigorous study design is needed.

A health system that will facilitate the trusting relationship is equally important. The results of this study suggested that the type of providers on whom respondents rated their trust repeatedly resulted as a significant predictor associated with service utilization. Whether this finding was related to the effects of health policy on providers' behaviors or their characteristics could not be determined from this study. However, the effect of a health care system policy on the amount of time allotted to individual patients, the availability of providers, and providers' service behaviors is undeniable (Mechanic, 2003).

The results of this study also indicated that non-Black minority children were more likely to discontinue the low physical health services while White children were more likely to use high cost physical services compared to all minority children. These phenomena suggest potential racial disparity among this population. Further investigation to understand factors contributing to Medicaid enrollees' service utilization behaviors is recommended.

Limitations of the study

There are several limitations of this study. The effect of a trusting relationship was only examined over a short time period, six months after trust was measured. With such a short period of time, we may not be able to detect a significant change in enrollees' health seeking behaviors, such as discontinuation of use of low cost services, which was defined in this study as not using the services continuously for period of six months. In addition, the effect of the trusting relationship on health care quality and health outcomes may not be able to reveal any significant changes within such a constrained timeframe.

Use of secondary data analysis has limited our sample size. Having a small number of subjects in the two managed care plans is another limitation of this study. With small sample sizes for the PMHP and HMO plans, we were not able to identify significant predictors related to service utilization behaviors of several subgroups enrolled in these plans.

References

- Bazemore, P. H. (1996). Medical problems of the seriously and persistently mentally ill. In S. M. Soreff (Ed.), *Handbook for the treatment of the seriously mentally ill* (pp. 45-66). Seattle, WA: Hofgreber & Huber.
- Berren, M. R., Hill, K. R., Merikle, E., Gonzalez, N., & Santiago, J. (1994). Serious mental illness and mortality rates. *Hospital and Community Psychiatry, 45*(6), 604-605.
- Black, D. W., Warrack, G., & Winoder, G. (1995). Excess mortality among psychiatric patients: the Iowa record-linkage study. *JAMA: Journal of the American Medical Association, 253*(1), 58-61.
- Blumenthal, D (1996). Effects of market reforms on doctors and their patients. *Health Affairs, 15*(2), 170-184.
- Boothroyd, R. A., Evans, M. E., Shern, D. L., & Forquer, S. L. (1993). Quality assurance and evaluation of psychiatric rehabilitation programs. In R. W. Flexer, & P. Solomon (Eds.), *Psychiatric rehabilitation in practice* (pp. 211-237). Boston, MA: Andover Medical Publishers.
- Bostrom, J., Tisnado, J., Zimmerman, J., & Lazar, N. (1994). The impact of continuity of nursing care personnel on patient satisfaction. *Journal of Nursing Administration, 24*(10), 64-68.
- Brazier, J., Jones, N., & Kind, P. (1993). Testing the validity of the EuroQOL and comparing it with the SF-36 Health Survey Questionnaire. *Quality of Life Research, 2*(3), 169-180.
- Chen, H. J. The validation of a revised trust scale: Trust in the health care provider. Paper presented at the annual research conference of the College of Nursing, University of South Florida and Sigma Theta Tau Internal Honor Society of Nursing, Delta Beta Chapter, 1999.
- Chen, H. J. (2001). Trust and managed mental health care. Unpublished doctoral dissertation, University of South Florida, Tampa, FL.
- Ettner, S. L. (1996). The timing of preventive services for women and children: the effect of having a usual source of care. *American Journal of Public Health, 86*(12), 1748-1754.
- Jellinek, M. S., Murphy, J. M., & Burns, B. J. (1986). Brief psychosocial screening in outpatient pediatric practice. *The Journal of Pediatrics, 109*(2), 371-378.
- Kao, A. C., Green, D. C., David, N. A., Koplan, J. P., & Cleary, P. D. (1998a). Patients' trust in their physicians: Effects of choice, continuity, and payment method. *Journal of General Internal Medicine, 13*(10), 681-686.

