Evaluation for Year 1 (SFY 2022) of Four New State Directed Payments: Preliminary Report

As Required by 42 CFR 438.6(c)

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Table of Contents

1. Background 3
Directed Payment Program (DPP) for Behavioral Health Services (BHS) 3
Comprehensive Hospital Increase Reimbursement Program (CHIRP) 4
Texas Incentives for Physicians and Professional Services (TIPPS) 6
Rural Access to Primary and Preventive Services Program (RAPPS) 7

2. Methodology 8
Evaluation Questions and Hypotheses 8
Evaluation Design 10
Evaluation Measures 15

3. Preliminary Results 20
Summary of Preliminary Baseline Results for DPP BHS-Specific Evaluation Measures by Medicaid Managed Care 21
DPP BHS-Specific Preliminary Baseline Results associated with Evaluation Question 1 22
DPP BHS-Specific Preliminary Baseline Results associated with Evaluation Question 4 23
Supplemental Analysis of DPP BHS Structure Measures 25

4. Limitations 30

5. Conclusion 32

6. Appendix 33
Appendix I: DPP BHS-Specific Evaluation Measures 33
Appendix II. DPP Evaluation Measures – Additional Information 34
Appendix III. Overview of Structure Measures 37
Appendix IV. List of Acronyms 38

1. Background

In early 2021, Texas Health & Human Services Commission (HHSC) submitted four new directed payment programs (DPPs) for approval by the Centers for Medicare and Medicaid Services (CMS). The "Evaluation Plan for Year 1 (State Fiscal Year 2022) of Four New State Directed Payments" (here on referred to as the Year 1 Evaluation Plan) outlined how HHSC will evaluate all four DPPs:

- Directed Payment Program for Behavioral Health Services (DPP BHS),
- Comprehensive Hospital Increase Reimbursement Program (CHIRP),
- Texas Incentives for Physicians and Professional Services (TIPPS), and
- Rural Access to Primary and Preventive Services Program (RAPPS).

As required by 42 CFR 438.6(c), approved DPPs must be evaluated to test whether the payment arrangement advances goals of the State's Medicaid Managed Care Quality Strategy. However, at the time of writing this preliminary evaluation report, only DPP BHS has been approved by CMS for Year 1; the remaining three DPPs (CHIRP, TIPPS, and RAPPS) are still pending CMS approval for Year 1. Therefore, the results presented in this preliminary evaluation report are preliminary baseline data for the first six months of calendar year (CY) 2021 for DPP BHS only. Pursuant to STC 35, the final evaluation report will include final evaluation baseline data for the full twelve months of CY 2021 for all four DPPs, pending CMS approval.

Directed Payment Program (DPP) for Behavioral Health Services (BHS)

As approved by CMS, DPP BHS is a program for Texas Medicaid-enrolled community mental health centers (CMHCs) serving adults and children enrolled in STAR, STAR+PLUS, and STAR Kids[1]. DPP BHS incentivizes the continuation of successful Delivery System Reform Incentive Payment (DSRIP) innovations that improve access to behavioral health services, care coordination, and care transitions and

[1] State of Texas Access Reform (STAR), STAR Kids, and STAR+PLUS are examples of Texas Medicaid medical managed care programs. STAR covers low-income children, pregnant women, and families. STAR Kids covers children and adults 20 and younger who have disabilities. STAR+PLUS covers people who have disabilities or are age 65 or older. https://hhs.texas.gov/services/health/medicaid-chip/

promotes the provision of services aligned with the Certified Community Behavioral Health Clinic (CCBHC) model of care to Medicaid clients.

Although all CMHCs are eligible to enroll in DPP BHS regardless of CCBHC certification status, the payment arrangements in DPP BHS are based on two CMHC provider classes in the program:

- CMHCs with CCBHC certification, and
- CMHCs without CCBHC certification.

There are two components in the DPP BHS program. Component 1 is a uniform dollar increase paid as monthly payments and requires semiannual submission of status updates on structure measures that promote progress toward CCBHC certification or maintenance of CCBHC status such as implementation of telehealth services, collaborative care, integrated physical and behavioral health services, and improved data exchange. Component 2 is a uniform percent increase for certain CCBHC services and requires semiannual submission of numeric data on process and outcome measures aligned with CCBHC measures and goals. As a condition of participation, all DPP BHS-participating CMHCs are required to report on all measures in all components.

Since DPP BHS has been approved by CMS for Year 1, the results presented in this preliminary evaluation report are preliminary baseline data for the first six months of CY 2021 for DPP BHS using data reported by participating DPP BHS CMHCs during the first semiannual reporting period. See ***Preliminary Results*** section for additional information.

Comprehensive Hospital Increase Reimbursement Program (CHIRP)

CHIRP is a program for Texas Medicaid hospitals serving adults and children enrolled in STAR and STAR+PLUS. The following six hospital provider classes are eligible to participate in CHIRP:

- children's hospitals,
- rural hospitals,
- state-owned non-Institutions of Mental Disease (IMD) hospitals,
- urban hospitals,

- non-state-owned IMD hospitals, and
- state-owned IMD hospitals

CHIRP is a new iteration of the Uniform Hospital Rate Increase Program (UHRIP). Redesigning the UHRIP program allows HHSC to monitor progress on focus areas identified in the DSRIP Transition Plan[2], which include:

- maternal health,
- behavioral health, and
- patient navigation, care coordination, and care transitions, especially for patients with high costs and high utilization.

There are two components in the CHIRP program. Component 1, known as UHRIP, provides a uniform rate enhancement to participating CHIRP hospitals, and Component 2, known as Average Commercial Incentive Award (ACIA), allows participating CHIRP hospitals to earn higher reimbursement rates based upon a percentage of the estimated average commercial reimbursement.

The UHRIP Component includes a mix of structure and outcome measures applicable to all participating CHIRP hospitals and requires semiannual reporting.

The ACIA Component is organized into six modules, which are groupings of measures based on hospital provider class; eligibility for each module is restricted to certain provider classes, as defined in program enrollment and historic volume and type of services provided. The six ACIA modules are: ACIA Maternal Care, ACIA Hospital Safety, ACIA Pediatric, ACIA Care Transitions, ACIA Psychiatric Care Transitions and ACIA Rural Hospital Best Practices. For example, eligibility for the "ACIA Maternal Care" module is limited to hospital provider classes of children's hospitals, state-owned hospitals that are not IMDs, and urban hospitals have more than 30 births that are covered by Medicaid Managed Care in a year. CHIRP hospitals opting into the ACIA Component must report on all ACIA modules for which their provider class type is eligible. Modules in the ACIA Component include a mix of structure, outcome, and process measures and require semiannual submission of status updates for the structure measures and numeric data for the outcome and process measures.

[2] hhs.texas.gov/sites/default/files/documents/laws-regulations/policies-rules/Waivers/medicaid-1115-waiver/dsrip-transition-plan.pdf

When hospitals apply to participate in CHIRP, hospitals opt into the ACIA Component. However, as a condition of participation, all CHIRP-participating hospitals must report on all required program measures in UHRIP and all measures in the modules for which they are eligible in the ACIA Component.

Since CHIRP has not been approved by CMS for Year 1, there are not any preliminary results for CHIRP in this preliminary evaluation report; the final evaluation report will include evaluation data for CHIRP, pending CMS approval.

Texas Incentives for Physicians and Professional Services (TIPPS)

TIPPS is a program for Texas Medicaid physician practice groups serving adults and children enrolled in STAR, STAR+PLUS, and STAR Kids. The following three physician practice group classes are eligible to participate in TIPPS:

- physician groups affiliated with a health-related institution (HRI) as defined by Section 63.002 of the Texas Education Code,
- physician groups affiliated with a hospital receiving the indirect medical education add-on (IME), and
- other physician groups that are not HRI or IME (Other).

There are three components in the TIPPS program, and HRI and IME physician practice groups are eligible for Components 1-3, while Other physician practice groups are eligible for Component 3 only.

Component 1 is a rate enhancement and requires semiannual submission of status updates on structure measures. Component 2 is a rate enhancement and requires semiannual submission of numeric data on process and outcome measures focused on primary care and chronic care. Component 3 is a rate enhancement for certain outpatient services and requires semiannual submission of numeric data on process and outcome measures focused on maternal health, chronic care, behavioral health, and social drivers of health. As a condition of participation, all TIPPS-participating physician practice groups are required to report on all measures in the components for which they are eligible.

