Texas Medicaid Managed Care

Quarterly Topic Report 1: Identifying Opportunities for Better Integrating Behavioral Health and Physical Health (BH/PH) Services in Texas Medicaid

Contract Year 2018

The Institute for Child Health Policy
University of Florida

The External Quality Review Organization
for Texas Medicaid Managed Care and CHIP

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Executive Summary

Introduction

In recent years, Medicaid's role in financing and administering public behavioral health services has expanded, as mental health is currently a key driver of Medicaid spending. The Medicaid program is the nation's largest source of financing for behavioral health services, and also plays a large role in financing substance use disorder services. In Texas, recent state legislation has sought improved integration of behavioral health and physical health (BH/PH) services. In 2013, the Legislature added targeted mental health case management and mental health rehabilitative services to the array of services provided by Medicaid managed care organizations (MCOs) (S.B. 58, 83rd Legislature, Regular Session, 2013). In 2015, the Legislature required Texas Health and Human Services (HHS) to monitor the integration of physical and behavioral health at the MCO level (S.B. 200, 84th Legislature, Regular Session, 2015). And in 2017, the Legislature mandated integrating MCO staff and provider portals for MCOs that subcontract with behavioral health organizations (S.B. 74, 85th Legislature, Regular Session, 2017).

To assess opportunities for improvements in the provision of better-integrated BH/PH health services, the Institute for Child Health Policy – the external quality review organization (EQRO) for Texas Medicaid – will produce two quarterly topic reports in 2018. These reports focus on identifying where successfully integrated BH/PH services can potentially reduce expenditures and improve outcomes for Medicaid enrollees with co-occurring BH/PH conditions. This first report uses exploratory analyses of Medicaid encounter data to provide important and timely information on the potential size, location, variability, and nature of BH/PH care integration in Texas Medicaid. The subsequent report will provide an in-depth analysis of these results.

Methodology

The EQRO used Texas Medicaid encounter data from the STAR+PLUS and STAR programs for 2016 to examine the relationship between co-occurring BH/PH conditions and quality of care using rates of potentially preventable events (PPEs) and performance on Healthcare Effectiveness Data and Information Set (HEDIS®) measures. The EQRO also used findings from the MCO Administrative Interviews (AIs) to categorize the MCOs based on the strength of their behavioral health focus. The evaluation team used the data to answer the following questions:

1. What proportion of PPEs (in both number and dollar volume) are associated with co-occurring BH/PH conditions?
2. Which specific BH/PH diagnostic pairs have the highest PPE rates (in both number and dollar volume) where: (a) a behavioral health condition is the primary cause of the PPE, and (b) a physical health condition is the primary cause of the PPE?
3. Do the proportions of PPEs associated with BH/PH conditions and the specific BH/PH diagnostic pairs with the highest PPE rates vary: (a) across MCOs and service areas (SAs), and (b) based on the level of supports the MCO has in place at the plan level for BH care?

4. How do key HEDIS® measures differ between enrollees with co-occurring BH/PH conditions and enrollees without co-occurring conditions? Do these differences vary across MCOs and SAs?

Diagnostic Definitions

The EQRO classified members into four diagnostic groups derived from the Centers for Medicare and Medicaid Services (CMS) Chronic Conditions Data Warehouse (CCW) and Hierarchical Condition Category (HCC) definitions, along with work conducted in the Texas Wellness Incentive Navigation (WIN) study: (1) Co-occurring chronic BH/PH conditions; (2) chronic BH condition only; (3) chronic PH condition only; and (4) No chronic BH or PH condition. **Note that members in the last group (No chronic BH or PH condition) may have had inpatient or emergency department admissions and or incurred expenditures in these settings based on non-chronic diagnoses not present in the lists used in this study.**

Key Measures

The research team used 3M PPE software to identify potentially preventable events (PPEs), which includes potentially preventable admissions (PPAs), potentially preventable readmissions (PPRs), and potentially preventable emergency department visits (PPVs) among STAR+PLUS and STAR enrollees. PPEs refer to health care utilization that may not have been necessary had the enrollee received appropriate care prior to the occurrence of the PPE. For example, inpatient admissions with a principal diagnosis of asthma in many cases could have been avoided if the enrollee had received appropriate ambulatory care for asthma along with appropriate medications for asthma control. This is an example of a potentially preventable admission (PPA). Similar clinical logic can be used to identify unnecessary hospital readmissions (PPRs) that likely occurred because of inadequate care during the original admission or inadequate ambulatory care following the original admission.