- Kao, A. C., Green, D. C., Zaslavsky, A. M., Koplan, J. P., & Cleary, P. D. (1998b) The relationship between method of physician payment and patient trust. *JAMA: Journal of the American Medical Association*, 280(19), 1708-1714.
- Kessler, R. C., Berglund, P. A., Zhao, S., Leaf, P. J., Kouzis, A. C., Bruce, M. L., Friedman, R. M., Grossier, R. C., Kennedy, C., Narrow, W. E., Kuehnel, T. G., Laska, E. M., Manderscheid, R. W., Rosenheck, R. A., Santoni, T. W., & Schneier, M. (1996). The 12-month prevalence and correlates of serious mental illness. In R. W. Manderscheid & M. A. Sonnenschein (Eds.). *Mental Health, United States, 1996* (pp. 59-70). (DHHS Publication No.(SMA) 96-3098), Washington, DC: U.S. Department of Health & Human Services , Substance Abuse and Mental Health Services Administration, Center for Mental Health Services; For sale by the U.S. Government Printing Office.
- Kessler, R. C., McGonagle, K. A., Zhao, S., Nelson, C. B., Hughes, M., Eshleman, S., Wittchen, H.-U., & Kendler, K. S. (1994). Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States: Results from the National Comorbidity Survey. *Archives of General Psychiatry*, 51(1), 8-19.
- Landgraf, J. M., Abetz, L., Ware, J. E. (1996, 1999). *The Child Health Questionnaire (CHQ): A user's manual*. Boston, MA: HealthAct.
- McHorney, C. A., Ware, J. E. , & Raczek, A. E. (1993). The MOS 36-item short-form health survey (SF-36):II. Psychometric and clinical test of validity in measuring physical and mental health constructs. *Medical Care*, 31(3), 247-263.
- Mechanic, D. (1996). Changing medical organization and the erosion of trust. *The Milbank Quarterly*, 74(2), 171-189.
- Mechanic, D. (1997). Managed care as a target of distrust [Comment]. *JAMA: The Journal of the American Medical Association*, 277(20), 1810-1811.
- Mechanic, D. (2003). Physician discontent: challenges and opportunities. *JAMA: Journal of the American Medical Association*, 290(7), 941-946.
- Mechanic, D. & Schlesinger, M. (1996). The impact of managed care on patient's trust in medical care and their physician. *Journal of the American Medical Association*. 275(21), 1693-1697.
- Mechanic, D. & Rosenthal, M. (1999). Responses of HMO medical directors to trust building in managed care. *The Milbank Quarterly*, 77(5), 384-303.
- Mechanic, D. & Schlesinger, M. (1996). The impact of managed care on patient's trust in medical care and their physician. *JAMA: The Journal of the American Medical Association*, 275(21), 1693-1697.

- Mechanic, D. (2003). Physician discontent – Challengers and opportunities. *Journal of American Medical Association*, 290(7):941-946.
- Meredith, L. S., Orlando, M., Humphrey, N., Camp, P., & Sherbourne, C. D. (2001) Are better ratings of the patient-provider relationship associated with higher quality care for depression? *Medical Care*, 39(4), 349-360.
- Newman, S. C. & Bland, R. C. (1991). Mortality in a cohort of patients with schizophrenia: A record linkage study. *Canadian Journal of Psychiatry*, 36(4), 239-245.
- Regier, D. A., Narrow, W., Rae, D. S., Manderscheid, R. W., Locke, B. Z., & Goodwin, F. K. (1993). The de facto US mental and addictive disorders services system. Epidemiologic catchment area prospective 1-year prevalence rate of disorders and services. *Archives of General Psychiatry*, 50(2), 85-94.
- Shern, D. L., Lee, B., & Coen, A. S. (1997). Reliability, stability, and sensitivity of the Colorado Symptom Index. Unpublished manuscript.
- Sweeney, K.G. & Gray, D.P. (1995). Patients who do not receive continuity of care from their general practitioner: are they a vulnerable group? *British Journal of General Practice*, 45(392):133-135.
- Thom, D. H. & Campbell, B. (1997). Patient-physician trust: An exploratory study. *Journal of Family Practice*, 44(2), 169-176.
- Valey, J. H., Krone, L., & Gerbino, K. A. (1998). Expectations of parents and providers: Insoluble differences or potential solutions. In C. Liberton, K. Kutash, & R. Friedman (Eds.), *10th annual research conference proceedings: A system of care for children's mental health: Expanding the research base (February 23 to February 26, 1997)* (pp. 127-132). Tampa, FL: University of South Florida, The Louis de la Parte Florida Mental Health Institute, Research and Training Center for Children's Mental Health.
- Ware, J. E., Bayliss, M. S., Rogers, W. H., Kosinski, M., & Tarlov, A. R. (1996). Differences in four-year health outcomes for elderly and poor, chronically ill patients treated in HMO and fee-for-service systems: Results from the Medical Outcomes study. *JAMA: Journal of the American Medical Association*, 276 (3), 1039-1047.
- Ware, J., Kosinski, M., & Keller, S. D. (1995). *SF-12: How to score the SF-12 physical and mental health summary scales*. Boston, MA: The Health Institute, New England Medical Center.
- Ware, J., Kosinski, M., & Keller, S. (1996). A 12-item Short-Form Health Survey (SF-12): construction of scales and preliminary test of reliability and validity. *Medical Care*, 32(3), 220-233.