Since TIPPS has not been approved by CMS for Year 1, there are not any preliminary results for TIPPS in this preliminary evaluation report; the final evaluation report will include evaluation data for TIPPS, pending CMS approval.

Rural Access to Primary and Preventive Services Program (RAPPS)

RAPPS is a program for Texas Medicaid rural health clinics (RHCs) serving adults and children enrolled in STAR, STAR+PLUS, and STAR Kids. RAPPS incentivizes the provision of primary care, preventive services, and chronic condition management for Medicaid clients in rural communities of the state.

The following two RHC provider classes are eligible to participate in RAPPS:

- hospital-based RHCs, which include non-state government owned and private RHCs, and
- free-standing RHCs.

There are two components in the RAPPS program. Component 1 is a uniform dollar increase paid as prospective, monthly payments and requires semiannual submission of status updates on structure measures that promote improved access to primary care and preventive services. Component 2 is a uniform percent rate increase for certain services and requires semiannual submission of numeric data on process and outcome measures focused on preventive care and screening and management of chronic conditions. As a condition of participation, all RAPPS-participating RHCs are required to report on all measures in all components.

Since RAPPS has not been approved by CMS for Year 1, there are not any preliminary results for RAPPS in this preliminary evaluation report; the final evaluation report will include evaluation data for RAPPS, pending CMS approval.

2. Methodology

Evaluation Questions and Hypotheses

The four DPPs (DPP BHS, CHIRP, TIPPS and RAPPS) were designed to help advance the following goals from the *September 2021 Texas Medicaid Quality Strategy*[3]:

1. **Promoting optimal health for Texans** at every stage of life through prevention and by engaging individuals, families, communities, and the healthcare system to address root causes of poor health
2. **Providing the right care in the right place at the right time** to ensure people can easily navigate the health system to receive timely services in the least intensive or restrictive setting appropriate
3. **Keeping patients free from harm** by building a safer healthcare system that limits human error
4. **Promoting effective practices for people with chronic, complex, and serious conditions** to improve people's quality of life and independence, reduce mortality rates, and better manage the leading drivers of health care costs
5. **Attracting and retaining high-performing Medicaid providers, including medical, behavioral health, dental, and long-term services and supports providers** to participate in team based, collaborative, and coordinated care

To evaluate the extent to which the DPPs helped advance these quality goals, **Table 1.** outlines the related Evaluation Questions and corresponding Evaluation Hypotheses.

Table 1. DPP Evaluation Questions and Evaluation Hypotheses

Evaluation Question	Evaluation Hypothesis
1. Did the DPPs promote optimal health for Medicaid managed care clients at every stage of life through prevention and by engaging individuals, families, communities,	**1.a.** The DPPs supported the practice of healthy behaviors to yield reduced rates of tobacco use, obesity, and substance use

[3] 2021 Texas Managed Care Quality Strategy

Evaluation Question	Evaluation Hypothesis
and the healthcare system to address root causes of poor health?	**1.b.** The DPPs improved access to routine and timely preventive and primary care **1.c.** The DPPs addressed social drivers of health **1.d.** The DPPs increased the rate of preconception, early prenatal, and postpartum care, and other preventive health utilization to reduce rates of infant and maternal morbidity and mortality
2. Did the DPPs provide the right care in the right place at the right time to ensure people can easily navigate the health system to receive timely services in the least intensive or restrictive setting appropriate?	**2.a.** The DPPs supported reductions in the rate of avoidable hospital admissions and readmissions **2.b.** The DPPs supported reduction in the rate of avoidable emergency department visits
3. Did the DPPs keep patients free from harm by building a safer healthcare system that limits human error?	**3.a.** The DPPs supported reductions in the rate of avoidable complications or adverse healthcare events in all care settings
4. Did the DPPs promote effective practices for people with chronic, complex, and serious conditions to improve people's quality of life and independence, reduce mortality rates, and better manage the leading drivers of health care costs?	**4.a.** The DPPs slowed the progression of chronic disease and improved management of complex conditions **4.b.** The DPPs supported reductions in the rate of avoidable hospital and emergency department visits for individuals with medical complexity, including with co-occurring behavioral health diagnoses **4.c.** The DPPs promoted effective medication management **4.d.** The DPPs increased prevention, identification, treatment, and management of behavioral and mental health **4.e.** The DPPs promoted earlier identification and successful treatment of substance use disorders including opioid use disorders
5. Did the DPPs attract and retain high-performing Medicaid providers, including medical, behavioral health, dental, and long-term services and supports providers to participate in team based, collaborative, and coordinated care?	**5.a.** The DPPs increased the number of individuals, particularly individuals with complex medical needs, served in integrated and/or accountable care models **5.b.** The DPPs supported reductions in the proportion of population reporting difficulties accessing care, including through telehealth

Evaluation Design

The evaluation relies on a one-group post-test only design to analyze consecutive observations of evaluation measures that test each Evaluation Hypothesis and ultimately aims to answer each Evaluation Question outlined in **Table 1**. Pending CMS approval of all four DPPs, the final evaluation report will include DPP-specific evaluation measures to isolate DPP-specific impacts over time as well as statewide evaluation measures to investigate meaningful statewide impacts over time.

To isolate DPP-specific impacts over time, HHSC will conduct analyses of the DPP provider-reported evaluation measures with measure types known as "process" and "outcome" measures. In this preliminary evaluation report, only program-specific preliminary baseline data for DPP BHS process and outcome measures are presented for the first six months of CY 2021 as reported by participating DPP BHS CMHCs during the first semiannual reporting period (see ***Evaluation Measures*** and ***Appendix I.*** for additional information on the DPP BHS program-specific evaluation measures). In the final evaluation report, HHSC will conduct primary analyses of all process and outcome measures and present preliminary baseline data for all four DPPs, pending CMS approval.

In addition to isolating DPP-specific impacts, HHSC will investigate meaningful statewide impacts over time, by analyzing statewide evaluation measures reported by the Texas Medicaid External Quality Review Organization (EQRO). These statewide evaluation measures will not necessarily be attributable to the DPP participating providers only; however, these statewide data will offer HHSC further insight into the impact of the DPPs on key statewide indicators that cannot be evaluated using provider-reported evaluation data alone. For example, multiple delivery system-level factors and provider types beyond those provider types participating in the DPPs contribute to the successful prevention of avoidable hospital events and other adverse events. By analyzing statewide data, HHSC can explore whether the DPPs alongside other statewide initiatives were associated with reductions in the rate of avoidable hospital events (e.g., **Evaluation Hypotheses 2.a., 2.b., and 3.a.** related to **Evaluation Question 2.**: *Providing the right care in the right place at the right time to ensure people can easily navigate the health system to receive timely services in the least intensive or restrictive setting appropriate*). Due to the timing of data availability from the EQRO for the statewide evaluation measures, this preliminary evaluation report does not include any preliminary statewide data from the EQRO; HHSC will include statewide evaluation data from the EQRO in the final evaluation report (see ***Evaluation Data***

Measurement Periods and Anticipated Timing of Data Availability section for additional information on the timing of statewide evaluation measures data).

Furthermore, as possible, HHSC may conduct supplemental analyses of the DPP provider-reported evaluation measures with measure types known as "structure" measures.[4] In the final evaluation report, HHSC aims to investigate the extent to which associations exist between provider performance on process and outcome measures and those providers who implemented certain structure measures as part of DPP participation (i.e., exploring whether DPP participation influences provider implementation of certain structure measures and whether such implementation is associated with higher performance on evaluation measures).

Lastly, as required in the preprint, 44.b. Table 8. and described in the Year 1 Evaluation Plan, HHSC will establish final Year 2 (SFY 2023) evaluation performance targets for each DPP after the evaluation baseline data are known for the full 12 months of calendar year (CY) 2021 data. Since only DPP BHS has been approved by CMS and since the available DPP BHS baseline data are only preliminary for the first six months of CY 2021, final Year 2 evaluation performance targets are not yet established.[5]

Evaluation Data Measurement Periods and Anticipated Timing of Data Availability

The Year 1 evaluation data measurement period is twelve months of CY 2021 (e.g., January 1, 2021 through December 31, 2021). Due to the timing of provider-reported data[6], in this preliminary evaluation report, the available DPP BHS

[4] "Structure Measure", "Process Measure", and "Outcome Measure" are measure type classifications used in health care quality measurement. "Structure Measures" are a type of measure that helps provide a sense of a health care organization's capacity, infrastructure, and strategy for delivering evidence-based best practices for high quality care. "Process Measures" are a type of measure that helps indicate what a health care organization does to maintain or improve health, often reflecting generally accepted recommendations for clinical practice. "Outcome Measures" are a type of measure that helps reflect the impact of the health care service or intervention on the health status of patients. https://www.ahrq.gov/talkingquality/measures/types.html

[5] HHSC has proposed preliminary Year 2 evaluation performance targets only for the 6 total DPP BHS program-specific evaluation measures based on six months of CY 2021 data as outlined in the "Evaluation Plan for Year 2 (State Fiscal Year 2023) of Four State Directed Payments".