In addition to PPEs, the research team examined over two dozen HEDIS performance measures for STAR+PLUS and STAR enrollees to gauge MCO performance in terms of access, utilization and quality of care.

Behavioral Health Focus Ratings

The EQRO assigned each MCO a BH focus rating of “low” or “high” based on their responses to the 2016 MCO Administrative Interviews, which include web-based tools and site visits. The BH focus ratings are based on questions that address eight key areas: (1) Requiring PCPs to conduct BH screening; (2) providing support to PCPs treating members with BH problems; (3) requiring PCPs to conduct substance abuse screening; (4) providing support to PCPs treating members with substance abuse problems; (5) offering care coordination for BH; (6) offering care coordination for chemical dependency; (7) offering disease management programs for BH; and (8) calculating performance measures for members enrolled in BH disease management.

Approach

The EQRO used descriptive cross-tabulations of BH and PH diagnoses, PPEs, and HEDIS measures across the four diagnostic categories and the BH focus ratings described above, along with tabulations showing how these measures vary across MCOs and SAs.

Summary of Findings

Question 1

- What proportion of PPEs (both number and dollar volume) are associated with co-occurring BH/PH conditions?

The EQRO classified STAR+PLUS and STAR enrollees into four mutually exclusive and exhaustive categories of BH/PH diagnostic combinations: *Co-occurring chronic BH/PH conditions*, *chronic BH diagnosis only*, *chronic PH diagnosis only*, and *no chronic BH or PH condition*.

Figure 1 shows the PPE event proportions and PPE expenditures across each of the four BH/PH diagnostic categories for STAR+PLUS and STAR. The data show considerable differences between the programs.

- For STAR+PLUS, co-occurring BH/PH conditions account for the vast majority of all PPEs in both frequency and total PPE dollar volumes.
- For STAR, co-occurring BH/PH conditions are not strongly associated with PPEs.

In summary, focusing on co-occurring conditions will capture 73 percent of total PPE expenditures in STAR+PLUS, compared to only 15 percent of total PPE expenditures in STAR. ***The strong association of co-occurring BH/PH conditions with PPEs in the STAR+PLUS program compared to the STAR program is a key finding of this report.***

Question 2

- Which specific BH/PH diagnostic pairs have the highest PPE rates (both number and dollar volume) where:
  a) a behavioral health condition is the primary cause of the PPE, and
  b) a physical health condition is the primary cause of the PPE?

Table 1 displays the most frequent BH/PH diagnostic pairs and the cumulative percentage of all enrollees with co-occurring conditions in STAR+PLUS. **Table 2** displays the primary diagnostic causes of PPEs by PPE type for STAR+PLUS enrollees. **Table 3** and

Table 4 display the analogous information for STAR.

Key points from the tables for Question 2 include:

- For STAR+PLUS and STAR, enrollees with co-occurring conditions are dispersed across many BH/PH diagnostic pairs. They do not appear to cluster in a few, high-frequency diagnostic pairs.
- By contrast, a relatively small number of individual BH and PH diagnoses appear to be the primary diagnostic causes of PPEs among enrollees with co-occurring conditions.

- **Take Home:** It may be easier to target the small number of individual BH and PH diagnoses that cause the majority of PPE expenditures than to target a small number of high-frequency diagnostic pairs**.**

Figure 1. Potentially Preventable Event Proportions and Expenditures Across BH/PH Categories for STAR+PLUS and STAR

