Health Plans Struggle to Report on Depression Quality Measures That Require Clinical Data

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ABSTRACT

OBJECTIVE: Depression quality measures aligned with evidence-based practices require that health care organizations use standardized tools for tracking and monitoring patient-reported symptoms and functioning over time. This study describes challenges and opportunities for reporting 5 HEDIS measures which use electronic clinical data to assess adolescent and perinatal depression care quality.

METHODS: Two learning collaboratives were convened with 10 health plans from 5 states to support reporting of the depression measures. We conducted content analysis of notes from collaborative meetings and individual calls with health plans to identify key challenges and strategies for reporting.

RESULTS: Health plans used various strategies to collect the clinical data needed to report the measures, including setting up direct data exchange with providers and data aggregators and leveraging data captured in health information exchanges and case management records. Health plans noted several challenges to reporting and performance improvement: 1) lack of access to clinical data sources where the results of patient-reported tools were documented; 2) unavailability of the results of patient-reported tools in usable data fields; 3) lack of routine depression screening and ongoing assessment occurring in provider practices.

CONCLUSIONS: Our findings demonstrate ongoing challenges in collecting and using patient-reported clinical data for health plan quality measurement. Systems to track and improve outcomes for individuals with depression will require significant investments and policy support at the point of care and across the healthcare system.

KEYWORDS: adolescent depression; electronic clinical data; perinatal depression; quality measures

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WHAT'S NEW

Few health plans report quality measures for adolescent and perinatal depression due to limited availability of clinical data usable for quality improvement work. Improving care for depression will require intensive efforts to incentivize collaborative data collection, sharing and quality improvement.

DEPRESSIVE DISORDERS ARE common mental disorders with long-term consequences and are a leading cause of disability worldwide.[1] Adolescents and pregnant women are 2 populations that may be particularly vulnerable to the effects of depression. Depression affects nearly 15% of individuals age 12 to 17 years, which is approximately twice the prevalence seen in adults.[2] Depression in adolescence has been found to predict substance use and continued mental health problems in adulthood.[3,4] Similarly, depression affects 12% to 15% of pregnant and/or postpartum women, with rates in some US areas estimated to be as high as 20%.[5−7] Among perinatal women, depression has consequences for both the mother and infant, disrupting important caregiving and infant bonding activities.[8−12] Adolescent and perinatal depression is particularly relevant to state Medicaid programs as children represent nearly half of total Medicaid enrollment,[13] and Medicaid pays for nearly half of all births nationally and an even larger share of births to minority women.[14]

Given its health importance, depression has been the focus of quality measurement and improvement programs across the health care system, including the Medicaid Core Set for state reporting, the Healthcare Effectiveness Data and Information Set[1] (HEDIS) for health plan reporting and the Medicare Merit-Based Incentive Payment System (MIPS) for provider reporting.[15−17] These

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[1]HEDIS is a registered trademark of the National Committee for Quality Assurance.

programs publicly report health care entities' performance, and in some cases performance may be tied to payment or other incentives.[17]

While the most commonly reported behavioral health quality measures rely on administrative data to determine provision of services,[18,19] recently, new depression-focused measures that use patient-reported outcomes linked to clinical actions for follow-up have been introduced for health plan reporting. Given their population-health perspective, health plans have important levers to support high quality depression care. Plans are responsible for creating robust networks and support access to specialty and acute behavioral health services. Plans can track diagnosis and follow-up at an enrollee level and can support depression care by improving data sharing and providing care management services.

To leverage the unique role of health plans in promoting evidence-based care for depression, HEDIS includes 5 measures on depression screening and management that include adolescents and perinatal women. These measures assess key points along the continuum of care, including population screening, follow-up for those who screen positive, routine depression symptom monitoring, and significant improvement in symptoms or remission.[20] Similar measures are used in MIPS[17] and the Medicaid Adult and Child Core Sets.[16] Unfortunately, these measures are not widely reported, which reduces our ability to assess the quality of depression care across the United States. Only 8 states reported the depression screening measure in the Medicaid Child Core Set in 2020; this was one of only 3 measures reported by less than half of states.[21] Of the 265 eligible Medicaid plans reporting HEDIS in 2020, about one-fifth reported depression screening measures for adolescents or perinatal women, and very few had valid rates (adolescent: n = 12 [4.5%], prenatal: n = 9 [3.4%], postpartum: n = 11 [4.1%]) (Table 1). Only a handful of plans reported measures assessing depression outcomes of remission or response. Because of limited uptake of reporting and feasibility concerns of relying on clinical data, these measures have not been used in public reporting or health plan ratings.[22,23]

To understand challenges and opportunities for improvement, we convened 2 learning collaboratives with health plans focused on implementing depression quality measures for adolescents and perinatal women. This report describes the learnings from the collaboratives and discusses specific obstacles and potential solutions related to integration of electronic clinical data into quality reporting to facilitate measurement-based care for depression.