[6] For DPP-specific evaluation measures using provider-reported data, there are two semiannual reporting periods. During the first semiannual reporting period, the required data measurement period is the first six months of CY 2021 (e.g., January 1, 2021 through June 30, 2021), and during the second semiannual reporting period, the required data measurement period is the full twelve months of CY 2021.

provider-reported data only includes the preliminary baseline data for the first six months of CY 2021 as reported during the first semiannual reporting period for DPP BHS (December 2021); final baseline data for DPP BHS will not be available until after the second semiannual reporting period for DPP BHS (tentatively scheduled for April 2022). In the final evaluation report, final provider-reported baseline data for all four DPPs, pending CMS approval, will be presented.

For statewide evaluation measures using EQRO-reported data, the full 12 months of CY 2021 will not be available until October 2022. Due to the timing of EQRO-reported data, this preliminary evaluation report does not include any results on statewide evaluation measures. In the final evaluation report, final EQRO-reported baseline data will be presented.

Evaluation Population

For all four DPPs, providers will report data stratified by the Medicaid managed care payer type. For the DPP BHS, TIPPS, and RAPPS programs, the Medicaid managed care evaluation population includes adults and children in the STAR, STAR+PLUS, and STAR Kids Medicaid managed care programs. For CHIRP, the Medicaid managed care evaluation population includes adults and children in the STAR and STAR+PLUS Medicaid managed care programs.

In Year 1 only, as discussed and agreed to by CMS, HHSC will allow providers without systems in place to stratify by Medicaid managed care (inclusive of the respective Medicaid managed care programs outlined above) instead to stratify data by Medicaid (inclusive of all Medicaid managed care and fee-for-service). However, in subsequent program years, HHSC will require data stratification by the Medicaid managed care payer type as outlined above.

Evaluation Data Sources

The evaluation relies on two data sources: DPP provider-reported data and EQRO data. In this preliminary evaluation report, only program-specific preliminary baseline data for DPP BHS process and outcome measures are presented, which relies on DPP BHS provider-reported data sources. In the final evaluation report, the program-specific final baseline data for all the process and outcome measures across DPPs, pending CMS approval, will be included, which will rely on DPP provider-reported data sources. The final evaluation report will also include the statewide evaluation measures, which will rely on the EQRO data source.

Examples of data sources for DPP provider-reported data include:

- **Electronic Health Record (EHR).** The DPP provider organization's system for electronically documenting the patient clinical record, including diagnosis, procedure or service, lab and test results, social history, and other qualitative clinician notes.
- **Other administrative data files.** Any other administrative data files such as billing data or patient surveys with patient information documented by the provider.

Examples of data sources for EQRO data include:

- **Medicaid claims files.** Medicaid claims data contain encounter, procedure, diagnosis, and place of service codes and other member-level information necessary to calculate evaluation measures.
- **Medicaid enrollment files.** Medicaid enrollment data contain member-level demographic information, such as age, sex, ethnicity, race, preferred language, and county of residence, managed care program, and length of Medicaid enrollment.
- **Consumer Assessment of Healthcare Providers and Systems (CAHPS®) surveys.** CAHPS® survey data are collected through sampling (rather than collected on each member) and contain information about member experience receiving care through their health plan.

The data source determines the level of data analysis HHSC can perform. For evaluation measures relying on DPP provider-reported data, the unit of analysis is the participating DPP provider. Therefore, for DPP provider-reported measures, HHSC performs analyses in which the evaluation population is the Texas Medicaid managed care clients served by the DPP providers during the evaluation measurement period. Alternatively, for evaluation measures relying on the EQRO, the unit of analysis is the Medicaid member (rather than the participating DPP provider). Therefore, for EQRO measures, HHSC performs analyses in which the evaluation population is all Medicaid managed care members, including those members who may not have had an encounter with a participating DPP provider during the evaluation measurement period.

Analytic Methods

The evaluation mainly uses descriptive trend analyses (DTAs) to determine improvements in DPP evaluation measures over time. A DTA plots and analyzes time-series data calculated at equally spaced intervals to explain patterns in

selected evaluation measures over time. A DTA typically focuses on identification and quantification of a trend using correlation coefficients or ordinary least squares regression, if feasible.

Additionally, the evaluation may make use of descriptive statistics, such as estimates of central tendency and dispersion, to describe performance on evaluation measures during the evaluation measurement period. To strengthen the DTA and other descriptive statistics, the evaluation may also leverage benchmarks and subgroup analyses, where feasible, to help substantiate and contextualize observed trends.

Furthermore, the evaluation may employ tobit regression analysis to investigate whether DPP providers who implemented certain structure measures have higher performance on the evaluation measures. A tobit regression is used when the dependent variable is limited in range (e.g., between 0 and 1 or between -1 and 0), so a series of tobit regression models may be used to examine the association between implementation of structure measures and DPP provider performance on process and outcome measures. Specifically, each evaluation measure (one per model) would be regressed on a vector of control variables and a series of dummy variables representing structure measures implemented by the provider. The basic equation for these models is: $Y = \beta_0 + \beta_1 control\ variables + \beta_2 structure1 + \cdots + \beta_n structureN + \varepsilon$.

Evaluation Measures

Pending CMS approval of all four DPPs, the final evaluation report will use a total of 44 evaluation measures collectively across the four DPPs to test each Evaluation Hypothesis and ultimately answer each Evaluation Question related to the 2021 Texas Medicaid Quality Strategy. Of the 44 total evaluation measures, 34 measures isolate DPP-specific impacts over time and 10 measures investigate meaningful statewide impacts over time.

Evaluation Measures isolating DPP-specific Impacts

To isolate DPP-specific impacts over time, **Table 2.** provides an overview of the 34 DPP-specific evaluation measures, including the evaluation questions, corresponding evaluation hypotheses, the evaluation measure names, and applicable DPP(s).

In this preliminary evaluation report, only DPP BHS-specific preliminary baseline data for DPP BHS process and outcome measures are available. These 6 total DPP BHS-specific evaluation measures test the Evaluation Questions and Evaluation Hypotheses associated specifically with DPP BHS and only isolate DPP BHS program-specific impacts (DPP BHS-specific evaluation hypotheses and measures are bolded in **Table 2.**).

Table 2. Overview of Evaluation Measures Isolating DPP-specific Impacts

Evaluation Hypothesis	Evaluation Measure Name	DPPs Using Measure			
		DPP BHS	CHIRP	TIPPS	RAPPS
Evaluation Question 1. Did the DPPs promote optimal health for Medicaid managed care clients at every stage of life through prevention and by engaging individuals, families, communities, and the healthcare system to address root causes of poor health?					
1.a. DPP BHS, TIPPS, and CHIRP supported the practice of healthy behaviors to yield reduced rates of tobacco use, obesity, and substance use	**Preventive Care and Screening: Unhealthy Alcohol Use: Screening and Brief Counseling**	**X***			
	Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up	**X***			
	Tobacco Use and Help with Quitting Among Adolescents			X	

Evaluation Hypothesis	Evaluation Measure Name	DPPs Using Measure			
		DPP BHS	CHIRP	TIPPS	RAPPS
	Weight Assessment and Counseling for Nutrition and Physical Activity for Children/ Adolescents			X	
	Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention		X	X	
1.b. CHIRP, TIPPS and RAPPS improved access to routine and timely preventive and primary care	Cervical Cancer Screening			X	
	Childhood Immunization Status (CIS)			X	
	Chlamydia Screening in Women (CHL)			X	
	Immunizations for Adolescents (IMA)			X	
	Preventive Care and Screening: Influenza Immunization		X	X	X
1.c. TIPPS addressed social drivers of health	Food Insecurity Screening			X	
1.d. TIPPS increased the rate of preconception, early prenatal, and postpartum care, and other preventive health utilization to reduce rates of infant and maternal morbidity and mortality	Behavioral Health Risk Assessment for Pregnant Women			X	
	Maternity Care: Post-Partum Follow-Up and Care Coordination			X	
Evaluation Question 3. Did the DPPs keep patients free from harm by building a safer healthcare system that limits human error?					
3.a. CHIRP supported reductions in the rate of avoidable complications or adverse healthcare events in all care settings	Catheter-Associated Urinary Tract Infection (CAUTI) Outcome Measure		X		
	Central Line Associated Bloodstream Infection (CLABSI) Outcome Measure		X		
	Facility-wide Inpatient Hospital-onset Clostridium difficile Infection (CDI) Outcome Measure		X		
	Harmonized Procedure Specific Surgical Site Infection (SSI) Outcome Measure		X		
	PC-02 Cesarean Section		X		
	Pediatric Adverse Drug Events		X		
	Pediatric CAUTI		X		
	Pediatric CLABSI		X		
	Pediatric SSI		X		