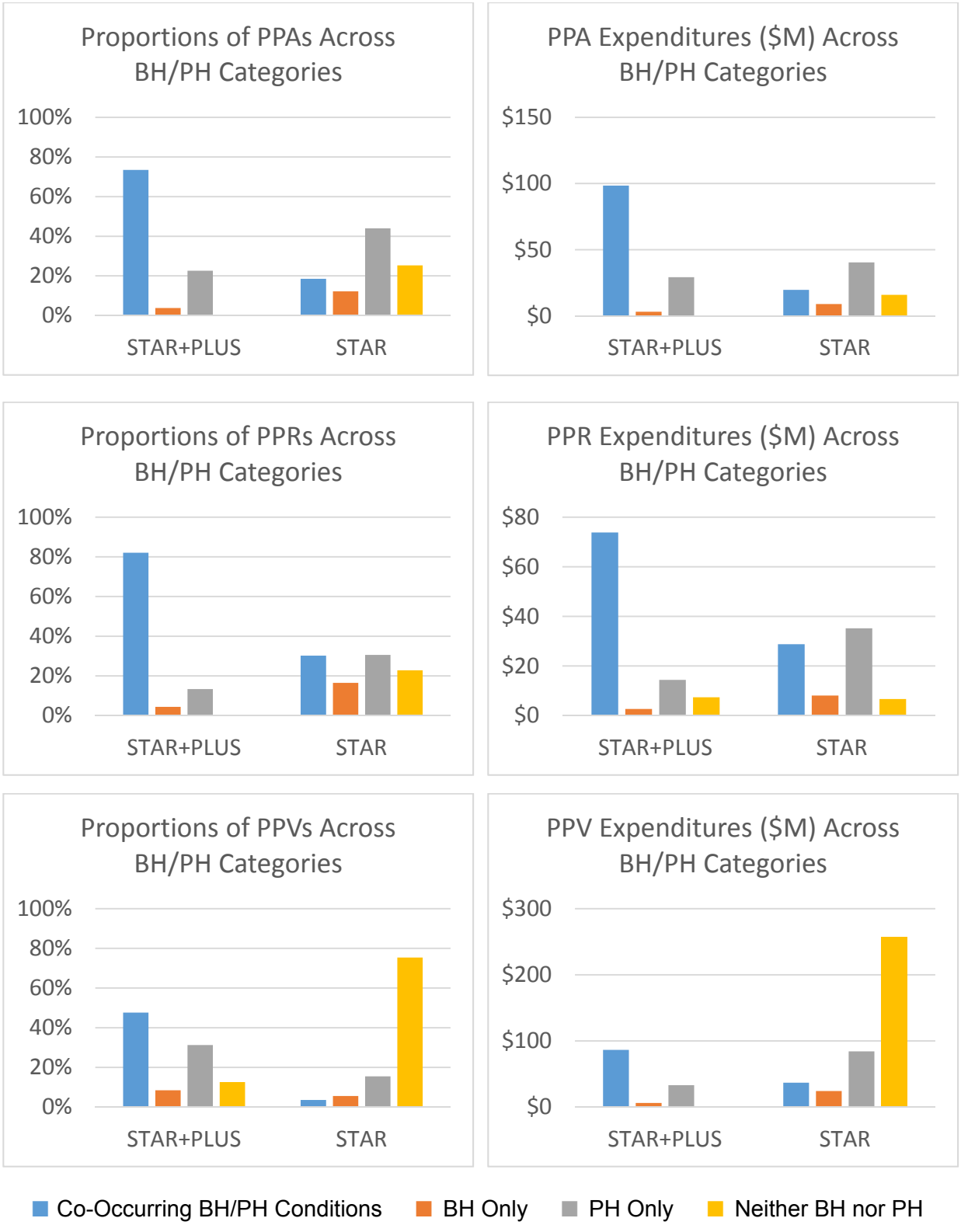

Table 1. Most Frequent BH/PH Diagnostic Pairs and Cumulative Percentage of All Enrollees with Co-Occurring Conditions for STAR+PLUS

Rank	BH Condition	PH Condition	Frequency	Cumulative Percentage
1	Depression	Hypertension	36,052	4.03%
2	Anxiety	Hypertension	32,590	7.68%
3	Depression	Diabetes	19,887	9.90%
4	Bipolar	Hypertension	18,532	11.97%
5	Depression	Asthma	18,527	14.04%
↓	↓	↓	↓	↓
50	Depression	Cirrhosis	5,590	66.15%

Table 2. Most Frequent BH and PH Primary Causes of PPEs by PPE Type for STAR+PLUS Enrollees with Co-Occurring Conditions (Cumulative Expenditure Percentages)

Primary BH PPA Cause	Primary BH PPR Cause	Primary BH PPV Cause	Primary PH PPA Cause	Primary PH PPR Cause	Primary PH PPV Cause
Schizophrenia/ other (50%)	Schizophrenia/ other (48%)	Anxiety (19%)	CHF (29%)	CHF (17%)	Diabetes (14%)
Depression (74%)	Depression (67%)	Drug Use Disorders (41%)	Asthma (50%)	Asthma (25%)	Epilepsy (29%)
Bipolar (95%)	Bipolar (86%)	Schizophrenia/ other (59%)	COPD (69%)	COPD (32%)	Fibromyalgia (36%)
Drug Use Disorders (97%)	Alcohol (95%)	Alcohol (79%)	Epilepsy (77%)	Chronic kidney disease (41%)	COPD (44%)
--	Drug Use Disorders (99%)	Depression (90%)	Hypertension (86%)	Diabetes (48%)	Hypertension (53%)

Table 3. Most Frequent BH/PH Diagnostic Pairs and Cumulative Percentage of All Enrollees with Co-Occurring Conditions for STAR