METHODS

RECRUITMENT AND PARTICIPATING ORGANIZATIONS

We recruited health plans for both collaboratives by widely circulating information to NCQA's HEDIS Users Group, which includes over 200 health plans, posting information on NCQA's website and sending targeted recruitment emails to Medicaid plans operating in states that had existing quality efforts focused on adolescent or perinatal depression. Requirements for participation in the adolescent collaborative included the ability to access clinical data to report the measures and partnering with specific provider practices on quality improvement efforts. Five Medicaid plans operating in CA, DC and NY (2) expressed interest, met all participation requirements and joined. One plan dropped out after one year due to changing organizational priorities. Three of the 4 plans were nonprofit organizations. For the perinatal collaborative, 6 Medicaid plans operating in CA (3), DC, HI and PA expressed interest and joined; 4 of the 6 plans were nonprofit organizations.

ADOLESCENT LEARNING COLLABORATIVE ACTIVITIES

The adolescent collaborative focused on supporting plans in reporting the suite of HEDIS depression measures[20] for adolescents. The collaborative lasted from August 2018 to August 2020 and was modeled on the Institute for Healthcare Improvement's Breakthrough Series Collaboratives.[24] The research team created a change package with driver diagrams identifying key factors affecting reporting and resources to support improvement. During the prework phase, participants joined a web-based group kick-off meeting and 2 individual coaching calls with collaborative faculty to provide orientation to the project, support establishment of Quality Improvement (QI) teams and prepare for improvement work. QI teams set measurable improvement goals based on historical performance, tested changes using Plan, Do, Study, Act cycles and reported findings monthly in individual coaching calls. Plans tracked performance monthly for the provider practices they had engaged and submitted quarterly data reports during the second year of the collaborative. During the implementation phase, several members from each QI team joined for 2 full-day in-person learning sessions, 11 bimonthly learning webinars and a final web-based capstone meeting. In these meetings, participants shared progress, challenges, and lessons learned with each other and received technical assistance and coaching from expert faculty on measure specifications, data reporting and quality improvement methods.

PERINATAL LEARNING COLLABORATIVE ACTIVITIES

The perinatal collaborative included a focused 6-month effort to support health plans in reporting the HEDIS perinatal depression screening and follow-up measures in 2020. Between January and July 2020, the participating plans attended 6 shared learning webinars with expert faculty providing technical assistance on the measure specifications, reporting guidelines and audit requirements. The webinars were structured to provide time for participants to share progress on data collection efforts and discuss challenges and strategies for reporting.

Table 1. National HEDIS Reporting Results (2019*)

	Medicaid (n = 265)		Commercial (n = 417)	
Measure	Plans Reporting[†] (%)	Plans With a Performance Rate[‡] (%)	Plans Reporting[†] (%)	Plans With a Performance Rate[‡] (%)
Adolescent depression (Age 12−17)				
Depression screening	49 (18.5%)	12 (4.5%)	86 (20.6%)	20 (4.8%)
Follow-up after positive screen	8 (3.0%)	8 (3.0%)	15 (3.6%)	15 (3.6%)
Utilization of PHQ-9	82 (30.9%)	10 (3.8%)	45 (10.8%)	16 (3.8%)
Depression remission or response	3 (1.1%)	3 (1.1%)	9 (2.2%)	9 (2.2%)
Perinatal depression				
Prenatal depression screening	53 (20.0%)	9 (3.4%)	150 (36.0%)	17 (4.1%)
Follow-up after positive screen	3 (1.1%)	3 (1.1%)	8 (1.9%)	8 (1.9%)
Postpartum depression screening	55 (20.8%)	11 (4.1%)	151 (36.2%)	18 (4.3%)
Follow-up after positive screen	4 (1.5%)	4 (1.5%)	8 (1.9%)	8 (1.9%)

*Results represent care delivered in 2019 and reported to NCQA in June 2020. Reporting results may have been impacted by the COVID-19 Public Health Emergency.

†Plans reporting any data for the measure with a denominator ≥30 members (percentage out of the total number of Medicaid [265] and commercial [417] plans that reported HEDIS).

‡Performance rates were calculated for reporting plans that had a numerator >0 (percentage out of the total number of Medicaid [265] and commercial [417] plans that reported HEDIS).

