U.S. Department of Health and Human Services
Assistant Secretary for Planning and Evaluation
Behavioral Health, Disability, and Aging Policy

PRELIMINARY COST AND QUALITY FINDINGS FROM THE NATIONAL EVALUATION OF THE CERTIFIED COMMUNITY BEHAVIORAL HEALTH CLINIC DEMONSTRATION

September 2020

Office of the Assistant Secretary for Planning and Evaluation

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NOTE: BHDAP was previously known as the Office of Disability, Aging, and Long-Term Care Policy (DALTCP). Only our office name has changed, not our mission, portfolio, or policy focus.

This report was prepared under contract #HHSP233201600017I between HHS's ASPE/BHDAP and Mathematica Policy Research to conduct the national evaluation of the demonstration. For additional information about this subject, you can visit the BHDAP home page at https://aspe.hhs.gov/bhdap or contact the ASPE Project Officer, Judith Dey, at HHS/ASPE/BHDAP, Room 424E, H.H. Humphrey Building, 200 Independence Avenue, S.W., Washington, D.C. 20201. Her e-mail address is: Judith.Dey@hhs.gov.

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ACRONYMS

The following acronyms are mentioned in this report and/or appendices.

ADD	Follow-up Care for Children Prescribed ADHD Medication
ADHD	Attention Deficit Hyperactivity Disorder
AMA	American Medical Association
AMM	Antidepressant Medication Management
ASAM	American Society of Addiction Medicine
ASPE	HHS Office of the Assistant Secretary for Planning and Evaluation
BA	Bachelor of Arts
CCBHC	Certified Community Behavioral Health Clinic
CDF-A	Screening for Clinical Depression and Follow-Up Plan
CMHC	Community Mental Health Center
CMS	HHS Centers for Medicare & Medicaid Services
DCO	Designated Collaborating Organizations
DY	Demonstration Year
DY1	First Demonstration Year
DY2	Second Demonstration Year
EHR	Electronic Health Record
FTE	Full-Time Equivalent
FUH	Follow-Up after Hospitalization for mental illness
HEDIS	Healthcare Effectiveness Data and Information Set
HHS	U.S. Department of Health and Human Services
HIT	Health Information Technology
ICD	International Classification of Diseases
IET	Initiation and Engagement of Alcohol and other Drug Dependence Treatment
MEI	Medicare Economic Index
MHSIP	Mental Health Statistics Improvement Program
NCQA	National Committee for Quality Assurance
NQF	National Quality Forum
PAMA	Protecting Access to Medicare Act
PCPI	Physician Consortium for Performance Improvement
PCR-AD	Plan All-Cause Readmission Rate

PHQ	Patient Health Questionnaire
PPS	Prospective Payment Systems
PPS-1	PPS First Model/Methodology
PPS-2	PPS Second Model/Methodology
PTSD	Post-Traumatic Stress Disorder
QBP	Quality Bonus Payment
SAA	Adherence to Antipsychotic Medications for Individuals with Schizophrenia
SAMHSA	HHS Substance Abuse and Mental Health Services Administration
SED	Serious Emotional Disturbance
SMI	Serious Mental Illness
SRA	Suicide Risk Assessment
SUD	Substance Use Disorder

EXECUTIVE SUMMARY

Section 223 of the Protecting Access to Medicare Act (PAMA), enacted in April 2014, authorized the Certified Community Behavioral Health Clinic (CCBHC) demonstration to allow states to test new strategies for delivering and reimbursing services provided in community mental health centers (CMHCs). The demonstration aims to improve the availability, quality, and outcomes of ambulatory services provided in CMHCs by establishing a standard definition and criteria for CCBHCs and developing new prospective payment systems (PPS) that account for the total cost of providing comprehensive services to all individuals who seek care. The demonstration also aims to provide coordinated care that addresses both behavioral and physical health conditions. CCBHCs and demonstration states must also report a common set of quality measures and report their costs as a condition of participating in the demonstration.