Weiss, L. J., Blustein, J. (1996). Faithful patients: the effect of long-term physician-patient relationships on the costs and use of health care by older Americans. *American Journal of Public Health*, 86(12),1742-1747.

Wickizer, T. M., & Lessler, D. (2002). Utilization management: issues, effects, and future prospects. *Annual Review of Public Health*, 23, 233-254.

APPENDIX A

PSRDC CATCAID DOCUMENTATION

Background

The PSRDC catcaids were originally developed in an attempt to identify and categorize mental health services provided by the Florida Agency for Health Care Administration (AHCA) through Medicaid. Prior to 2002, catcaids were named catcodes. The decision to change the name came in response to the acquisition of Medicare claims data, and the subsequent need to identify and categorize Medicare mental health services. It was decided to rename the Medicaid catcodes, “catcaids” and to name the new Medicare catcodes, “catcares”.

In evaluating the Medicaid claims service utilization data, the PSRDC recognized the need to create logical groupings of services in order to describe broad service delivery patterns to AHCA. The development of mental health catcaids has been an ongoing process that began in 1996. Other catcaids were also created to categorize services in the Managed Care Encounter data, which were not applicable to services in the Medicaid claims data.

The existence of thousands of procedure codes used in claims billing necessitated the aggregation of procedure codes into large groups of services. Because procedure codes did not exist on every claim, other variables had to be employed in developing the categorization scheme. The variables that were used in the Medicaid catcaid scheme included the following: procedure code, diagnosis code, record type, claim form, appropriations code, treatment provider type, treatment provider specialty, pay to provider type and age.

The mental health catcaids began as several large, inclusive groups that were defined as integer codes and later were split into more detailed categories that were defined as integer + decimal codes. A list of the mental health catcaids, the label, a description of the category and the source variables used to construct the category (current as of 01/09/2002) is included in Table 1. Many services were separated into distinct categories based on where they were received, i.e. as an inpatient in a hospital, as an outpatient at a hospital, in an office/clinic or in a Community Mental Health Center. Then they were further divided into procedures performed at the different locations.

In 1999, the need to develop physical health catcaids in addition to the existing mental health catcaids became apparent. The physical health catcaids were developed as broad categories of services based on the groupings of procedure codes in the American Medical Association’s (AMA) Common Procedural Terminology (CPT) manual. The medical record type claims (which record data collected on the HCFA 1500 form) used the three levels of codes in the Health Care Financing Administration Common Procedure Coding System (HCPCS). Level I included CPT codes, level II included other national HCPCS codes, and Level III included codes reserved for assignment by the local authority. The institutional record type claims (which record data collected on the HCFA 1450 form, a.k.a. UB92 form)

used ICD-9-CM procedure code, but this variable was not recorded on approximately 80% of the claims. Because of the incompleteness of the procedure code variable, the institutional claims were broadly categorized based on the claim form variable. A list of the physical health catcaids, the label, a description of the category and the source variables used to construct the category (current as of 01/09/2002) is included in Table 2.

