Texas Medicaid Managed Care

Quarterly Topic Report 4

Potentially Preventable Events in Members with Co-occurring Behavioral Health (BH) and Physical Health (PH) Needs in Texas STAR+PLUS: Focus on Primary Care Providers and BH/PH Integration Practices

Contract Year 2018

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

Submitted: August 31, 2018
Revision submitted: December 21, 2018

Executive Summary

Introduction

In recent years, Medicaid's role in financing and administering services for behavioral health and substance abuse conditions has expanded, leading to increased efforts to ensure that beneficiaries have access to high-quality and cost-effective services. Among these efforts, practices to integrate behavioral health and physical health (BH/PH) services have shown promise in promoting screening, diagnosis, treatment, and improved outcomes for beneficiaries with co-occurring BH/PH conditions. In Texas, three initiatives to integrate BH/PH services have been mandated by the Legislature: (1) the addition of targeted mental health case management and mental health rehabilitative services to the array of services provided by Medicaid managed care organizations (MCOs);[i] (2) the requirement for Texas Health and Human Services (HHSC) to monitor BH/PH integration at the MCO level;[ii] and (3) the integration of MCO staff and provider portals for MCOs that subcontract with behavioral health organizations.[iii]

This is the second of two quarterly topic reports produced in 2018 by the Institute for Child Health Policy – the external quality review organization (EQRO) for Texas Medicaid – to identify where better integrated BH/PH services can potentially improve outcomes and reduce expenditures for Texas Medicaid enrollees with co-occurring BH/PH conditions. The first report used exploratory analyses of Medicaid encounter data to examine the relationship between co-occurring BH/PH conditions and quality and cost of care by MCO and service area (SA); results pointed to areas where BH/PH integration may be most effective. The study found that co-occurring BH/PH conditions accounted for the majority of potentially preventable events (PPEs) in STAR+PLUS.[1] However, the proportion of PPEs attributed to members with co-occurring conditions varied little by STAR+PLUS MCO or SA. To expand on these findings, this second report focuses on the population of STAR+PLUS members with co-occurring conditions, exploring the potential influence of members' primary care providers and MCO BH/PH integration practices on the prevalence of PPEs.

Methodology

The EQRO used Texas Medicaid encounter data from the STAR+PLUS program for Calendar Year (CY) 2017 to examine the relationship between primary care providers (PCPs) and potentially preventable hospital admissions (PPAs) and emergency department visits (PPVs) among STAR+PLUS members with co-occurring BH/PH conditions. The EQRO also examined the relationship between PPAs and PPVs in this population with selected STAR+PLUS MCO strategies for BH/PH integration, identified from a survey with MCOs conducted by HHSC in December 2017. The primary outcome for evaluation was the actual-to-expected (A/E) ratio, which represents the ratio of actual PPEs to expected PPEs in a given group, taking into account the risk profile of members in the group. An A/E ratio greater than 1.00 signifies more PPEs than expected based on statewide experience with the group's risk profile, indicating poorer performance.

[i] S.B. 58, 83rd Legislature, Regular Session, 2013
[ii] S.B. 200, 84th Legislature, Regular Session, 2015
[iii] S.B. 74, 85th Legislature, Regular Session, 2017

The evaluation team used the data to answer the following questions:

1. Are actual-to-expected ratios for PPAs and PPVs in the STAR+PLUS BH/PH population disproportionately *higher* among members seen by certain PCPs?
    a. What proportion of all PPAs and PPVs in the STAR+PLUS BH/PH population could be potentially prevented by focusing on the PCPs associated with the highest A/E ratios?
2. Are actual-to-expected ratios for PPAs and PPVs in the STAR+PLUS BH/PH population disproportionately *higher* among members who did not see any PCP?
    a. What proportion of all PPAs and PPVs in the STAR+PLUS BH/PH population could be potentially prevented by focusing on members who did not see any PCP?
3. Are actual-to-expected ratios for PPAs and PPVs in the STAR+PLUS BH/PH population disproportionately *higher* among members whose PCPs are in a certain provider category?
    a. What proportion of all PPAs and PPVs in the STAR+PLUS BH/PH population could be potentially prevented by focusing on PCP categories associated with the highest A/E ratios?
4. Are actual-to-expected ratios for PPAs and PPVs in the STAR+PLUS BH/PH population disproportionately *lower* among members in plans that have adopted certain BH/PH integration practices?
    a. What proportion of all PPAs and PPVs in the STAR+PLUS BH/PH population could be potentially prevented by broadly implementing BH/PH integration practices associated with the lowest A/E ratios?

Diagnostic Classification

The EQRO classified members as having co-occurring BH/PH conditions using 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. Any STAR+PLUS member continuously enrolled in the same STAR+PLUS MCO during CY 2017 who had at least one PH condition and at least one BH condition from the list during CY 2016 or CY 2017 was eligible for inclusion. Members dually eligible for Medicaid and Medicare were excluded.