Both the payment and quality reporting requirements are central features of the CCBHC model. Historically, Medicaid has reimbursed CMHCs through negotiated fee-for-service or managed care rates, and there is some evidence that these rates did not cover the full cost of CMHC services.[1] The CCBHC demonstration addresses this problem by allowing states to develop a PPS that reimburses CCBHCs for the total cost of providing care to their patients based on projected costs. Specifically, states selected between two PPS models developed by the U.S. Department of Health and Human Services (HHS) Centers for Medicare & Medicaid Services (CMS) (although states could exercise some flexibility in operationalizing the models). The first model (PPS-1) provides CCBHCs with a fixed daily payment for each day that a Medicaid beneficiary receives services from the clinic (this is similar to the PPS model used by Federally Qualified Health Centers). The PPS-1 model also includes a state option to provide quality bonus payments (QBPs) to CCBHCs that meet state-specified performance requirements on quality measures. The second model (PPS-2) provides CCBHCs with a fixed monthly payment for each month in which a Medicaid beneficiary receives services from the clinic. PPS-2 rates have multiple rate categories--a standard rate and separate rates for special populations that are defined by the state. PPS-2 also requires states to make QBPs based on quality measure performance, and outlier payments for costs above and beyond a specific threshold (that is, payment adjustments for extremely costly Medicaid beneficiaries).

Aligning the payment with the actual cost of care was intended to provide CCBHCs with the financial resources necessary to provide high-quality comprehensive care. In addition, CCBHCs receive PPS payments based on anticipated daily or monthly per-patient cost rather than the cost of specific services provided during any particular patient visit. This allows clinics flexibility in the services they provide and the staffing models they use to meet the needs of individual patients without requiring specific billable services to ensure financial sustainability. Finally, the PPS financially incentivizes the delivery of high-quality care by rewarding performance on quality measures.

[1] Scharf, D.M., et al. (2015). Considerations for the Design of Payment Systems and Implementation of Certified Community Behavioral Health Centers. Santa Monica, CA: RAND.

In October 2015, HHS awarded planning grants to 24 states to begin certifying CMHCs to become CCBHCs, develop their PPS, and plan for the implementation of the demonstration. To support the first phase of the demonstration, HHS developed criteria (as required by PAMA) for certifying CCBHCs in six important areas: (1) staffing; (2) availability and accessibility of services; (3) care coordination; (4) scope of services; (5) quality and reporting; and (6) organizational authority.[2] The criteria established a minimum threshold for the structures and processes that CCBHCs should have to provide high-quality care, although states may exercise some discretion in implementing the criteria to reflect their particular needs.

CCBHCs must provide coordinated care and offer a comprehensive range of nine types of services to all who seek help, including but not limited to those with serious mental illness (SMI), serious emotional disturbance (SED), and substance use disorder.[3] Services must be person and family-centered, trauma-informed, and recovery-oriented, and the integration of physical and behavioral health care must serve the "whole person." To ensure the availability of the full scope of these services, CCBHCs can partner with Designated Collaborating Organizations (DCOs) to provide selected services. DCOs are entities not under the direct supervision of a CCBHC but are engaged in a formal relationship with a CCBHC and provide services under the same requirements. CCBHCs that engage DCOs maintain clinical responsibility for services provided by a DCO to CCBHC consumers, and the CCBHC provides payment to the DCO.

In December 2016, HHS selected eight states to participate in the demonstration (listed in Table ES.1) from among the 24 states that received planning grants. As required by PAMA, HHS selected the states based on the ability of their CCBHCs to: (1) provide the complete scope of services described in the certification criteria; and (2) improve the availability of, access to, and engagement with a range of services (including assisted outpatient treatment). As shown in Table ES.1, six of the eight demonstration states (representing a total of 56 CCBHCs) selected the PPS-1 model and two states (representing ten CCBHCs) selected the PPS-2 model. As of October 2019, the demonstration will end on November 21, 2019.

[2] HHS Substance Abuse and Mental Health Services Administration (SAMHSA). "Criteria for the Demonstration Program to Improve Community Mental Health Centers and to Establish Certified Community Behavioral Health Clinics." Rockville, MD: SAMHSA, 2016. Available: https://www.samhsa.gov/sites/default/files/programs_campaigns/ccbhc-criteria.pdf. Accessed July 26, 2019.