Evaluation Hypothesis	Evaluation Measure Name	DPPs Using Measure			
		DPP BHS	CHIRP	TIPPS	RAPPS
	Pregnancy-Associated Outcome Measure: Severe Maternal Morbidity (SMM)		X		
Evaluation Question 4. Did the DPPs promote effective practices for people with chronic, complex, and serious conditions to improve people's quality of life and independence, reduce mortality rates, and better manage the leading drivers of health care costs?					
4.a. TIPPS and RAPPS slowed the progression of chronic disease and improved management of complex conditions	Controlling High Blood Pressure (CBP)			X	
	Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Testing			X	
	Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Poor Control (>9%)			X	X
4.b. DPP BHS supported reductions in the rate of avoidable hospital and emergency department visits for individuals with medical complexity, including with co-occurring behavioral health diagnoses	**Follow-Up After Hospitalization for Mental Illness 7-Day (discharges from state hospital)**	**X***			
	Follow-Up After Hospitalization for Mental Illness 30-Day (discharges from state hospital)	**X***			
4.c. CHIRP promoted effective medication management	Medication Reconciliation: Number of Unintentional Medication Discrepancies per Patient		X		
4.d. DPP BHS and TIPPS increased prevention, identification, treatment, and management of behavioral and mental health conditions	**Adult Major Depressive Disorder (MDD): Suicide Risk Assessment**	**X***			
	Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment	**X***			
	Depression Response at Twelve Months			X	
	Preventive Care and Screening: Screening for Depression and Follow-Up Plan			X	
Evaluation Question 5. Did the DPPs attract and retain high-performing Medicaid providers, including medical, behavioral health, dental, and long-term services and supports providers to participate in team based, collaborative, and coordinated care?					
5a. CHIRP increased the number of individuals, particularly individuals with complex medical needs, served	Engagement in Integrated Behavioral Health		X		

Evaluation Hypothesis	Evaluation Measure Name	DPPs Using Measure			
		DPP BHS	CHIRP	TIPPS	RAPPS
in integrated and/or accountable care models					

*These measures are included in DPP BHS and were used to isolate DPP BHS program-specific impacts in this preliminary evaluation.

Evaluation Measures investigating Statewide Impacts

To investigate meaningful statewide impacts over time, **Table 3.** provides an overview of the 10 statewide evaluation measures, including the evaluation questions, corresponding evaluation hypotheses, and evaluation measure names.

As described in the ***Evaluation Data Measurement Periods and Anticipated Timing of Data Availability*** section, due to the timing of data availability for the 10 total statewide evaluation measures, this preliminary report does not include any results on statewide impacts.

Table 3. Overview of Evaluation Measures Investigating Statewide Impacts

Evaluation Hypothesis	Evaluation Measure Name
Evaluation Question 2. Did the DPPs provide the right care in the right place at the right time to ensure people can easily navigate the health system to receive timely services in the least intensive or restrictive setting appropriate?	
2.a. The DPPs supported reductions in the rate of avoidable hospital admissions and readmissions	Potentially Preventable Admissions (PPA)
	Potentially Preventable Readmissions (PPR)
2.b. The DPPs supported reductions in the rate of avoidable emergency department visits	Potentially Preventable Emergency Department Visits (PPV)
	Ambulatory Care: Emergency Department (ED) Visits (AMB-CH)
Evaluation Question 3. Did the DPPs keep patients free from harm by building a safer healthcare system that limits human error?	
3.a. The DPPs supported reductions in the rate of avoidable complications or adverse healthcare events in all care settings	Potentially Preventable Complications (PPC)
Evaluation Question 4. Did the DPPs promote effective practices for people with chronic, complex, and serious conditions to improve people's quality of life and independence, reduce mortality rates, and better manage the leading drivers of health care costs?	
4.b. The DPPs supported reductions in the rate of avoidable hospital and emergency department visits for	Follow-up After Emergency Department (ED) Visits for Mental Illness (FUM)

Evaluation Hypothesis	Evaluation Measure Name
individuals with medical complexity, including with co-occurring behavioral health diagnoses	
4.c. The DPPs promoted effective medication management	Antidepressant Medication Management (AMM)
4.e. The DPPs promoted earlier identification and successful treatment of substance use disorders including opioid use disorders	Initiation and Engagement of Alcohol and other Drug Abuse or Dependence Treatment (IET)
Evaluation Question 5. Did the DPPs attract and retain high-performing Medicaid providers, including medical, behavioral health, dental, and long-term services and supports providers to participate in team based, collaborative, and coordinated care?	
5.b. The DPPs supported reductions in the proportion of population reporting difficulties accessing care, including through telehealth	Getting Care Quickly
	Getting Needed Care

3. Preliminary Results

The following results represent preliminary baseline data for DPP BHS-specific evaluation measures for the first six months of CY 2021, as reported by participating DPP BHS CMHCs during the first DPP BHS semiannual reporting period. The final evaluation report will include final evaluation baseline data for the full twelve months of CY 2021 for all four DPPs, pending CMS approval.

As described in the ***Evaluation Population*** section above, in Year 1 only, HHSC is allowing DPP BHS CMHCs without systems in place to stratify data by Medicaid managed care instead to stratify data by all Medicaid (inclusive of Medicaid managed care and fee-for-service). As shown in **Table 4.**, depending on the DPP BHS evaluation measure, between 51% and 59% of DPP BHS CMHCs were able to report required data by Medicaid managed care during the first semiannual reporting period of Year 1, which means that a little less than half of the DPP BHS CMHCs were unable to report DPP BHS-specific evaluation measures stratified by Medicaid managed care (see ***Limitations*** section for additional information).

Table 4: Total DPP BHS CMHCs reporting Evaluation Measures by Medicaid Managed Care (MMC) versus Medicaid

DPP BHS Evaluation Measure Name	Total CMHCs Reporting	Total CMHCs Reporting by MMC (%)	Total CMHCs reporting by Medicaid (%)
Preventive Care and Screening: Unhealthy Alcohol Use: Screening and Brief Counseling	37*	21 (57%)	16 (43%)
Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up	39	20 (51%)	19 (49%)
Follow-Up After Hospitalization for Mental Illness 7-Day (discharges from state hospital)	39	23 (59%)	16 (41%)
Follow-Up After Hospitalization for Mental Illness 30-Day (discharges from state hospital)	39	23 (59%)	16 (41%)
Adult Major Depressive Disorder (MDD): Suicide Risk Assessment	39	22 (56%)	17 (44%)
Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment	39	22 (56%)	17 (44%)

**Note that, while all 39 providers reported on all measures, two providers indicated there may be some issues with the data reported for the Preventative Care and Screening: Unhealthy Alcohol Use: Screening and Brief Counseling measure. Consequently, the data for these two providers has been removed from all analyses of this measure, and the providers are being contacted to assure their ability to correctly collect data for this measure in future reporting periods.*

Summary of Preliminary Baseline Results for DPP BHS-Specific Evaluation Measures by Medicaid Managed Care

There are 6 total DPP BHS-specific evaluation measures used to isolate DPP BHS-specific impacts (DPP BHS-specific evaluation measures were identified in **Table 2.**, and additional information on the DPP BHS-specific evaluation measures, such as measure descriptions and measure type, can be found in ***Appendix I***).

A summary of preliminary baseline results for the 6 total DPP BHS-specific evaluation measures are shown in **Table 5.**, including the total number of CMHCs reporting each evaluation measure by Medicaid managed care and the resulting median rate, mean rate, minimum rate, maximum rate, and standard deviation for each evaluation measure at baseline. In addition to the summary in **Table 5.**, the preliminary results are further described and explained for each individual measure in the subsections below.