DATA COLLECTION AND ANALYSIS

Qualitative information on implementation challenges and strategies to overcome challenges was collected through structured discussion questions used during each monthly individual call in the adolescent collaborative and each bimonthly or monthly group webinar in both collaboratives. There was an assigned notetaker from the research team for each call and all web-based group meetings were also recorded. One member of the research team reviewed the notes and recording after each meeting and created brief summaries of implementation challenges and strategies employed by each health plan. Notes-based analysis was conducted to identify key themes which were then reviewed and discussed by the research team monthly and summarized to highlight common challenges and solutions. Written summaries of key themes were then shared back with collaborative participants through email and during group meetings. Aggregated performance data was collected with a data collection tool that was designed by the research team in a spreadsheet application to capture key data elements for each of the quality measures. For the perinatal collaborative, performance data were also collected through NCQA's Interactive Data Submission System.

RESULTS

Out of the 10 plans across the 2 collaboratives, 8 were able to report performance rates on the depression screening and follow-up measures in 2020 (reflecting care provided in 2019). However, during collaborative meetings plans noted that their rates underestimated actual performance. In the adolescent collaborative, plans particularly noted challenges in reporting the measures that use data from the Patient Health Questionnaire (PHQ-9) to assess routine symptom monitoring and outcomes of remission or response. In both collaboratives, key challenges for reporting the measures included: difficulties in accessing clinical data sources where results of patient-reported tools were documented; limited use of structured fields and standardized coding to document results of patient-reported tools; and a general lack of routine depression screening and ongoing assessment (Table 2). The following sections summarize the findings and key themes related to each of these challenges as well as various strategies plans tested to overcome and address challenges.

ACCESS TO CLINICAL DATA SOURCES

In both learning collaboratives, health plans built new or adapted existing data exchange processes to report the depression measures, including direct data feeds from individual clinics/organizations and third-party data aggregators as well as use of health information exchanges (HIEs). In general, plans started by using claims data to target their outreach to health care organizations that served the bulk of relevant members.

Direct data feeds Plans leveraged existing relationships and sometimes incorporated incentives to support direct data feeds from providers or third-party aggregators. One plan expanded a process for secure file transfer of monthly EHR data extracts on body-mass index and lab results to include depression screening results. Another implemented a value-based payment arrangement to establish EHR data exchange with an organization representing 10 sites of care.

Plans encountered several challenges with this method. Overall, data cleaning and reconciliation took more time than originally anticipated and delayed plans' ability to use data for reporting or improvement work. One plan that attempted to collect data on perinatal depression screening through previously established EHR data feeds with 2 clinics found only a small number of perinatal women receiving care at those clinics. They noted that perinatal women in their region are spread out across multiple provider sites, and a significant amount of upfront time and resources were needed to establish data feeds with each site.

Table 2. Challenges and Strategies for Depression Care Quality Measures

Challenges	Strategies
Access to clinical data sources for reporting measures	- Prioritize and target data sources by usefulness and feasibility – for example, focus on practices representing largest plan population, IT capability, and willingness to collaborate. - Incentivize clinics and third-party vendors to set up EHR data exchange with the plan (eg, build data sharing incentives into value-based payment contracts). - Work with HIEs to collect specific data elements in standardized fields or modify existing data elements to formats needed for quality reporting.
Limited use of structured fields and standardized coding to capture data	- Educate providers and case managers about the availability and utility of using standard codes to capture clinical information from depression assessments at the point of care. - Work with health IT staff to make backend changes to EHR and case management records to ensure screening results generate the correct codes.
Lack of routine depression screening and assessment	- Include depression screening in existing preventive service quality improvement efforts and value-based payment arrangements. - Implement standard processes and workflows for providers and case managers to use standardized depression tools and results. - Deliver education to providers and patients on the importance of depression screening and management and tailor patient educational resources to reduce stigma among certain groups (eg, adolescents, new mothers). - Maintain close collaboration between health plan and provider practice QI teams through regular meetings.

Using third-party data vendors facilitated the back-end work of capturing relevant clinical data from provider EHRs and aggregating them into meaningful reports (eg, providing measure performance comparisons by practice). Two plans that had previously formed data sharing arrangements with a third-party data aggregator were more successful in obtaining clinical data than other plans.

Health information exchanges HIEs allow health care providers to access and share standardized patient information electronically.[25] Some plans did not have access to a regional HIE, while other plans attempted to use this as a data source. A plan that sought to leverage clinical data aggregated in a regional HIE with connections to over 100 hospital facilities and over 600 outpatient facilities found that PHQ-9 data were not available in the HIE. The plan anticipated that depression screening data would be partially available in the future as they directly worked with a large health system to ensure this data element was included when the health system joined the HIE.