[3] The nine types of services are: (1) crisis mental health services, including 24-hour mobile crisis teams, emergency crisis intervention services, and crisis stabilization; (2) screening, assessment, and diagnosis, including risk assessment; (3) patient-centered treatment planning or similar processes, including risk assessment and crisis planning; (4) outpatient mental health and substance use services; (5) outpatient clinic primary care screening and monitoring of key health indicators and health risk; (6) targeted case management; (7) psychiatric rehabilitation services; (8) peer support and counselor services and family supports; and (9) intensive, community-based mental health care for members of the armed forces and veterans. CCBHCs must provide the first four service types directly; a DCO may provide the other service types. In addition, crisis behavioral health services may be provided by a DCO if the DCO is an existing state-sanctioned, certified, or licensed system or network. DCOs may also provide ambulatory and medical detoxification in American Society of Addiction Medicine (ASAM) categories 3.2-WM and 3.7-WM.

TABLE ES.1. Number of CCBHCs, Demonstration Start Date, and PPS			
State	**Number of CCBHCs**	**Demonstration Start Date**	**PPS**
Minnesota	6	July 1, 2017	PPS-1[b]
Missouri	15	July 1, 2017	PPS-1[b]
Nevada	3[a]	July 1, 2017	PPS-1[b]
New Jersey	7	July 1, 2017	PPS-2
New York	13	July 1, 2017	PPS-1[b]
Oklahoma	3	April 1, 2017	PPS-2
Oregon	12	April 1, 2017	PPS-1
Pennsylvania	7	July 1, 2017	PPS-1[b]

SOURCE: Mathematica/RAND review of CCBHC demonstration applications and telephone consultations with state officials.

NOTES: As of October 2019, the demonstration ends in all states on November 21, 2019.

a. Nevada initially certified 4 clinics. However, in March 2018, 1 CCBHC withdrew from the demonstration after Nevada revoked its certification. The total number of CCBHCs in the table reflects the number of participating CCBHCs in May 2019.

b. PPS-1 with QBP (all PPS-2 states include QBPs.

Goals of the National Evaluation

In September 2016, the HHS Office of the Assistant Secretary for Planning and Evaluation (ASPE) contracted with Mathematica and its subcontractor, the RAND Corporation, to conduct a comprehensive national evaluation of the CCBHC demonstration. ASPE is overseeing the evaluation in collaboration with CMS. Working with these federal partners, Mathematica and RAND designed a mixed-methods evaluation to examine the implementation and outcomes of the demonstration and to provide information for HHS to include in its reports to Congress.

Specifically, Section 223 of PAMA mandates that HHS's reports to Congress must include: (1) an assessment of access to community-based mental health services under Medicaid in the area or areas of a state targeted by a demonstration program as compared to other areas of the state; (2) an assessment of the quality and scope of services provided by CCBHCs as compared to community-based mental health services provided in states not participating in a demonstration program and in areas of a demonstration state not participating in the demonstration; and (3) an assessment of the impact of the demonstration on the federal and state costs of a full range of mental health services (including inpatient, emergency, and ambulatory services). To date, the evaluation has focused on providing critical information to Congress and the larger behavioral health community about the implementation of the CCBHC model across the eight demonstration states.

In June 2018, Mathematica and RAND submitted to ASPE the report "Interim Implementation Findings from the National Evaluation of the Certified Community Behavioral Health Clinic Demonstration."[4] The report described the progress that states and CCBHCs made (through April 2018) in implementing the demonstration and their successes and challenges. In June 2019, Mathematica and RAND submitted a second report, "Implementation Findings from the National

[4] See https://www.samhsa.gov/sites/default/files/ccbh_clinicdemonstrationprogram_071118.pdf.

Evaluation of the Certified Community Behavioral Health Clinic Demonstration,"[5] which provided updated information on the demonstration's implementation through April 2019 (approximately the first 22 months of the demonstration for six states and 24 months for the remaining two states).