Steps in Mental Health Catcaid Assignment

Step 1 (All Mental Health Catcaids 01.00 – 20.50)

Understanding the hierarchical algorithm used to assign the catcaids is very important for interpreting the results of categorical analyses using the catcaids. The first step in catcaid assignment is to select claims that are either medical or institutional record type, non-capitation claims. For the analyses performed on Medicaid claims data by the PSRDC, only these record types are examined. The pharmacy and capitation claims are not currently included in PSRDC analyses using catcaids.

Step 2 (All Mental Health Catcaids 01.00 – 20.50)

The next step is to select and “bookmark” all of the mental health claims. A claim is selected as a mental health claim if *any one* of the following variables suggests it is a mental health service: procedure code, primary or secondary diagnosis code, appropriations code, treatment provider type, treatment provider specialty, pay to provider type and claim form. If a claim is selected as a mental health service based on any of the above variables, then it continues through the hierarchical algorithm (using if-then-else statements) to assign its mental health catcaid.

Step 3 (Catcaids 01.00 – 03.50)

Next, the mental health claims (institutional and medical) are broadly categorized into substance abuse claims (X=03.), child (age < 21 years) claims (X=02.) and adult claims (X=01.), in that order. For instance, the substance abuse claims are selected, including both children and adults, and then the remaining claims are separated by age. Then, if certain coding conditions are met, the broadly categorized claims are assigned into inpatient hospital bed days (X.00), ancillary inpatient hospital services (X.05) and hospice/respice services (X.20). By this step, all inpatient and some medical record type claims have been assigned to catcaids 01.00 through 03.50, if the claim was not yet assigned a catcaid, it continues through the remaining catcaid assignment algorithm.

Step 4 (Catcaids 04.00 – 18.00)

The remaining mental health catcaid assignment only applies to the medical record type claims. Catcaids 04.00 through 18.00 are well-defined categories assigned to the mental

health claims if specific criteria regarding their source variables are met. For a list of source variables used to assign these catcaids, refer to Table 1.

Step 5 (Catcaids 20.00 – 20.50)

The final step involves collecting the remaining mental health claims into the “catch-all” categories 20.00 through 20.50. Catcaid 20.00 is assigned to claims with general mental procedures that are not categorized above. Catcaids 20.10 through 20.50 are categories that describe the claims that were selected as mental health claims by meeting some criterion other than a known, mental health procedure code. These claims most likely have a mental health diagnosis; however, they may have been selected based on any of the following variables: primary or secondary diagnosis code, appropriations code, treatment provider type, treatment provider specialty or pay to provider type.

Steps in Physical Health Catcaid Assignment

Step 1 (All Physical Health Catcaids 51.00 – 99.99)

All non-capitation, institutional and medical record type claims, which were not selected as mental health claims and subsequently assigned a mental health catcaid, are then run through an algorithm for assigning a physical health catcaid. The physical health catcaids are based on claim forms and groupings of procedure codes within the AMA’s CPT manual.

Step 2 (Catcaids 63.00 – 66.00)

First, all physical health inpatient claims, institutional care claims, outpatient claims, and hospice claims are assigned a catcaid based on claim form.

Step 3 (Catcaids 51.00 – 62.00)

Next, the medical record type claims with known procedure codes are run through the remaining physical health catcaid algorithm.

Step 4 (Catcaids 98.00 – 99.00)

Next, the claims with national codes temporarily defined to a service while awaiting reassignment in the CPT manual are categorized into catcaid 98.00. And finally, all other physical health services with unknown or missing procedure codes will be coded as 99.99. Claims that end up in this catcaid should be examined every new project year to search for new codes that should be included in the algorithm.