Key Measures

The research team used 3M Health Information Systems software to identify potentially preventable admissions (PPAs) and potentially preventable emergency department visits (PPVs) among STAR+PLUS enrollees in the study population. 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. This report provides PPA and PPV rates (per 1,000 member-months) weighted according to the relative resource cost of the PPE. The report also provides actual-to-expected (A/E) ratios for specific reporting groups (see below), based on risk adjustment to the full STAR+PLUS population using 3M's risk adjustment approach. Because the full STAR+PLUS population is healthier and has fewer PPEs than the population of STAR+PLUS members with co-occurring BH/PH conditions, A/E ratios are likely to be greater than 1.00.

Rates and A/E ratios for STAR+PLUS enrollees in the study population were calculated according to: (1) the enrollee's specific PCP (including enrollees who had no PCP); (2) the enrollee's category of PCP; and (3) various BH/PH integration strategies employed by the enrollee's STAR+PLUS MCO.

Primary Care Providers

For the purpose of this study, PCPs were identified according to majority of care relationships. The EQRO assigned each STAR+PLUS enrollee in the study population a single "primary care provider" – representing the provider with whom the enrollee had the most professional claims and encounters with evaluation and management (E&M) codes during the data period. Identified providers included most categories of PCPs listed in the Texas Uniform Managed Care Contract (UMCC) for Medicaid MCOs (Section 8.1.4.2), as well as specialists and facilities. Certain exclusions were made for provider types who were identified in claims, but who would not function in practice as PCPs (such as durable medical equipment suppliers).

Research Questions 1 and 3 focused on PCPs. Research Question 1 focused on PPE rates for specific PCPs assigned to the STAR+PLUS enrollees in this study. To ensure that practical application of the study findings will have the highest impact, this study reports findings for PCPs who provided the majority of care to 50 or more STAR+PLUS enrollees in the study population, referred to in this report as "high-volume PCPs".

Research Question 3 focused on PPE rates for categories of PCPs assigned to the STAR+PLUS enrollees in this study. The classification system used provider taxonomy codes to group identified PCPs into 19 provider categories. These categories include PCP definitions specified in the UMCC (8.1.4.2), as well as several other categories, including, but not limited to behavioral health or mental health (BH/MH) providers, case management or social work, inpatient facilities, practice groups, and physician and non-physician specialists. The EQRO reported PPE rates and ratios by provider category for all providers identified in the study.

BH/PH Integration Practices

For Research Question 4, the EQRO used data from the Texas Medicaid and CHIP Behavioral and Physical Health Integration Survey, conducted by HHSC in December 2017. All responses to questions were collected via self-report by the MCOs. The EQRO extracted responses specific to the STAR+PLUS MCOs and selected domains of survey questions relevant to BH/PH integration practices for further analysis. Most selected survey questions were closed-ended. For open-ended and narrative response questions, the EQRO used inductive coding methods to identify relevant practices. This process identified 16 discrete BH/PH integration practices that showed variability across the STAR+PLUS MCOs.

Approach

The EQRO used descriptive cross-tabulations of PPA and PPV rates and A/E ratios, showing how results vary across PCPs, PCP categories, and BH/PH integration practices.

Summary of Findings

Overall, findings from this study point toward several areas where focused interventions may help to reduce PPAs and PPVs among STAR+PLUS members with co-occurring conditions.

Question 1 – Primary care providers

A disproportionately high percentage of PPAs and PPVs in this study were concentrated in a small number of high-volume PCPs. The 145 high-volume PCPs (who comprised 1.3 percent of all PCPs in this study) accounted for over one-fifth of all PPAs and over one-quarter of all PPVs. This share of PPEs among these providers is related to their larger share of members in the population, and does not necessarily mean they are low-quality providers. However, because there is a relatively low number of high-volume PCPs, they represent a reasonable target for provider-level interventions.

- A smaller number of providers had high PPE A/E ratios ($\geq$ 1.50). For PPAs, 18 providers fell in this category and accounted for 3.6 percent of all PPAs in the study. For PPVs, 35 providers fell in this category and accounted for 11.9 percent of all PPVs in the study.
- Providers with A/E ratios greater than 1.00 may also represent a reasonable target for intervention. For PPAs, 51 providers fell in this category and accounted for 8.4 percent of all PPAs in the study. For PPVs, 95 providers fell in this category and accounted for 21.8 percent of all PPVs in the study.
- Both PPAs and PPVs were concentrated in more highly populated, urban service areas (Bexar, Dallas, and Harris). Providers in the Dallas SA accounted for greater than 6 percent of all PPAs and 10 percent of all PPVs in the study. Notably, the 11 high-volume PCPs in the Hidalgo SA had the lowest PPE A/E ratios in the study; among these providers, all had PPA A/E ratios less than 1.00.