In this latest report, we describe the costs during the first demonstration year (DY1) and the experiences of states and CCBHCs reporting the required quality measures. Given the novelty of reimbursing CCBHCs through a PPS, state and federal policymakers, and other behavioral health system stakeholders, have an interest in understanding the functioning of the PPS and the extent to which PPS rates covered the full costs of care. In addition, given that the adoption of electronic health records (EHRs) and other health information technology (HIT) has been slower among behavioral health providers than other sectors of the health care system (in part, because these providers have not historically received the same incentives as medical providers to adopt such technologies),[6] stakeholders also have an interest in understanding how CCBHCs made changes to their EHR/HIT systems to facilitate reporting the required quality measures. Stakeholders in the demonstration are also interested in how CCBHCs and states used performance on those measures to improve care and make QBPs to CCBHCs.

The findings in this report draw on data collected from: (1) interviews with state Medicaid and behavioral health officials; (2) progress reports submitted by all 66 CCBHCs; (3) cost reports submitted by all 66 CCBHCs; and (4) site visits to select CCBHCs. Most CCBHCs and states did not submit quality measure performance data to HHS in time for this report. As a result, information in this report regarding quality measures focuses on CCBHCs' and states' experiences reporting the quality measures and the enhancements they made to data collection and reporting systems to facilitate reporting the measures (based on our interviews with state officials), CCBHC progress reports, and site visits to CCBHCs.

A. Findings Regarding CCBHC PPS Rates and Costs

During the planning grant year, states worked with clinics that were candidates for CCBHC certification to set visit-day rates for PPS-1 states or visit-month rates for PPS-2 states. At the end of DY1, the CCBHCs submitted detailed cost reports, which include information on total costs of clinic operations. It is important to note that the rates, which were set prior to the beginning of the demonstration, might differ from the actual costs, reported by the clinics at the end of DY1. This report summarizes the rate-setting process and the costs of providing care in the CCBHCs during DY1. We also highlight potential reasons that the rates differed from the DY1 costs.

Establishment of PPS rates. States set the PPS rates using a formula, wherein projected total allowable costs were divided by the projected number of visit-days (for PPS-1) or visit-months (for PPS-2). To set the rates, states collected data on clinics' historical operating costs and visits

[5] See https://aspe.hhs.gov/report/certified-community-behavioral-health-clinics-demonstration-program-report-congress-2018.

[6] Ranallo, P.A., A.M. Kilbourne, A.S. Whatley, & H.A. Pincus. (2016). "Behavioral Health Information Technology: From Chaos To Clarity." *Health Affairs* 35(6): 1106-1113.

using a cost report template provided by CMS. Clinics in seven of the eight participating states did not have experience in collecting and reporting their operating costs prior to the demonstration. In these states, officials reported that collecting this information for the purposes of setting rates was a major challenge for clinics. State officials also reported that they anticipated that the rates during DY1 would differ from the actual DY1 costs due to the limitations of the historical data on costs, particularly for services included in the CCBHC criteria that the clinics either did not deliver or bill separately prior to the demonstration. As a result, states and CCBHCs had to project the costs and number of visits for these new services based on very limited information or uncertain assumptions. Several states provided technical support (such as funding for accounting consultations) to the clinics to improve their cost-reporting capabilities.

The average daily rate across the 56 clinics in PPS-1 states was $264 (median rate was $252, and ranged from $151 to $667). PPS-1 rates were, on average, higher in urban CCBHCs than rural CCBHCs, and in CCBHCs that served a smaller number of clients (as measured by total visit-days) versus those that served a higher number of clients. Urban CCBHCs were likely to have higher rates due to higher labor costs and larger CCBHCs were likely to have lower rates due to apportionment of fixed costs across a larger number of visit-days. PPS-1 rates were also, on average, higher among CCBHCs in which a larger share of their total full-time equivalent staff was dedicated to medical doctors. The average blended PPS-2 rate was $714 in New Jersey and $704 in Oklahoma.[7] PPS-2 rates tended to be higher in CCBHCs that served a smaller number of clients versus those that served a higher number of clients, as measured by the total visit-months.