Trust and Health Service Use

Table 1.

| CATCAID | LABEL | DESCRIPTION OF CATEGORY | SOURCE VARIABLE(S) |
|----------------|------------------------------------|---|--|
| 01.00 | Adult Inpatient Care | Bed days and ICD-9-CM procedures in a hospital for an adult, non-substance abuse, institutional claims only | Record type, age, claim form |
| 01.10* | Adult Residential | Managed care services received in a residential facility for an adult, non-substance abuse, PMHP/HMO | |
| 01.20 | Adult Hospice/Respite | Hospice/Respite services received for an adult, non-substance abuse, institutional and medical claims | Record type, age, claim form, procedure code |
| 01.50 | Adult ancillary inpatient services | Ancillary services received while admitted in a hospital for an adult, non-substance abuse, medical claims only | Record type, age, procedure code |
| 02.00 | Child Inpatient Care | Bed days and ICD-9-CM procedures in a hospital for a child, non-substance abuse, institutional claims only | Record type, age, claim form |
| 02.10* | Child Residential | Managed care services received in a residential facility for a child, non-substance abuse, PMHP/HMO | |
| 02.20 | Child Hospice/Respite | Hospice/Respite services received for a child, non-substance abuse, institutional and medical claims | Record type, age, claim form, procedure code |
| 02.50 | Child ancillary inpatient services | Ancillary services received while admitted in a hospital for a child, non-substance abuse, medical claims only | Record type, age, procedure code |
| 03.00 | Substance Abuse Inpatient Care | Bed days and ICD-9-CM procedures in a hospital for substance abuse, institutional claims only | Record type, diagnosis code, claim form |
| 03.10* | Substance Abuse Residential | Managed care services received in a residential facility for substance abuse, | |

Trust and Health Service Use

PMHP/HMO

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|-------|--|--|--|
| 03.20 | Substance Abuse Hospice/Respite | Hospice/Respite services received for substance abuse, institutional and medical claims | Record type, diagnosis code, claim form, procedure code |
| 03.50 | Substance Abuse ancillary inpatient services | Ancillary services received while admitted in a hospital for substance abuse, medical claims only | Record type, diagnosis code, procedure code |
| 04.00 | Emergency MH Treatment | Acute MH care received in the emergency room | Record type, procedure code and treatment provider specialty |
| 04.50 | Hospital Outpatient MH Services | Outpatient mental health services provided in a hospital setting | Record type, claim form, appropriations code |
| 05.00 | Physician Services – clinic or outpatient | Periodic office visits, treatment/management of mental health problem received in a clinic or as an outpatient in a physician’s office | Record type, procedure code |
| 05.25 | Home-based or prolonged physician’s services | Home-based or prolonged physician’s services, not defined by location of service, formerly 14.00 | Record type, procedure code |
| 05.50 | CMH: Physician Services | Periodic office visits, treatment/management of mental health problem as defined by the Florida CMH manual | Record type, procedure code |
| 06.00 | CMH: Treatment Planning & Review | Treatment Planning & Review of care as defined by the Florida CMH manual (treatment plan developed jointly between patient and treatment team) | Record type, procedure code |
| 07.00 | Evaluation and Testing Services | Evaluation and Testing services | Record type, procedure code, appropriations code |
| 07.50 | CMH: Evaluation and Testing Services | Evaluation and Testing services as defined by the Florida CMH manual | Record type, procedure code |
| 08.00 | Counseling, Therapy, & | Ongoing Counseling, Therapy, & Treatment | Record type, procedure code |