Rank	BH Condition	PH Condition	Frequency	Cumulative Percentage
1	ADHD	Asthma	14,629	6.57%
2	Anxiety	Asthma	9,437	10.80%
3	Depression	Asthma	8,805	14.75%
4	Anxiety	Anemia	8,628	18.62%
5	Anxiety	Hypertension	8,565	22.47%
↓	↓	↓	↓	↓
50	Bipolar	Epilepsy	1,039	73.19%

Table 4. Most Frequent BH and PH Primary Causes of PPEs by PPE Type for STAR Enrollees with Co-Occurring Conditions (Cumulative Expenditure Percentages)

Primary BH PPA Cause	Primary BH PPR Cause	Primary BH PPV Cause	Primary PH PPA Cause	Primary PH PPR Cause	Primary PH PPV Cause
Depression (53%)	Depression (42%)	Anxiety (40%)	Asthma (53%)	Diabetes (9%)	Asthma (30%)
Bipolar (84%)	Bipolar (74%)	Drug Use Disorders (62%)	Epilepsy (74%)	Chronic kidney disease (22%)	COPD (38%)
Schizophrenia/ other (96%)	Schizophrenia/ other (89%)	Depression (78%)	Diabetes (80%)	Asthma (25%)	Epilepsy (55%)
--	Drug Use Disorders (92%)	Alcohol (88%)	Chronic kidney disease (86%)	Epilepsy (31%)	Fibromyalgia (61%)
--	ADHD (94%)	ADHD (93%)	CHF (94%)	--	Diabetes (73%)

Regarding the most frequent BH/PH diagnostic pairs:

- Three BH and three PH diagnoses appear in the top ten BH/PH diagnostic pairs in both STAR+PLUS and STAR: depression, anxiety, and bipolar disorder for the BH conditions, along with hypertension, fibromyalgia, and asthma for the PH conditions.
- Enrollees in the top 10 most frequent BH/PH diagnostic pairs account for approximately 24 percent of BH/PH diagnostic pairs in STAR+PLUS and 37 percent in STAR.
- The top 50 most frequent BH/PH diagnostic pairs account for approximately 66 percent of all BH/PH diagnostic pairs in STAR+PLUS and 73 percent in STAR.

Examining the most frequent BH and PH diagnoses deemed the primary cause of PPEs (admissions, readmissions, and ED visits; n ≥ 100) reveals that:

- In STAR+PLUS, schizophrenia accounts for approximately half of expenditures among PPAs and PPRs with a primary BH diagnostic cause, while anxiety disorders account for approximately one-fifth of expenditures among PPVs with a primary BH diagnostic cause. Other common primary BH diagnostic causes of PPEs include depression, bipolar disorder, and alcohol/drug use disorders.
- In STAR, depression accounts for between 40 and 50 percent of expenditures among PPAs and PPRs with a primary BH diagnostic cause, anxiety disorders account for about 40 percent of expenditures among PPVs with a primary BH diagnostic cause. Other common primary BH diagnostic causes of PPEs include bipolar disorder, schizophrenia, and alcohol/drug use disorders.
- Congestive heart failure, asthma, COPD, epilepsy, hypertension, and diabetes appear prominently as PH condition causes of multiple types of PPEs in STAR+PLUS. In STAR, asthma, epilepsy, diabetes, and chronic kidney disease comprise the top four primary causes of both PPAs and PPRs, while asthma, COPD, epilepsy, fibromyalgia, and diabetes are the top primary causes of PPVs.

Refer to tables in the Appendix for a more comprehensive listing of the most frequent BH/PH diagnostic pairs (**Error! Reference source not found.**) and BH/PH primary causes of PPEs (**Error! Reference source not found.**).

Question 3

- Do (i) the proportions of PPEs associated with BH/PH conditions from Question 1 and (ii) the specific BH/PH diagnostic pairs with the highest PPE rates vary:
  a. across MCOs and SAs? If so, how?
  b. based on the level of supports the MCO has in place at the plan level for BH care?

Key points related to Question 3:

- PPAs and PPR frequencies are higher for MCOs with a strong BH focus, leading to higher total PPA and PPR expenditures for these MCOs.
- PPVs show less distinct patterns than PPAs and PPRs, with similar total amounts paid across MCOs with low versus strong BH foci in both STAR+PLUS and STAR.
- **Take Home: There seems to be lower variability across MCOs and SAs in STAR+PLUS compared to STAR in the proportion of PPEs found among enrollees with co-occurring conditions.** Consequently, it may be difficult to target specific MCOs or SAs in STAR+PLUS for improvement. Statewide interventions may be called for as opposed to interventions targeted to specific MCOs or SAs.