Cost-reporting by clinics. All the CCBHCs submitted cost reports that were approved by their state governments. However, in discussions with state officials and site visits to CCBHCs, we often heard about the challenges of reporting accurate cost information. To assist CCBHCs in providing accurate cost report information, states reported providing extensive technical assistance to clinic financial and administrative staff during DY1. Some states hired consulting firms to work directly with the CCBHCs on the reports during DY1. State officials in Pennsylvania instituted a "dry run" of the cost reports, which covered the first six months of the demonstration. Having the clinics go through the process of collecting and reporting cost information helped the state identify and address reporting challenges before the first federally mandated cost reports were due. Overall, CCBHCs were ultimately able to provide the information in the cost reports.

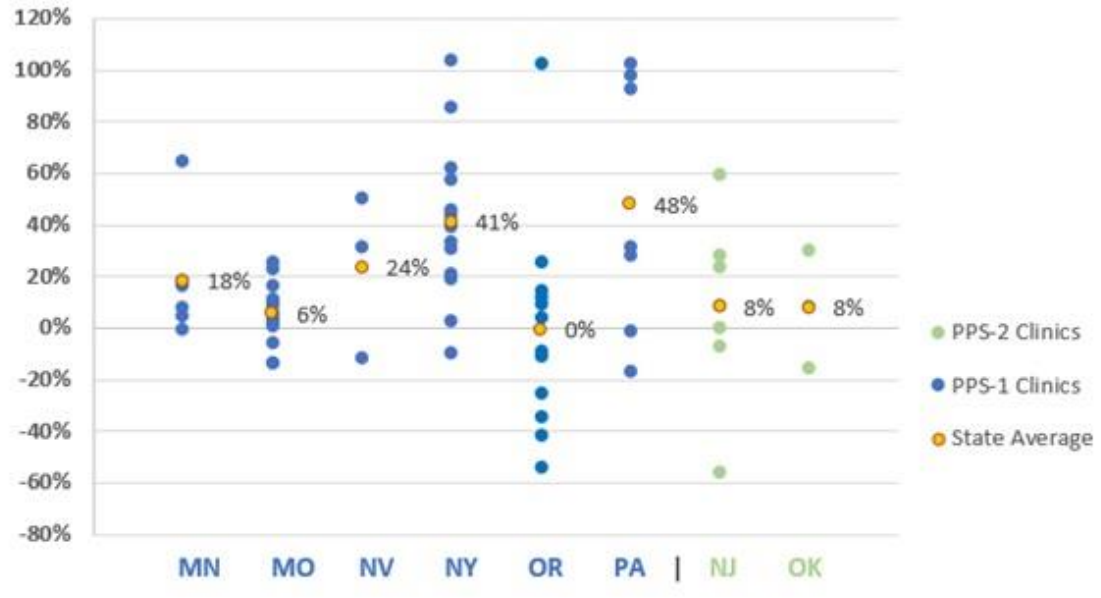
Total costs of CCBHC operations during DY1. Across all PPS-1 clinics, the average DY1 visit-day cost was $234 and ranged from $132 to $639. The state average visit-day cost ranged from $167 in Nevada to $336 in Minnesota. Across all PPS-2 clinics, the blended visit-month costs averaged $759 and ranged from $443 to $2,043. The state average visit-month cost was $679 in Oklahoma and $793 in New Jersey.

[7] As described in detail in the report, the PPS-2 states established rates for the general population and rates for special populations. We calculated an average blended rate by weighting each rate by the number of visit-months in that category in DY1 according to the cost reports and then calculated the average for the clinic. We then calculated the average across the clinics to report a state average.