Trust and Health Service Use

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|---------|--|---|-----------------------------|
| | Treatment Services | services | |
| 09.00** | Counseling, Therapy, & Treatment Services by Behavioral Health Specialist | Ongoing Counseling, Therapy, & Treatment services provided by a Behavioral Health Specialist (has been incorporated into 08.00) | |
| 10.00 | Rehabilitative Services | Living skills training, as defined by the Florida CMH manual | Record type, procedure code |
| 11.00 | CMH: Children's Behavioral Health | Children's behavioral health services as defined by the Florida CMH manual | Record type, procedure code |
| 11.50 | CMH: Behavioral Health Overlay for Department of Juvenile Justice Residential Facilities | Specific program provided in for behavioral health in residential facilities as defined by the Florida CMH manual | Record type, procedure code |
| 12.00 | CMH: Day Treatment Services | Intense services (Partial Hospitalization) as defined by the Florida CMH manual | Record type, procedure code |
| 13.00 | Targeted Case Management | General (traditional) and Intensive (surrogate family member) management as defined by the Florida Targeted Case Management manual, section 1-2 | Record type, procedure code |
| 14.00** | Physician's services not listed above | Home-based or prolonged physician's services, not defined by location of service, incorporated into 05.25 | Record type, procedure code |
| 14.10* | HMO/FHP Employment Services | F-codes, services provided under managed care that are not provided by Medicaid | |
| 14.20* | HMO/FHP Drop-In Centers | F-codes, services provided under managed care that are not provided by Medicaid | |
| 14.30* | HMO/FHP Housing Services | F-codes, services provided under managed care that are not provided by Medicaid | |
| 14.50* | Clinical On-site services | F-codes, services provided under managed care that are not provided by Medicaid | |
| 14.90* | HMO/FHP Other Special | F-codes, services provided under managed | |

Trust and Health Service Use

| | Services | care that are not provided by Medicaid | |
|---------|---|--|---|
| 15.00** | Other Assessment | Incorporated into 07.00 | |
| 16.00 | Therapeutic Foster Care I & II | Foster care services | Record type, procedure code |
| 17.00** | EPSDT Screening | Incorporated into 20.00 | |
| 18.00 | MH Drug Injection | Drug injection to treat mental health problem | Record type, procedure code |
| 18.10* | Pharmacy-related revenue codes | Managed Care revenue codes | |
| 20.00 | Other MH – does not fit into above categories | General mental health procedure codes, Electric Shock Therapy or other claims with mental health criterion other than procedure code met | Record type, procedure code |
| 20.10 | Lab/Pathology with MH diagnosis | Lab/Pathology service with mental health criterion other than procedure code met | Record type, procedure code |
| 20.20 | Speech/Language Therapy with MH diagnosis | Speech/Language Therapy service with mental health criterion other than procedure code met | Record type, procedure code, treatment provider specialty |
| 20.30 | Occupational Therapy with MH diagnosis | Occupational Therapy service with mental health criterion other than procedure code met | Record type, procedure code, treatment provider specialty |
| 20.40 | Physical Therapy with MH diagnosis | Physical Therapy service with mental health criterion other than procedure code met | Record type, procedure code, treatment provider specialty |
| 20.50 | MH Ambulance Services | Ambulance services with mental health criterion other than procedure code met | Record type, treatment provider type |

*Code is specific to the Managed Care Encounter (PMHP/HMO) data and not used in the Statewide Medicaid Claims data

**Code is obsolete

Trust and Health Service Use

Table 2.

| CATCAID | LABEL | DESCRIPTION OF CATEGORY | SOURCE VARIABLE(S) |
|----------------|--|---|---|
| 51.01 | Office or Other Outpatient Evaluation and Management Services | Office visits, evaluation and management services | Record type, claim form, procedure code |
| 51.02 | Hospital Observation/Inpatient Evaluation and Management Services | Hospital visits, inpatient evaluation and management services | Record type, claim form, procedure code |
| 51.03 | Consultation Evaluation and Management | Consultation with other providers for evaluation and management of care | Record type, claim form, procedure code |
| 51.04 | Emergency/Critical/Intensive Care Evaluation and Management Services | Acute care evaluation and management services | Record type, claim form, procedure code |
| 51.05 | Nursing Facility, Custodial Care, Home, or Prolonged Care Evaluation and Management Services | Long-term care evaluation and management services | Record type, claim form, procedure code |
| 51.06 | Case Management or Care Plan Evaluation and Management | Case management, care plan oversight or supervisory evaluation and management | Record type, claim form, procedure code |
| 51.07 | Preventive Medicine Evaluation and Management Services | Preventive evaluation and management services (i.e. history and physical) | Record type, claim form, procedure code |
| 51.08 | Newborn Care Evaluation and Management Services | Evaluation and management services for newborn care | Record type, claim form, procedure code |
| 51.09 | Family Planning Evaluation and Management Services | Evaluation and management services for family planning services | Record type, claim form, procedure code |
| 51.99 | Special/Other Evaluation and Management Services | Disability, other screening evaluation and management services | Record type, claim form, procedure code |
| 52.00 | Anesthesia | All anesthesia services | Record type, claim form, procedure code |
| 53.00 | Surgery | All surgical services | Record type, claim form, procedure code |
| 54.01 | Diagnostic Radiology | Diagnostic radiology, imaging, ultrasound services | Record type, claim form, procedure code |
| 54.02 | Radiology Oncology | Radiology treatment of cancers/diseases | Record type, claim form, procedure code |
| 55.01 | Pathology/Laboratory | Laboratory and Pathology panels, drug | Record type, claim form, procedure code |