Table 5: Summary of Preliminary Baseline Results for DPP BHS-Specific Evaluation Measures by Medicaid Managed Care (Evaluation Measurement Period of January – June 2021)

DPP BHS Evaluation Measure Name	Total CMHCs Reporting by MMC (%)	Median	Mean	Min	Max	Std Dev
Preventive Care and Screening: Unhealthy Alcohol Use: Screening and Brief Counseling	21 (57%)	0.6481	0.5249	0.0000	1.0000	0.4097
Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up	20 (51%)	0.6394	0.5290	0.0000	1.0000	0.3656
Follow-Up After Hospitalization for Mental Illness 7-Day (discharges from state hospital)	23 (59%)	0.6000	0.4923	0.0000	1.0000	0.4689

DPP BHS Evaluation Measure Name	Total CMHCs Reporting by MMC (%)	Median	Mean	Min	Max	Std Dev
Follow-Up After Hospitalization for Mental Illness 30-Day (discharges from state hospital)	23 (59%)	0.6667	0.5293	0.0000	1.0000	0.4854
Adult Major Depressive Disorder (MDD): Suicide Risk Assessment	22 (56%)	0.8424	0.7242	0.0833	1.0000	0.2930
Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment	22 (56%)	0.7327	0.6059	0.0209	0.9902	0.3467

DPP BHS-Specific Preliminary Baseline Results associated with Evaluation Question 1

As described earlier in **Table 2.**, **Evaluation Question 1.** (Did the DPPs promote optimal health for Medicaid managed care clients at every stage of life through prevention and by engaging individuals, families, communities, and the healthcare system to address root causes of poor health?) and **Evaluation Hypothesis 1.a.** (DPP BHS supported the practice of healthy behaviors to yield reduced rates of tobacco use, obesity, and substance use) will be evaluated using data from two DPP BHS program-specific evaluation measures:

- The Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-up
- Preventive Care and Screening: Unhealthy Alcohol Use: Screening and Brief Counseling.

Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-up

As shown in **Table 5.**, based on preliminary DPP BHS provider-reported data for the first six months of CY 2021, the preliminary baseline rate (median) for Medicaid managed care clients (includes STAR, STAR+PLUS, and STAR Kids) for this measure is 0.6394, with a range of 0.0000 and 1.0000. This means among the CMHCs that reported this measure by Medicaid managed care in the first six months of CY

2021, half of the CMHCs reported that greater than 64% of clients who received a primary care service in the first six months of CY 2021 had a BMI screening documented.

Preventive Care and Screening: Unhealthy Alcohol Use: Screening and Brief Counseling

As shown in **Table 5.**, based on preliminary DPP BHS provider-reported data for the first six months of CY 2021, the preliminary baseline rate (median) for Medicaid managed care clients (includes STAR, STAR+PLUS, and STAR Kids) for this measure is 0.6481, with a range of 0.0000 and 1.0000. This means among the CMHCs that reported this measure by Medicaid managed care in the first six months of CY 2021, half of the CMHCs reported that greater than 65% of clients who were screened for unhealthy alcohol use had received brief counseling if identified as an unhealthy alcohol user.

DPP BHS-Specific Preliminary Baseline Results associated with Evaluation Question 4

As described earlier in **Table 2.**, **Evaluation Question 4.** (Did the DPPs promote effective practices for people with chronic, complex, and serious conditions to improve people's quality of life and independence, reduce mortality rates, and better manage the leading drivers of health care costs?) will be evaluated using data from four DPP BHS program-specific evaluation measures, two measures tied to **Evaluation Hypotheses 4.b.** (DPP BHS supported reductions in the rate of avoidable hospital and emergency department visits for individuals with medical complexity, including with co-occurring behavioral health diagnoses) and two measures tied to **4.d.** (DPP BHS increased prevention, identification, treatment, and management of behavioral and mental health conditions):

- Follow-Up After Hospitalization for Mental Illness 7-Day (discharges from state hospital)
- Follow-Up After Hospitalization for Mental Illness 30-Day (discharges from state hospital)
- Adult Major Depressive Disorder (MDD): Suicide Risk Assessment

- Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment

Follow-Up After Hospitalization for Mental Illness 7-Day (discharges from state hospital)

As is shown in **Table 5.**, based on preliminary DPP BHS provider-reported data for the first six months of CY 2021, the preliminary baseline rate (median) for Medicaid managed care clients (includes STAR, STAR+PLUS, and STAR Kids) for this measure is 0.6000, with a range of 0.0000 and 1.0000. This means among the CMHCs that reported this measure by Medicaid managed care in the first six months of CY 2021, half of the CMHCs reported that greater than 60% of hospital discharges for clients who were treated for selected mental illness or intentional self-harm diagnoses had a follow-up visit with a mental health practitioner within 7 days after discharge.

Follow-Up After Hospitalization for Mental Illness 30-Day (discharges from state hospital)

As is shown in **Table 5.**, based on preliminary DPP BHS provider-reported data for the first six months of CY 2021, the preliminary baseline rate (median) for Medicaid managed care clients (includes STAR, STAR+PLUS, and STAR Kids) for this measure is 0.6667, with a range of 0.0000 and 1.0000. This means among the CMHCs that reported this measure by Medicaid managed care in the first six months of CY 2021, half of the CMHCs reported that greater than 67% of hospital discharges for clients who were treated for selected mental illness or intentional self-harm diagnoses had a follow-up visit with a mental health practitioner within 30 days after discharge.

Adult Major Depressive Disorder (MDD): Suicide Risk Assessment

As is shown in **Table 5.**, based on preliminary DPP BHS provider-reported data for the first six months of CY 2021, the preliminary baseline rate (median) for Medicaid managed care clients (includes STAR, STAR+PLUS, and STAR Kids) for this measure is 0.8424, with a range of 0.0833 and 1.0000. This means among the CMHCs that reported this measure by Medicaid managed care in the first six months of CY 2021, half of the CMHCs reported that greater than 84% of all visits with a new or recurrent diagnosis of MDD had a suicide risk assessment completed during the visit for patients age 18 years or older.

Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment

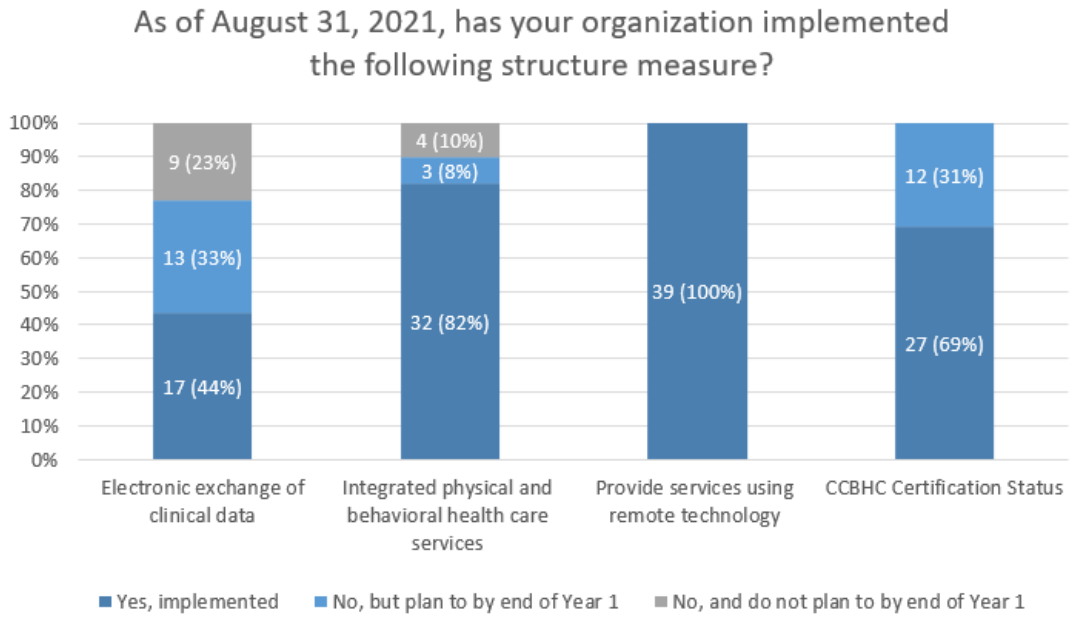
As is shown in **Table 5.**, based on preliminary DPP BHS provider-reported data for the first six months of CY 2021, the preliminary baseline rate (median) for Medicaid managed care clients (includes STAR, STAR+PLUS, and STAR Kids) for this measure is 0.7327, with a range of 0.0209 and 0.9902. This means among the CMHCs that reported this measure by Medicaid managed care in the first six months of CY 2021, half of the CMHCs reported that greater than 73% of all visits with a new diagnosis of MDD had a suicide risk assessment completed during the visit for patients age 6 through 17 years.