Direct labor costs accounted for 65 percent of the total allowable costs for all CCBHCs. This proportion is similar to the proportion reported for outpatient care centers in the Census Bureau's Service Annual Survey. According to that survey, labor costs account for 68 percent of total outpatient care center costs in 2016.[8] Indirect costs accounted for 23 percent of costs, and other direct costs accounted for 11 percent of costs. The distribution of costs across these categories was similar across states. About 1 percent of DY1 costs were payments by CCBHCs to DCOs. Although the total amount paid to DCOs was a small percentage of costs across all CCBHCs, among the 34 CCBHCs that had DCOs, the proportion of total costs paid to DCOs ranged from 0.02 percent to 14 percent and averaged 2 percent. The percentage of costs allocated to direct labor, indirect, other direct, and DCOs were similar for PPS-1 and PPS-2 states.

Rates relative to costs during DY1. In seven of the eight demonstration states, the rate per visit-day or per visit-month was higher, on average, than the cost per visit-day or per visit-month during DY1. As illustrated in Figure ES.1, four of the eight states had rates that, on average, were no more than 10 percent higher than costs, and four of the states had rates, on average, more than 10 percent higher than costs, ranging from 18 percent to 48 percent above cost on average. In Oregon and New Jersey, the rates were similar to costs on average, but the rate to cost ratio varied widely across clinics. In contrast, the rate to cost ratios for Missouri CCBHCs are closely grouped around the state average.

FIGURE ES.1. DY1 Rates as Percent Above or Below DY1 Costs Per Visit-Day or Per Visit-Month for Clinics by State



SOURCE: Mathematica and the RAND Corporation analysis of DY1 CCBHC cost reports.
NOTE: A positive percentage indicates how much the rate was greater than the cost and a negative percentage indicates how much the rate was less than the cost.

[8] Ashwood, J.S., K.C. Osilla, M. DeYoreo, J. Breslau, J.S. Ringel, C.K. Montemayor, N. Shahidinia, D.M. Adamson, M. Chamberlin, and M.A. Burnam, Review and Evaluation of the Substance Abuse, Mental Health, and Homelessness Grant Formulas. Santa Monica, CA: RAND Corporation, 2019. https://www.rand.org/pubs/research_reports/RR2454.html.

There are at least two potential reasons for the tendency of the CCBHC rates to be higher than costs during DY1. First, as described above, state officials indicated in our interviews that the rates were set under the assumption that the CCBHCs would be fully staffed throughout the demonstration project. Although state officials recognized that not all CCBHCs would be fully staffed at the outset of the demonstration, it was important to set the rates under this assumption in order to avoid constraining hiring. If staff positions went unfilled, the clinic would have lower costs than had been anticipated and their costs would be lower than their rate. Second, as we described in a separate report, CCBHCs made efforts to increase access to services, including introduction of "open-access" systems where consumers could receive same-day appointments.[9] During site visits, several CCBHCs reported increases in the volume of consumers they see. Visit-days and visit-months would also increase if consumers were seen more frequently, on average, than the historical data on which the rates were set would suggest. If the number of consumer visits increased, while the costs were relatively constant, the actual costs per visit-day or visit-month would be lower than had been anticipated. Moreover, if the staffing costs were lower than anticipated while the number of visit-days or visit-months were greater than anticipated, the divergence between the rates and costs would be magnified.

Changes to rates for the second demonstration year (DY2). States were able to raise or lower their PPS rates for DY2 to bring rates into closer alignment with costs. The states could use a combination of re-basing (that is, re-calculation of the rates based on the DY1 cost reports), or inflation adjustment, using the Medicare Economic Index (MEI) (a measure of inflation in the health care sector). Six of the demonstration states re-based CCBHC rates: Minnesota, New Jersey, New York, Nevada, Oklahoma, and Pennsylvania. Oregon and Missouri chose to only adjust the rates between DY1 and DY2, based on the MEI. As state officials explained, their decision to adjust, not re-base, was related to not feeling comfortable with the length of time and the availability of cost, utilization, and staff hiring data to appropriately inform re-basing the rates.