Trust and Health Service Use

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|-------|---|---|---|
| | Testing/Assays | tests and assays | |
| 55.02 | Pathology | Microbiology, clinical pathology | Record type, claim form, procedure code |
| 55.03 | Pathology/Laboratory Transfusion Medicine | Services related to blood/serum transfusion | Record type, claim form, procedure code |
| 55.99 | Other Pathology/Laboratory Procedures | Other pathology/laboratory procedures | Record type, claim form, procedure code |
| 56.01 | Immunizations and Therapeutic/Diagnostic Infusions/Injections | Immunizations and Therapeutic/Diagnostic Infusions/Injections | Record type, claim form, procedure code |
| 56.02 | Tests/Medical Procedures | Tests/Medical Procedures | Record type, claim form, procedure code |
| 56.03 | Physical/Rehabilitation/Nutrition/Osteopathic/Chiropractic Medicine | Physical/Rehabilitation/Nutrition/Osteopathic/Chiropractic Medicine | Record type, claim form, procedure code |
| 56.04 | Medical Supplies/Devices | Medical Supplies/Devices | Record type, claim form, procedure code |
| 56.05 | Vision Procedures | Vision Procedures | Record type, claim form, procedure code |
| 56.06 | Hearing Procedures | Hearing Procedures | Record type, claim form, procedure code |
| 56.99 | Other Medical Services | Other medical procedures | Record type, claim form, procedure code |
| 57.01 | Early Intervention/Antepartum Care | Early intervention, support services for pregnant women | Record type, claim form, procedure code |
| 57.02 | Developmental Disability Waiver | Services provided under the Medicaid Developmental Disability Waiver | Record type, claim form, procedure code |
| 57.03 | Assisted Living/Community/Home Support Services | Activities of daily living, community and home support services | Record type, claim form, procedure code |
| 57.04 | Aged/Disabled Waiver Services | Physical health services provided under the Medicaid aged/disabled Waiver | Record type, claim form, procedure code |
| 57.05 | Care for Medically Complex or Chronically Mentally Ill Child | Living assistance and other services for chronically ill/complex cases | Record type, claim form, procedure code |
| 58.00 | Dental Procedures | Dental procedures | Record type, claim form, procedure code |
| 59.00 | Pharmacy Procedures | Physical health pharmacy procedures | Record type, claim form, procedure code |
| 60.00 | Physical/Occupational/Speech Therapy | PT, OT, and Speech therapy for physical health claims | Record type, claim form, procedure code |
| 61.00 | Transportation Services | All transportation services for physical health claims | Record type, claim form, procedure code |

Trust and Health Service Use

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|-------|---|---|---|
| 62.00 | AIDS Waiver Services | Services provided under Medicaid AIDS Waiver | Record type, claim form, procedure code |
| 63.00 | Inpatient Claims | Inpatient physical health claims | Record type, claim form |
| 64.00 | Institutional Care Claims | Home Health or SNF physical health claims | Record type, claim form |
| 65.00 | Outpatient Claims | Outpatient physical health claims | Record type, claim form |
| 66.00 | Hospice Care Claims | Hospice physical health claims | Record type, claim form |
| 98.00 | Temporary National Codes Awaiting Reassignment in CPT | Several G-codes, all Q-codes, and all S-codes awaiting CPT code assignment by AMA | Record type, claim form, procedure code |
| 99.99 | Other/Unknown Services | “Catch-all” for the rest of the physical health claims | Record type, claim form |