Case management records Most plans operated case management programs to coordinate and manage care for members with chronic conditions or special health needs. Depression screening and other health assessments are often delivered through these programs and captured in case management records. All plans in the perinatal collaborative used case management records to capture depression screening data for perinatal women, but they varied in the comprehensiveness of these data and in their ability to incorporate data in time for the reporting deadline. Several plans noted they would be able to include these data in the future. Only one plan in the adolescent collaborative considered case management records as a potential data source; it found adolescents were generally not being served by the program nor being screened for depression in that setting.

LIMITED USE OF STRUCTURED FIELDS AND STANDARDIZED CODING

Plans found that even when depression assessment results were documented in EHRs and case management records, many times these data were not captured in structured fields using standard coding terminology. Establishing successful direct data feeds required close collaboration with the practices and/or data aggregators to define specific requested data elements and in some cases required back-end work in the provider EHR systems to ensure data were captured in a standardized way. One plan in the perinatal collaborative found that case managers were documenting depression screening in the case management record but did not have a standardized process and were not using validated screening tools. Other plans found that providers often documented assessment results in semi-structured fields like a flow sheet or as unstructured text within EHRs. Even when data were documented in structured fields, they were often documented using nonstandard codes, and plans had to conduct time-consuming crosswalks to specified codes.

LACK OF ROUTINE DEPRESSION SCREENING AND ASSESSMENT

Even in the 2-year collaborative on adolescent depression, plans spent most of their efforts on improving data capture and exchange while work to improve measure performance was limited. Still, plans noted that having regular access to clinical data (eg, through monthly data feeds) could support efforts for more real-time quality improvement with providers. Once plans had reconciled data access and standardization issues, they were able to establish accurate baseline performance rates and found that adolescents were not being screened for depression routinely nor receiving follow-up. Several plans in the

collaborative worked closely with specific practices to better understand why screening was not occurring and then to implement new workflows to support routine depression screening and follow-up. A common concern cited by providers was how to ensure follow-up after a positive depression screen, particularly in practices without on-site or integrated behavioral health services. One plan was able to realize improvement in follow-up care by working closely with a pediatric practice. The plan and practice improvement teams met nearly monthly to track progress and test new screening and follow-up workflows. The practice standardized depression screening to take place during well-care visits and implemented telephone follow-up for adolescents who screened positive. The plan also helped facilitate conversations between the practice and the behavioral health provider group to close the referral loop between them. Follow-up performance improved from 31.7% in May 2019 to 73.6% in June 2020. However, the plan noted these changes took significant effort and were not easily scalable to other practices in their network.

DISCUSSION

Lessons from both learning collaboratives highlight challenges in reporting health plan depression quality measures. These measures include innovative aspects of quality measurement that push the boundaries for traditional measurement in behavioral health by assessing patient-reported outcomes using clinical data.[20] Yet these data are often not standardized or even captured at the point of care. Barriers to data capture and sharing limit health plans' ability to measure and improve the quality of depression care. Importantly, overcoming these barriers means facing a chicken-and-egg problem: plans report that lack of incentives or requirement to report depression measures limits progress in overcoming data challenges, while national reporting programs are waiting to include these measures due to reporting feasibility concerns.

These feasibility concerns are less apparent for other newly implemented immunization measures which rely on collection of data from registries and other clinical data sources.[26] Based on the sufficient number of valid HEDIS submissions in 2019, *Prenatal Immunization Status* will be the first publicly reported measure to use the HEDIS Electronic Clinical Data Systems reporting standard,[27] and in 2022, the measure will be included in NCQA's Health Plan Ratings for both Medicaid and commercial plans.[28]

The challenges in collecting and using clinical data in general, and patient-reported outcomes data specifically, include lack of documentation in structured fields, insufficient standardization of data across different records and databases, and lack of interoperability between systems. These challenges are not unique to behavioral health clinical data, but they are also not the only factors. There are also fundamental concerns about the roles and responsibilities of primary care and behavioral health providers and the need for systems to support measurement-based

care.[29] A report from the Medicaid and CHIP Payment and Access Commission on the Medicaid Core Set attributed poor reporting of behavioral health measures to fragmentation of behavioral health services delivery as well as data sharing issues.[30] Even in Minnesota with long-standing reporting of depression care measures across clinics, nearly 60% of adolescents with depression did not receive follow-up assessment in 2019.[31] Efforts to improve depression care require substantial and sustained effort at the delivery system as noted in our collaborative findings, including provider education and engagement, re-designed workflows that support routine collection and use of depression assessments and addressing provider concerns around ensuring follow-up is accessible for individuals who screen positive or whose symptoms are not improving. This is consistent with findings from a recent study showing that level of implementation support was associated with depression quality among clinics using the collaborative care model.[32]