B. Findings regarding CCBHC quality measure reporting

CCBHC criteria specify 21 quality measures for the demonstration, including nine clinic-reported measures and 12 state-reported measures. Clinic-reported quality measures are primarily process measures that focus on how clinics are achieving service provision target (for example, time to initial evaluation, whether screening and services were provided) and are based on clinical data typically derived from EHRs or other electronic administrative sources. State-reported measures focus on CCBHC consumer characteristics (for example, housing status), screening and treatment of specific conditions, follow-up and readmission, and consumer and family experiences of care. (See Table IV.1 in the report for a list of the measures and potential data sources that CCBHCs and states use to calculate the measures.)

[9] Siegwarth, A., R. Miller, J. Little, J. Brown, C. Kase, J. Breslau, and M. Dunbar. "Implementation Findings from the National Evaluation of the Certified Community Behavioral Health Clinic Demonstration." Report prepared for the U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. Washington, DC: Mathematica Policy Research, June 2019.

Development of infrastructure to report measures. Nearly all clinics (97 percent) across all states made changes to their EHRs or HIT systems to meet certification criteria and support quality measure and other reporting for the CCBHC demonstration. The most commonly reported changes were modification of EHR/HIT specifications (for example, data fields; forms) to support collection and output of data required for quality measure reporting, and the addition of features to allow the electronic exchange of clinical information with DCOs and other external providers. State officials reported investing considerable resources, including extensive technical assistance in some cases, prior to and following the demonstration launch to ensure that participating clinics had appropriate data systems in place to meet the demonstration quality reporting requirements. This highlights the importance of building-out technological infrastructure for the demonstration to support data collection for mandated quality reporting.

In addition, many clinics modified approaches to screening and the use of standardized tools to assess specific indicators (for example, implementing the Patient Health Questionnaire (PHQ-9) to assess symptoms of depression for the 12-month depression remission measure). During site visits, many CCBHC staff reported that similar screening tools had been used prior to the demonstration, but virtually all sites reported implementing changes to screening protocols (for example, the frequency with which screenings were conducted) and how screening data were used in clinical practice, including how and where results were displayed in a consumer's chart. These changes were typically accompanied by extensive staff trainings and frequent data reviews to ensure provider compliance with screening and data entry procedures.

Successes and challenges reporting measures. Many clinics experienced challenges in the early stages of the demonstration with data collection and reporting the CCBHC-reported measures. In interviews with state officials during DY1, all states reported that many clinics initially experienced challenges with their EHR/HIT systems, particularly when collecting and aggregating data needed to generate quality measures (for example, querying databases to specify the correct numerators and denominators within a given timeframe). State officials most often reported challenges associated with CCBHCs' lack of familiarity with the required measure specification and difficulty obtaining certain variables, such as new service codes or new population subgroups, from clinic EHRs. Many clinic staff echoed these concerns during interviews on CCBHC site visits. In the early stages of the demonstration, many clinics relied upon ad hoc strategies to overcome these challenges and facilitate data collection and reporting. To help clinics resolve these early challenges, state officials provided ongoing technical assistance in the form of training webinars and direct support through multiple channels (phone, online, in-person) to: (1) explain the measures and the information needed from the CCBHCs to report on each of them; (2) provide examples of how to extract information and calculate measures from EHR data (for example, what queries to run; what numerators and denominators to use; etc.); and (3) explain how to complete the reporting template. By the end of DY2, officials in all states reported that the majority of issues surrounding CCBHC-reported quality measures had been resolved.

Use of quality measures to inform quality improvement. Although CCBHCs and states were not required to use quality measure data to monitor or improve the quality of care they provide, both state officials and clinics reported using quality measure data to support a wide range of quality improvement efforts. For example, officials in all states reported using quality measures

data to support ongoing monitoring and oversight of CCBHCs (for example, to assess compliance with certification criteria). In addition, Pennsylvania utilized a "dashboard" that displayed CCBHC performance on quality measures and allowed individual CCBHCs to readily compare their performance against other CCBHCs in the state. Many clinics also reported using CCBHC quality measures to support quality improvements, although the use of individual quality measures (for example, time to initial evaluation; depression remission; suicide risk assessment [SRA]) varied depending on site-specific areas of focus.