Supplemental Analysis of DPP BHS Structure Measures

As described in the ***Evaluation Design*** section, the evaluation primarily analyzes DPP-specific evaluation measures known as process and outcome measures to isolate DPP-specific impacts over time. However, as possible, supplemental analyses will also be conducted of the DPP provider-reported data known as structure measures. A preliminary overview (see **Table 6** and **Table 7**) of supplemental analyses of DPP BHS-specific structure measures is included in this preliminary evaluation report.

Table 6. presents a high-level summary of the implementation status for the DPP BHS structure measures as reported by DPP BHS CMHCs during the first semiannual reporting period. For each DPP BHS structure measure, all 39 providers were asked whether they had implemented the structure measure prior to the start of Year 1, had not yet implemented the structure measure but planned to by the end of Year 1, or had not implemented the structure measure and did not plan to by the end of Year 1.

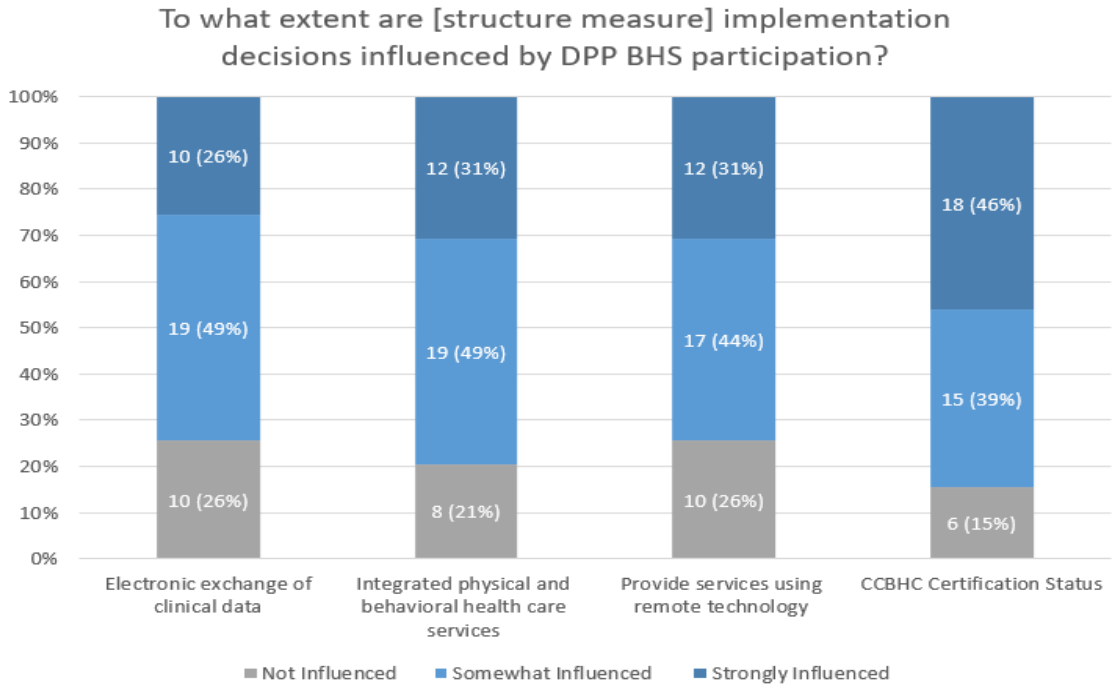
Table 6: Preliminary Supplemental Analysis of DPP BHS Structure Measures: Implementation Status



Note. The data shown in this table reflect the number of providers who selected each answer choice for each measure and the corresponding percent. Percentages shown in the table are determined by dividing the number of providers who selected each answer choice for each measure by the total number of providers who reported for each measure (39 providers).

Table 7. presents a high-level summary of the extent to which participating in DPP BHS influenced decisions to implement the DPP BHS structure measures. For each structure measure, all 39 providers were asked whether participation in DPP BHS had not influenced, somewhat influenced, or strongly influenced decisions to implement a structure measure.

Table 7: Preliminary Supplemental Analysis of DPP BHS Structure Measures: DPP Participation Influence on Implementation Decisions



Note. The data shown in this table reflect the number of providers who selected each answer choice for each measure and the corresponding percent. Percentages shown in the table are determined by dividing the number of providers who selected each answer choice for each measure by the total number of providers who reported for each measure (39 providers). Percentages may not total to 100 due to rounding.

Participate in Electronic Exchange of Clinical Data with other Healthcare Providers/ Entities

As shown in **Table 6.**, 17 (44%) providers stated their organization does participate in electronic exchange of clinic data with other healthcare providers/entities by connecting via public HIEs, while 22 (56%) indicated that they did not participate in electronic exchanges of clinical data during the first six months of CY 2021. Of the 22 providers that indicated that they did not participate in electronic exchange of clinic data, 13 (59%) stated that they plan to by August 31, 2022. For providers that stated that they did not participate in electronic exchange of clinic data and did not plan to by the deadline, common barriers to implementation included an absence of HIE availability in their geographic area, a lack of network connections that utilize a HIE, and issues with data sharing in their current systems. Several of these providers indicated that they are working towards

connecting to a public HIE, but due to the above barriers would not be able to implement this measure by the August 2022 deadline.

When asked what level of influence participation in DPP BHS had on their organization's decision to participate in electronic exchange of clinic data, 29 (74%) providers indicated that participation in DPP BHS had somewhat or strongly influenced their decision (see **Table 7.**). One provider indicated that their participation in electronic data exchange with external organizations is "influenced by [DPP BHS] and CCBHC as the programs focus on promoting and improving access to services as well as successful transitions between provider organizations".

Provide integrated physical and behavioral health care services to children and adults with serious mental illness

As shown in **Table 6.**, 32 (82%) providers stated that their organization provides integrated physical and behavioral health care services for either children with serious emotional disturbance or adults with serious mental illness, while 7 (18%) providers indicated that they did not provide these services to children and adults with serious mental illness during the first six month of CY 2021. Of the 7 providers that indicated that they did not provide the above services, 3 (43%) stated that they plan to by August 31, 2022. For providers that stated that they did not offer integrated physical and behavioral health services and did not plan to by the deadline, the most common barrier to implementation was the associated cost of adding these services.

When asked what level of influence participation in DPP BHS had on their organization's decision to provide integrated physical and behavioral health care services to children and adults with serious mental illness, 31 (79%) providers indicated that participation in DPP BHS had somewhat or strongly influenced their decision (see **Table 7.**). When asked for additional comments, a DPP BHS provider stated that their "commitment to the CCBHC model of care, which is supported by [their] participation in DPP BHS, created opportunities to continue improvement of integrated physical and behavioral health care services" which they would have been unable to sustain without funding.

Provide patients with services by using remote technology including audio/video, client portals and apps for the provision of services such as telehealth, assessment collection and remote health monitoring/ screening

As shown in **Table 6.**, 39 (100%) providers stated that their organization has services using remote technology including any of the following services (audio/video, client portals and apps, telehealth, remote health monitoring/screening). The most commonly reported remote technology used was telehealth for patient appointments using audio and video. Telehealth was implemented for a range of services including medication management, outpatient psychiatric care and jail diversion services.

When asked what level of influence participation in DPP BHS had on their organization's decision to provide patients with services by using remote technology, 29 (74%) providers indicated that participation in DPP BHS had somewhat or strongly influenced their decision (see **Table 7.**). One participating provider indicated that "in anticipation of DPP BHS, [we] increased focus on access to quality care through remote technology".

Certified Community Behavioral Health Clinic (CCBHC) Certification Status

As shown in **Table 6.**, 27 (69%) providers indicated that their organization is recognized as a CCBHC while 12 (31%) providers indicated that their organization had not received this certification during the first six month of CY 2021. Of the 12 providers that indicated that their organization had not received a CCBHC certification, 12 (100%) stated that they plan to achieve this status by August 31, 2022. Additionally, all 39 (100%) providers indicated that their organization planned to maintain certification after their initial certification expires.