Question 2 – Members with no PCP

The proportion of PPEs accounted for by members who did not see a PCP in 2017 was not disproportionately higher than their representation in the study population.

- A total of 1,169 STAR+PLUS members with co-occurring conditions (1.8 percent of the study population) had no visit with a PCP in 2017.
- Up to 2.2 percent of all PPAs and 2.3 percent of all PPVs could be potentially reduced by focusing on members with no PCP.

Question 3 – PCP Categories

In most cases, the proportion of PPEs accounted for by particular PCP categories was not disproportionately greater or less than their representation in the full set of providers in this study.

- Providers practicing in internal medicine and family practice together accounted for 45 percent of all providers, which is approximately the same as their proportion of PPAs (47 percent) and PPVs (44 percent).

- Behavioral health providers (including therapists, psychiatrists, and psychiatric facilities) accounted for 17 percent of all providers in this study, but slightly lower proportions of PPAs (14 percent) and PPVs (13 percent). Compared to other provider types, behavioral health providers also had relatively lower A/E ratios for PPAs (0.96) and PPVs (1.16).
- The proportion of PPVs accounted for by FQHCs (7.7 percent) was disproportionately greater than their representation in the full set of providers (1.8 percent). The reason for this finding was beyond the scope of this study, and highlights an area for further research.

Question 4 – BH/PH Integration Practices

While all BH/PH integration practices had PPE A/E ratios greater than 1.00 (indicating more PPEs than expected given the case-mix of members), certain practices had notably lower PPA A/E ratios than for members in MCOs that did not have these practices.

- Practices that warrant further study for their potential to reduce PPAs include having case management or utilization management staff participate in integration activities, holding regular workgroups with clinical staff to discuss integration, having provider guidelines for BH/PH care coordination, and facilitating continuous quality improvement for members with co-occurring conditions using clinical monitoring indicators and referral tracking. In addition, implementing sub-contractual relationships with behavioral health organizations should be studied for its potential to reduce PPVs.
- The analysis of BH/PH integration practices has several caveats, which limit the conclusions and recommendations that can be made for this research question. In particular:
    - Findings are based on self-report by STAR+PLUS MCOs, and any resulting associations with PPEs are subject to bias related to the varying levels of detail provided by respondents.
    - Findings regarding the relationship between integration practices and PPEs also do not account for unmeasured factors that may influence both the adoption of integration practices and the occurrence of PPEs. Higher A/E ratios could occur for integration practices due to adverse selection, in which MCOs that have had problems with PPEs among members with co-occurring conditions are more likely to implement practices to improve integration.
    - This analysis was based on surveys conducted at the MCO level and the responses of individual MCOs to questions about integration practices. Therefore, the A/E ratios reported for integration practices also represent the A/E ratios for particular combinations of MCOs. In cases where two or more specific practices had the same MCO profile (i.e., were adopted by the same MCOs), it was not possible to interpret differences between or among these practices.

Recommendations

Based on these findings, Texas HHS and the STAR+PLUS MCOs should consider the following in efforts to reduce PPEs among members with co-occurring BH/PH conditions.

1. Interventions intended to improve on provider practices (e.g., BH/MH screening, BH/PH care coordination) should focus on a small number of high-volume PCPs, particularly those found to have higher-than-expected PPEs. For example, focusing interventions on high-volume PCPs who have PPE ratios of 1.50 or greater, could potentially prevent up to 4 percent of PPAs and up to 12 percent of PPVs.

2. Interventions intended to reduce PPEs in specific SAs should focus on more highly-populated, urban SAs – particularly the Dallas SA. Further study into the practices implemented by the PCPs in the Hidalgo SA assessed in this study may reveal promising strategies for reducing PPEs that can be disseminated to other providers.

3. While interventions with internal medicine and family practice providers could address up to 50 percent of PPAs and PPVs in the study population, focusing on the large number of providers in this category at a broad scale may be impractical. Behavioral health providers had relatively lower PPE A/E ratios compared to other providers; promoting integration practices that focus on BH providers (e.g., encouraging BH providers to screen and monitor for chronic PH conditions) may further reduce PPEs among members with co-occurring conditions. Further study is warranted to understand the disproportionately higher occurrence of PPVs accounted for by FQHCs.

4. Further study is also warranted to understand the potential for certain BH/PH integration strategies to reduce PPEs in this population. Strategies such as holding regular workgroups with clinical staff to discuss integration and having provider guidelines for BH/PH integration are promising and may be fairly straightforward to implement. Additional research is needed that uses study designs to account for other factors that may be associated with both BH/PH integration practices and PPEs.

Endnotes

[1] Potentially preventable events (PPEs) include potentially preventable hospital admissions (PPAs), potentially preventable emergency department visits (PPVs), potentially preventable hospital readmissions (PPRs), potentially preventable hospital complications (PPCs), and potentially preventable ancillary services (PPSs). Only PPAs and PPVs are included in this report.