Additional points concerning Question 3:

- For STAR+PLUS, the highest proportions of PPEs occur in the co-occurring chronic BH/PH condition category, likely reflecting the complex nature and multiple conditions found among STAR+PLUS enrollees.
- Across STAR MCOs, the highest proportions of PPAs generally occur in the chronic PH condition only category, followed by enrollees with no chronic BH or PH condition, co-occurring chronic BH/PH conditions, and chronic BH conditions only, in that order.
- PPRs in STAR show a more varied pattern, with each of the four BH/PH categories showing the highest proportion of PPRs for different MCOs. The only consistent result for PPRs appears in the chronic BH condition only category, which generally has the smallest proportion of PPRs.
- For PPVs, each MCO in STAR shows a clear majority of their PPVs occurring among enrollees with no chronic BH or PH condition.
- Widespread geographic variation also exists in average amounts paid for PPEs caused by the same PH diagnostic group. For example, the average amount paid for an asthma PPA in STAR ranges from a low of $2,630 in El Paso to $5,784 in Dallas.

For more details, see **Error! Reference source not found.** through **Error! Reference source not found.** in the Appendix.

Question 4

- How do key HEDIS® measures differ between enrollees with co-occurring BH/PH conditions and enrollees without co-occurring conditions? Do these differences vary across MCOs and SAs?

A primary finding from Question 4 was that:

- ***Enrollees in STAR+PLUS and STAR with co-occurring conditions tend to have higher HEDIS® scores on average.*** This is consistent with higher utilization rates and more opportunities to receive appropriate care among enrollees with co-occurring conditions.

For STAR+PLUS, the EQRO found that MCOs with the highest HEDIS® performance for enrollees with co-occurring chronic BH/PH conditions also had relatively low performance for enrollees who lack a chronic BH or PH condition, and vice versa. However, little variation was found in HEDIS® performance across BH/PH condition categories by service area.

For STAR, the EQRO found considerable variability in HEDIS® rates across MCOs and SAs, depending on the HEDIS® measure under consideration. This fact, along with the limited number of plans with adequate denominators for many measures, makes generalization about MCO performance difficult.

Examining HEDIS® *Ambulatory Care* ED Visit and Outpatient (OP) Visit rates (per 1,000 member-months) for STAR+PLUS and STAR:

- Medicaid enrollees with co-occurring chronic BH/PH conditions had the highest ED and OP visit rates, while Medicaid enrollees without a chronic BH or PH condition had the lowest ED and OP visit rates.
- Outpatient visits occurred at a much higher rate than ED visits.
- Interestingly, MCO rankings in STAR often showed reversals when moving from ED visits to OP visits. For example, MCOs with high relative rates of ED visits often had low relative rates of OP visits and vice versa.

Recommendations

1. The relatively high proportion of PPEs in both event frequency and total amounts paid for co-occurring BH/PH conditions suggest that the STAR+PLUS program should receive considerable attention when attempting to improve care integration for enrollees with co-occurring BH/PH conditions.

2. Efforts designed to improve care integration for enrollees with co-occurring BH/PH conditions should focus on a handful of co-occurring BH and PH diagnoses as major contributors to PPEs. Specifically, depression and anxiety figure prominently among BH diagnoses generating PPEs, while hypertension, diabetes, anemia, asthma, chronic kidney disease, and rheumatoid arthritis/osteoarthritis (RA/OA) are the most prominent among PH diagnoses across all PPE types.

3. Efforts designed to reduce PPEs should consider concentrating on the limited number of BH and PH conditions that appear as primary causes of PPEs across multiple types of PPEs (PPAs, PPRs, and PPVs). Only a handful of BH conditions appeared across all types of PPEs as the most primary diagnostic cause of PPEs, including depression, schizophrenia, bipolar disorder, and alcohol/drug use disorders. Examining the top PH diagnoses listed as the primary cause of a minimum of 100 PPEs (admissions, readmissions, and ED visits), many of the same physical conditions appeared, with asthma, congestive heart failure (CHF), chronic obstructive pulmonary disease (COPD), epilepsy, hypertension, chronic kidney disease, and ischemic heart disease appearing prominently for all three types of potentially preventable events.

4. Efforts to improve care integration for enrollees with co-occurring chronic BH/PH conditions should focus on determining the causes for high PPE rates (including issues related to network adequacy) among those MCOs and SAs that have unusually high rates of PPEs for enrollees with co-occurring conditions.