When asked what level of influence participation in DPP BHS had on their organization's decision to receive CCBHC certification status, 33 (85%) providers indicated that participation in DPP BHS had somewhat or strongly influenced their decision (see **Table 7.**). When asked for additional comments, a DPP BHS provider indicated that their "ability to maintain CCBHC Certification will hinge on the ability to maintain open access which, in turn, depends on [DPP BHS]".

4. Limitations

The results included in this preliminary evaluation report should be interpreted alongside the following limitations and considerations. First and foremost, at the time of writing this preliminary evaluation report, only DPP BHS has been approved by CMS for Year 1; the remaining three DPPs (CHIRP, TIPPS, and RAPPS) are still pending CMS approval for Year 1. In this preliminary evaluation report, the results presented are preliminary baseline data only for DPP BHS using data reported by participating DPP BHS CMHCs during the first semiannual reporting period for the first six months of CY 2021. The final evaluation report will include final evaluation baseline data for the 12 months of CY 2021 and investigate all of the Evaluation Questions and Evaluation Hypotheses associated with all four DPPs, pending CMS approval.

Additionally, as noted in the ***Evaluation Population*** section, in Year 1 only, HHSC is allowing providers without systems in place to stratify data by Medicaid managed care instead to stratify instead by Medicaid (inclusive of Medicaid managed care and Medicaid fee-for-service). In this preliminary evaluation report, the preliminary baseline results for DPP BHS were presented using Medicaid managed care rates. However, as described in the ***Results*** section, depending on the DPP BHS evaluation measure, only 51%-59% of DPP BHS CMHCs were able to report required data by Medicaid managed care during the first semiannual reporting period of Year 1, which means that a little less than half of the DPP BHS CMHCs were unable to report DPP BHS-specific evaluation measures by Medicaid managed care. The DPP BHS CMHCs who were unable to stratify by Medicaid managed care overwhelmingly stated their current data systems are not set up to stratify the required data by Medicaid managed care, but they are working internally and with their vendors to update their systems to stratify by Medicaid managed care. For example, one CMHC stated, "Provider's electronic health record was not able to capture the payor source. The provider has since converted to a new electronic health record where we are capturing Medicaid Managed Care payor levels. Provider is prepared to report by Medicaid Managed Care in subsequent reporting years." Based on supplemental provider qualitative responses, it is expected that a higher percentage of CMHCs will be able to stratify required data by Medicaid managed care during the next semiannual reporting period of Year 1 or by Year 2.

Moreover, a consideration to note is how the DPP BHS program year and the evaluation measurement period operate on different, yet overlapping, timeframes.

For example, the first program implementation year of DPP BHS is state fiscal year 2022 (September 1, 2021 through August 31, 2022), while the Year 1 evaluation measurement period is the 2021 CY (January 1, 2021 through December 31, 2021). In other words, although CMS approved DPP BHS on November 15, 2021 for a retroactive program implementation beginning September 1, 2021 through August 31, 2022, the Year 1 evaluation uses a measurement period of January 1, 2021 through December 31, 2021 to align with measurement timeframes used by the participating providers and the EQRO, who are the data sources for the evaluation measures.

Furthermore, DPP BHS is being implemented amidst the ongoing uncertainty of the COVID-19 public health emergency (PHE). Since March 2020, the PHE has shifted priorities and operations for Medicaid providers and managed care organizations in the state and impacted Medicaid managed care clients. HHSC anticipates the PHE will have significant direct and indirect impacts on the evaluation measures. At the time of writing this preliminary evaluation report, it is still unknown when the PHE will end and what the lasting effects of the PHE will be on health care delivery systems. Within the appropriate context of the PHE, this preliminary evaluation report presents pertinent results as possible.

Lastly, the preliminary baseline results included in this preliminary evaluation report do not determine any causal relationships between DPP BHS and the evaluation measures, only associations between the impact of DPP BHS and the evaluation measures. Despite these limitations, with DPP BHS as the only DPP that has been approved by CMS to date for Year 1, this preliminary evaluation report presents a preliminary indication of DPP BHS provider performance during the first six months of the baseline.

5. Conclusion

As required by 42 CFR 438.6(c) and pursuant to STC 35, approved DPPs must be evaluated to test whether the payment arrangement advances goals of the State's Medicaid Managed Care Quality Strategy. Since only DPP BHS has been approved by CMS for Year 1, this preliminary evaluation report presents preliminary baseline data for DPP BHS only for the first six months of CY 2021, as reported by participating DPP BHS CMHCs during the first semiannual reporting period. The presented preliminary results provide initial insights into DPP BHS CMHC performance at baseline for Medicaid managed care clients as well as the level of influence DPP BHS participation had on an organization's decision to implement best practices, as identified in structure measures and qualitative responses.

Pending CMS approval of all four DPPs, the final evaluation report will include final evaluation baseline data for the full twelve months of CY 2021 for all four DPPs as well as final statewide baseline data and any supplemental analyses, as possible.

6. Appendix

Appendix I: DPP BHS-Specific Evaluation Measures

DPP BHS Evaluation Measure Name	Measure Description	Measure Type
Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up	Percentage of patients aged 18 years and older with a BMI documented during the current encounter or during the previous twelve months AND with a BMI outside of normal parameters, a follow-up plan is documented during the encounter or during the previous twelve months of the current encounter	Process
Preventive Care and Screening: Unhealthy Alcohol Use: Screening and Brief Counseling	Percentage of patients aged 18 years and older who were screened for unhealthy alcohol use using a systematic screening method at least once within the last 24 months AND who received brief counseling if identified as a unhealth alcohol user	Process
Follow-up after Hospitalization for Mental Illness 7-Day (discharges from state hospital)	The percentage of discharges for patients 6 years of age and older who were hospitalized for treatment of selected mental illness or intentional self-harm diagnoses and who had a follow-up visit with a mental health practitioner. The percentage of discharges for which the patient received follow-up within 7 days after discharge.	Outcome
Follow-up after Hospitalization for Mental Illness 30-Day (discharges from state hospital)	The percentage of discharges for patients 6 years of age and older who were hospitalized for treatment of selected mental illness or intentional self-harm diagnoses and who had a follow-up visit with a mental health practitioner. The percentage of discharges for which the patient received follow-up within 30 days after discharge	Outcome
Adult Major Depressive Disorder (MDD): Suicide Risk Assessment	All patient visits during which a new diagnosis of MDD or a new diagnosis of recurrent MDD was identified for patients aged 18 years and older with a suicide risk assessment completed during the visit.	Process
Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment	Percentage of patient visits for those patients aged 6 through 17 years with a diagnosis of major depressive disorder with an assessment for suicide risk.	Process

Appendix II. DPP Evaluation Measures – Additional Information

Evaluation Measure Name	NQF #	Measure Steward	CMS 2021 Medicaid Core Set	Data Source					Measure Type
				Provider Reported				EQRO	
				DPP BHS	CHIRP	TIPPS	RAPPS		
Follow-up after Hospitalization for Mental Illness 7-Day (discharges from state hospital)	576	NCQA	Child/ Adult	X					Outcome
Follow-up after Hospitalization for Mental Illness 30-Day (discharges from state hospital)	576	NCQA	Child/ Adult	X					Outcome
Adult Major Depressive Disorder (MDD): Suicide Risk Assessment	104	AMA-PCPI	NA	X					Process
Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment	1365	AMA-PCPI	NA	X					Process
Preventive Care and Screening: Unhealthy Alcohol Use: Screening and Brief Counseling	2152	AMA-PCPI	NA	X					Process
Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up	421	CMS	NA	X					Process
Pregnancy-Associated Outcome Measure: Severe Maternal Morbidity (SMM)	NA	AIM	NA		X				Outcome
PC-02 Cesarean Section	471	The Joint Commission	NA		X				Outcome
Catheter-Associated Urinary Tract Infection (CAUTI) Outcome Measure	138	CDC	NA		X				Outcome
Central Line Associated Bloodstream Infection (CLABSI) Outcome Measure	139	CDC	NA		X				Outcome
Facility-wide Inpatient Hospital-onset Clostridium difficile Infection (CDI) Outcome Measure	1717	CDC	NA		X				Outcome
Harmonized Procedure Specific Surgical Site Infection (SSI) Outcome Measure	753	CDC	NA		X				Outcome
Pediatric Adverse Drug Events	NA	CHSPS	NA		X				Outcome
Pediatric CAUTI	NA	CHSPS	NA		X				Outcome
Pediatric CLABSI	NA	CHSPS	NA		X				Outcome
Pediatric SSI	NA	CHSPS	NA		X				Outcome