To improve care for adolescents and perinatal women, action is needed at multiple levels. First, there is urgent need to create meaningful incentives for plans and providers to collaborate on reporting and demonstrating improvement on depression. While including measures in national reporting programs is an important and critical step, it is not sufficient. Innovative approaches are needed to encourage organizations to invest in tools and systems that can support better depression care and demonstrate improvements in outcomes. These might include preparing an on-ramp for reporting new measures in the Medicaid Core Set or bonus credits to health plans that report the depression measures. Incentives to integrate behavioral health in primary care settings could be included in value-based payment.[33]

Second, efforts are needed to support the collection of standardized clinical data for depression across care settings. The PHQ-9 consists of structured fields, which can be readily captured in EHRs and other care management records.[34] Federal initiatives that began with the HITECH Act offset some of the cost for health systems to invest in EHRs;[35] however behavioral health organizations were largely not addressed.[36] States and health plans can support better data collection by incentivizing providers to use tools like the PHQ-9 and to document results using standard terminologies needed for outcome measure reporting. The Pennsylvania Department of Human Services implemented one such effort with the Obstetrical Needs Assessment Form,[37] which allows providers to submit standardized clinical data to a cloud-based database for pregnant and postpartum women. The form captures key data elements necessary for measuring immunizations and depression screening, among other components important to perinatal care. Many Medicaid Managed Care Organizations in Pennsylvania offer a significant provider incentive for the submission of this form. Health plans can go further by using value-based payment arrangements with providers that incorporate clinical data exchange and payment based on quality outcomes rather than fee-for-service care delivery.

Third, effective mechanisms are needed to broadly support the sharing of standardized clinical data, including patient-reported mental health outcomes data. Privacy concerns around sharing mental health data may pose barriers, and concerns about any special requirements for sharing data on adolescents should be considered. Recent regulations that implement provisions of the 21st Century Cures Act offer promise in realizing broader interoperability of health data.[38,39] Regional or statewide HIEs can also support exchange of clinical data among providers, payers and states.[40,41] Developing exchanges takes time, dedicated resources and requires commitment from health systems to participate. States can make investments in regional data exchanges and incentivize or require Medicaid plans to participate.[42] These investments can benefit many quality areas, particularly management of conditions where patients see multiple providers across care settings. Perinatal care often occurs in fragmented ways as there are shifts in women's contact with providers and care settings from the prenatal to postpartum period and disruption in insurance coverage, especially in Medicaid. Without improved data sharing, women may be lost to follow up.

Lastly, health plans are well positioned to provide case management programs, which can support follow-up symptom assessment and outcomes tracking for depression. As noted in our findings, health plans often include specific populations, such as perinatal women, in their case management programs. Plans can also connect their members to specialty behavioral health services to ensure accurate diagnosis, effective treatment, and appropriate follow-up are provided after screening, which is recommended by the US Preventive Services Task Force.[43,44] With these supports in place, providers may be more willing to conduct screening for their patients. If health plans deliver case management to their members, it is crucial to share data on outcomes assessments directly with clinicians involved in the individual's care.

With the rapid expansion of telehealth during the Covid-19 pandemic, there may be new opportunities for monitoring outcomes for depression. The relaxation of federal and state requirements for telehealth and face-to-face visit requirements made new care delivery options possible,[45] and mental health conditions are commonly addressed through telehealth.[46] Patient-reported outcomes data may be more easily collected through patient portals and previsit online check-in processes.[47] These platforms offer the potential for more timely information that can support care planning and individuals' self-management as well as actionable feedback for identifying service needs and targeting quality improvement.

CONCLUSIONS

Our findings demonstrate ongoing challenges in collecting and using clinical data for health plan quality measurement. Systems to track and improve outcomes for individuals with depression will require significant investments and policy support at the point of care and across health systems. National efforts to incentivize

improvement on depression care quality for adolescents and perinatal women are critically needed. In the meantime, health plans can support robust behavioral health networks and care management services, while the expanded use of telehealth and digital platforms during the Covid-19 pandemic and the push for data interoperability provide opportunities to improve data collection and sharing.

ACKNOWLEDGMENTS

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