TABLE ES.2. Quality Measures Used for Determining Quality Bonus Payments

	Required or Optional for Determining QBPs[a]	States with QBPs that Used the Measure to Determine QBPs[b]
CCBHC-Reported Measures		
Child and adolescent major depressive disorder: SRA (SRA-BH-C)	Required	All
Adult major depressive disorder: SRA (SRA-BH-A; NQF-0104)	Required	All
CDF-A	Optional	MN
Depression Remission at 12 months (NQF-0710)	Optional	None
State-Reported Measures		
Adherence to Antipsychotic Medications for Individuals with Schizophrenia (SAA-BH)	Required	All
Follow-Up After Hospitalization for Mental Illness, ages 21+ (adult) (FUH-BH-A)	Required	All
FUH, ages 6-21 (child/adolescent) (FUH-BH-C)	Required	All
Initiation and Engagement of Alcohol and other Drug Dependence Treatment (IET-BH)	Required	All
PCR-AD	Optional	MN, NV, NY
Follow-up Care for Children Prescribed ADHD Medication (ADD-C)	Optional	None
Antidepressant Medication Management (AMM-A)	Optional	None

SOURCE: Appendix III -- Section 223 Demonstration Programs to Improve Community Mental Health Services Prospective Payment System (PPS) Guidance (Available at https://www.samhsa.gov/sites/default/files/grants/pdf/sm-16-001.pdf#page=94. Accessed July 26, 2019) and data from interviews with state Medicaid and behavioral health agency officials conducted by Mathematica and the RAND Corporation, February 2019.

NOTES:

a. As required in the CCBHC certification criteria.

b. All demonstration states except Oregon offered QBPs to CCBHCs.

Quality Bonus Payment (QBP) programs. QBP programs were optional for states that implemented PPS-1 and required for states that implemented PPS-2. CMS specified six quality measures that states were required to use if they implemented a QBP program; states could choose from among an additional five measures or ask for approval for use of non-listed measures (required and optional measures are listed in Table ES.2). All demonstration states except Oregon offered bonus payments based on CCBHCs' performance on quality measures. Pennsylvania, Missouri, New Jersey, and Oklahoma used only the six CMS-required measures to determine bonus payments. Minnesota, Nevada, and New York also used the CMS-optional measure for Plan All-Cause Readmission Rate (PCR-AD) in addition to the six CMS-required

measures. In addition to the six required measures, Minnesota also used the CMS-optional measure Screening for Clinical Depression and Follow-Up Plan (CDF-A) in determining QBPs, and New York added two state-specific measures based on state data regarding suicide attempts and deaths from suicide.

States varied in the criteria they used to award QBPs. In some states, CCBHCs could qualify for the QBP during DY1 simply by reporting the quality measures. Several states assessed performance on the quality measures during the first six months of the demonstration and used that information to set improvement goals for the remainder of DY1. Some states decided to weight some measures more heavily than others. As of Spring 2019, Missouri and Nevada had assessed CCBHC performance relative to the QBP program standards, and, in both states, all CCBHCs met the criteria. Officials from the other five states with QBPs reported that they were still receiving or analyzing data to finalize determinations of QBPs.

C. Future Evaluation Activities

In Summer 2020, we will update this report to include findings from the DY1 quality measures and DY2 cost reports. That report will provide updated information for the evaluation questions described in this report. In addition, we plan to address a number of additional evaluation questions related to changes in rates, costs, and cost components over time. We will also examine if states' changes to rates resulted in closer alignment with actual costs.

We are in the process of obtaining Medicaid claims and encounter data from states to examine the impacts of CCBHC services on hospitalization rates, emergency department service utilization, and ambulatory care relative to within-state comparison groups (Medicaid beneficiaries with similar diagnostic and demographic characteristics who did not receive care from CCBHCs). Depending on the availability of data within each state, we expect that the impact analyses will use approximately four years of Medicaid claims/encounter data (up to a two-year pre-demonstration period and a two-year post-implementation period). We will report these findings in our final report in May 2021, along with updated findings that draw on both years of CCBHC cost reports and quality measures.