Evaluation Measure Name	NQF #	Measure Steward	CMS 2021 Medicaid Core Set	Data Source					Measure Type
				Provider Reported				EQRO	
				DPP BHS	CHIRP	TIPPS	RAPPS		
Medication Reconciliation: Number of Unintentional Medication Discrepancies per Patient	2456	Brigham and Women's Hospital	NA		X				Outcome
Engagement in Integrated Behavioral Health	NA	Texas HHSC	NA		X				Process
Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention	28	PCPI	NA		X	X			Process
Preventive Care and Screening: Influenza Immunization	41	NCQA	NA		X	X	X		Process
Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Poor Control (>9%)	59	NCQA	Adult			X	X		Outcome
Depression Response at Twelve Months	1885	MN Community Measurement	NA			X			Outcome
Controlling High Blood Pressure (CBP)	18	NCQA	Adult			X			Outcome
Food Insecurity Screening	NA	Texas HHSC	NA			X			Process
Maternity Care: Post-Partum Follow-Up and Care Coordination	NA	CMS	NA			X			Process
Preventive Care and Screening: Screening for Depression and Follow-Up Plan	418	CMS	Child/ Adult			X			Process
Behavioral Health Risk Assessment for Pregnant Women	NA	CMS (retired)	NA			X			Process
Cervical Cancer Screening (CCS)	32	NCQA	Adult			X			Process
Childhood Immunization Status (CIS)	38	NCQA	Child			X			Process
Chlamydia Screening in Women (CHL)	33	NCQA	Child/ Adult			X			Process
Immunizations for Adolescents (IMA)	1407	NCQA	Child			X			Process
Weight Assessment and Counseling for Nutrition and Physical Activity for Children/ Adolescents	24	NCQA	Child			X			Process
Tobacco Use and Help with Quitting Among Adolescents	2803	NCQA	NA			X			Process
Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Testing	57	NCQA	NA			X			Process
Potentially Preventable Complications (PPC)	NA	3M	NA					X	Outcome

Evaluation Measure Name	NQF #	Measure Steward	CMS 2021 Medicaid Core Set	Data Source					Measure Type
				Provider Reported				EQRO	
				DPP BHS	CHIRP	TIPPS	RAPPS		
Potentially Preventable Readmissions (PPR)	NA	3M	NA					X	Outcome
Potentially Preventable Admissions (PPA)	NA	3M	NA					X	Outcome
Potentially Preventable Emergency Department Visits (PPV)	NA	3M	NA					X	Outcome
Getting Care Quickly	NA	NCQA/ CAHPS	NA					X	Outcome
Getting Needed Care	6	NCQA/ CAHPS	NA					X	Outcome
Ambulatory Care: Emergency Department (ED) Visits (AMB-CH)	NA	NCQA	Child					X	Outcome
Antidepressant Medication Management (AMM)	105	NCQA	Adult					X	Process
Follow-up after ED Visits for Mental Illness (FUM)	3489	NCQA	Child/ Adult					X	Process
Initiation and Engagement of Alcohol and Other Drug Abuse or Dependence Treatment (IET)	4	NCQA	Adult					X	Process

Note. NQF= National Quality Forum; AMA-PCPI=American Medical Association Physician Consortium for Performance Improvement; PCPI= Physician Consortium for Performance Improvement Foundation; CAHPS® = Consumer Assessment of Healthcare Providers and Systems, NCQA=National Committee for Quality Assurance; AIM=Alliance for Innovation on Maternal Health; CMS=Centers for Medicare & Medicaid Services; CDC=Centers for Disease Control and Prevention; HHSC=Health and Human Services Commission; CHSPS=Children's Hospitals' Solutions for Patient Safety; NA=Not Applicable.

Appendix III. Overview of Structure Measures

Structure Measure Name	Structure Measure Data Source			
	DPP BHS	CHIRP	TIPPS	RAPPS
Participate in electronic exchange of clinical data with other healthcare providers/ entities	X			
Provide integrated physical and behavioral health care services to children and adults with serious mental illness	X			
Provide patients with services by using remote technology including audio/video, client portals and apps for the provision of services such as telehealth, assessment collection and remote health monitoring/ screening	X			
Certified Community Behavioral Health Clinic (CCBHC) Certification Status	X			
Alliance for Innovation on Maternal Health (AIM) Collaborative Participation		X		
Hospital Safety Collaborative Participation		X		
Service Delivery Area (SDA) Learning Collaborative Participation		X		
Written transition procedures that include formal Managed Care Organization (MCO) relationship or Emergency Department Encounter Notification; (EDEN) notification/ Admission, Discharge, Transfer (ADT) Feed for non-psychiatric patients		X		
Written transition procedures that include formal MCO relationship or EDEN notification/ ADT Feed for psychiatric patients		X		
Health Information Exchange (HIE) Participation		X	X	
Pre-visit planning and/or standing order protocols			X	
Patient-Centered Medical Home (PCMH) Accreditation or Recognition Status			X	
Patient education focused on disease self-management			X	
Same-day, walk-in, or after-hours appointments in the outpatient setting			X	
Telehealth to provide virtual medical appointments and/or consultations for specialty services, including both physical health and behavioral health services			X	
Identification of pregnant women at-risk for Hypertension, Preeclampsia, or Eclampsia; treatment based on best practices; and follow-up with postpartum women diagnosed with Hypertension, Preeclampsia, or Eclampsia			X	
Care team includes personnel in a care coordination role not requiring clinical licensure			X	X
Telehealth to provide virtual medical appointments with a primary care or specialty care provider				X
Use of electronic health record (EHR)				X

Appendix IV. List of Acronyms

Acronym	Meaning
ACIA	Average Commercial Incentive Award
ADT	Admission, Discharge, Transfer
AIM	Alliance for Innovation on Mental Health
AMA-PCPI	American Medical Association Physician Consortium for Performance Improvement
AMB-CH	Ambulatory Care: Emergency Department Visits
AMM	Antidepressant Medication Management
BMI	Body Mass Index
CAHPS®	Consumer Assessment of Healthcare Providers and Systems
CAUTI	Catheter-Associated Urinary Tract Infection
CBP	Controlling High Blood Pressure
CCBHC	Certified Community Behavioral Health Clinic
CDC	Centers for Disease Control and Prevention
CDI	Clostridium Difficile Infection
CHIP	Children's Health Insurance Program
CHIRP	Comprehensive Hospital Increased Reimbursement Program
CHL	Chlamydia Screening in Women
CHSPS	Children's Hospitals' Solutions for Patient Safety
CIS	Childhood Immunization Status
CLASBI	Central Line Associated Bloodstream Infection
CMHC	Community Mental Health Center
CMS	Centers for Medicare and Medicaid Services
CY	Calendar Year
DPPs	Directed Payment Programs
DPP BHS	Directed Payment Program for Behavioral Health Services
DSRIP	Delivery System Reform Incentive Payment
DTA	Descriptive Trend Analysis
ED	Emergency Department
EDEN	Emergency Department Encounter Notification
her	Electronic Health Record
EQRO	External Quality Review Organization
FUM	Follow-up after Mental Illness
HbA1c	Hemoglobin A1c
HIE	Health Information Exchange
HEDIS	Healthcare Effectiveness Data and Information Set
HHSC	Texas Health and Human Services Commission
HRI	Health-Related Institution
IET	Initiation and Engagement of Alcohol and other Drug Abuse or Dependence Treatment

IMA	Immunizations for Adolescents
IMD	Institutions of Mental Disease
IME	Indirect Medical Education
MCO	Managed Care Organization
MDD	Major Depressive Disorder
MMC	Medicaid Managed Care
NA	Not Applicable
NCQA	National Committee for Quality Assurance
NQF	National Quality Forum
PCMH	Patient-Centered Medical Home
PCPI	Physician Consortium for Performance Improvement Foundation
PHE	Public Health Emergency
PPA	Potentially Preventable Admissions
PPC	Potentially Preventable Complications
PPR	Potentially Preventable Readmissions
PPV	Potentially Preventable Emergency Department Visits
RAPPS	Rural Access to Primary and Preventive Services Program
RHC	Rural Health Clinic
SDA	Service Delivery Area
SFY	State Fiscal Year
SMM	Severe Maternal Morbidity
SSI	Surgical Site Infection
STAR	State of Texas Access Reform
TIPPS	Texas Incentives for Physicians and Professional Services Program
UHRIP	Uniform Hospital Rate Increase Program