

# “How can we be sure kids are getting what they need?”

A Scoping Review of Quality Measures for Child Behavioral Health

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# TABLE OF CONTENTS

EXECUTIVE SUMMARY .....	4
THE PROBLEM .....	4
WHAT WE DID .....	4
WHAT WE LEARNED: KEY FINDINGS.....	5
RECOMMENDED NEXT STEPS.....	9
Table 1. BEHAVIORAL HEALTH QUALITY MEASURES FROM NATIONAL QUALITY ORGANIZATIONS .....	11
Table 2. BEHAVIORAL HEALTH QUALITY MEASURES DERIVED FROM PROFESSIONAL PRACTICE GUIDELINES.....	21
Table 3. BEHAVIORAL HEALTH QUALITY MEASURES DERIVED FROM EMPIRICAL RESEARCH STUDIES .....	23
Table 4. BEHAVIORAL HEALTH QUALITY MEASURES DERIVED FROM INDUSTRY STANDARDS.....	31
Table 5. BEHAVIORAL HEALTH QUALITY MEASURES DERIVED FROM LEVEL OF CARE UTILIZATION GUIDELINES.	32

# EXECUTIVE SUMMARY

“How can we be sure kids are getting what they need?”

## THE PROBLEM

Since 2014, Idaho’s behavioral health system for youth has been undergoing a major transformation with the goal of expanding access to appropriate services, increasing service quality, and ultimately improving the well-being of youth who experience emotional and behavioral disorders and their families. These changes are occurring in part in response to the Jeff D. Settlement Agreement which focuses on expanding access to community-based behavioral health services for youth with serious emotional disturbance (SED) but also reflect a broader vision outlined in the Idaho Behavioral Health Council Strategic Plan. As part of this transformation, stakeholders need accurate and meaningful measures and metrics, sometimes called key performance indicators, with which to evaluate the adequacy and quality of behavioral health services for youth. The use of quality measures is a key component of the State’s commitment to ongoing quality improvement and also links to national efforts by payers to monitor and improve the quality of behavioral health care. The essential question is: “How can we be sure kids are getting what they need, with regard to behavioral health care?”

The goal of this report is to aid stakeholders in identifying, analyzing, and selecting appropriate quality measures for youth behavioral health services in Idaho. The report presents findings of a scoping review of State and national resources for measuring the quality of behavioral healthcare for youth as well as related empirical research.

## WHAT WE DID

We conducted a comprehensive review of four potential sources of quality measures for child mental health (Figure 1):

- 1) databases and repositories of State and national healthcare quality organizations (e.g., National Quality Forum, National Committee for Quality Assurance, U.S. Agency for Healthcare Research and Quality),
- 2) professional treatment guidelines based on empirical evidence regarding behavioral health treatment for youth (e.g., American Academy of Child and Adolescent Psychiatry, American Psychological Association, Division 12 [Society of Clinical Psychology]),
- 3) empirical research examining youth behavioral healthcare quality, treatment dosing, level-of-care, and unmet need, and
- 4) industry standards including measures and approaches used by other States.

# Potential Sources of Quality Indicators for Child Mental Health



**Figure 1. Potential Sources of Quality Indicators**

As is noted by numerous subject matter experts and quality of care organizations (Pincus et al., 2011; Zima, 2020), feasibility is an essential feature of any policy-relevant measurement strategy. In order to ensure the measures identified in this review were feasible for Idaho, we focused predominantly on measures that could be incorporated into claims data, existing Idaho family surveys, electronic health records, or structural indicators (e.g., provider certification). In addition, we noted measures that are linked to national healthcare reporting requirements and those linked to the future of quality measurement.

## WHAT WE LEARNED: KEY FINDINGS

**Although there are no universally endorsed quality measures, state-of-the-art quality measurement for child behavioral healthcare often relies on measures endorsed by the National Quality Forum (NQF), the Center for Medicare and Medicaid Services’ (CMS) Child Core Set, and/ or the National Committee on Quality Assurance’s (NCQA) Healthcare Effectiveness Data and Information Set (HEDIS).** The most widely used measures of behavioral health quality for youth are those included in the databases of the NQF, the CMS Child Core Set, and the NCQA’s HEDIS measures (Seibert et al., 2015). These measures were generated through independent, extensive, and transparent



## RECOMMENDED QUALITY MEASURES

### Process

- ✓ Timely follow-up after hospitalization for mental illness
- ✓ Follow-up care for youth prescribed ADHD medicine
- ✓ Caregiver attendance at child mental health visits
- ✓ Minimum mental health visits for acute and maintenance phases by level of need

review processes that incorporated hundreds of individuals, including physicians, families, policymakers, allied health professionals, researchers, and other stakeholders, across the U.S. (Mangione-Smith et al., 2011; Zima et al., 2013). Although empirical evidence regarding the clinical validity of these indicators is emerging, initial results are promising and there are no other measures with a broader reference group for benchmarking (Zima et al., 2019). Key resources for Idaho policymakers and program managers include the NQF’s database of measures called the Quality Positioning System (QPS) and the CMS Measures Inventory Tool (CMIT) which summarizes available measures endorsed through these organizations. (See Box 1 for a description of these resources.)

**Recommended Process Measure: Timely Follow-Up After Hospitalization for Mental Illness.** The NQF and Medicaid Child Core Set both endorse this process measure of behavioral healthcare quality which is among the most strongly supported in terms of

#### Box 1. National Repositories of Quality Measures for Child Behavioral Health

##### National Quality Forum’s Quality Positioning System

- <https://www.qualityforum.org/QPS/QPSTool.aspx>

A full list of NQF-endorsed measures is available through NQF’s Quality Positioning System, better known as QPS. QPS is a web-based tool developed by NQF to help people more easily select and use NQF-endorsed measures. It allows you to search for NQF-endorsed measures in a number of ways, export your search results, and create and view portfolios of measures – customized collections of NQF-endorsed measures selected by a QPS user. Using QPS, you can find NQF-endorsed measures on particular topics, track and get reminders about measures that are important to you, and see which measures others are using.

NQF-endorsed measures have undergone careful review by expert committees made up of doctors, hospitals and other providers, employers, health plans, public agencies, community coalitions, and patients –most of whom use measures on a daily basis to ensure better care.

##### CMS Measures Inventory Tool

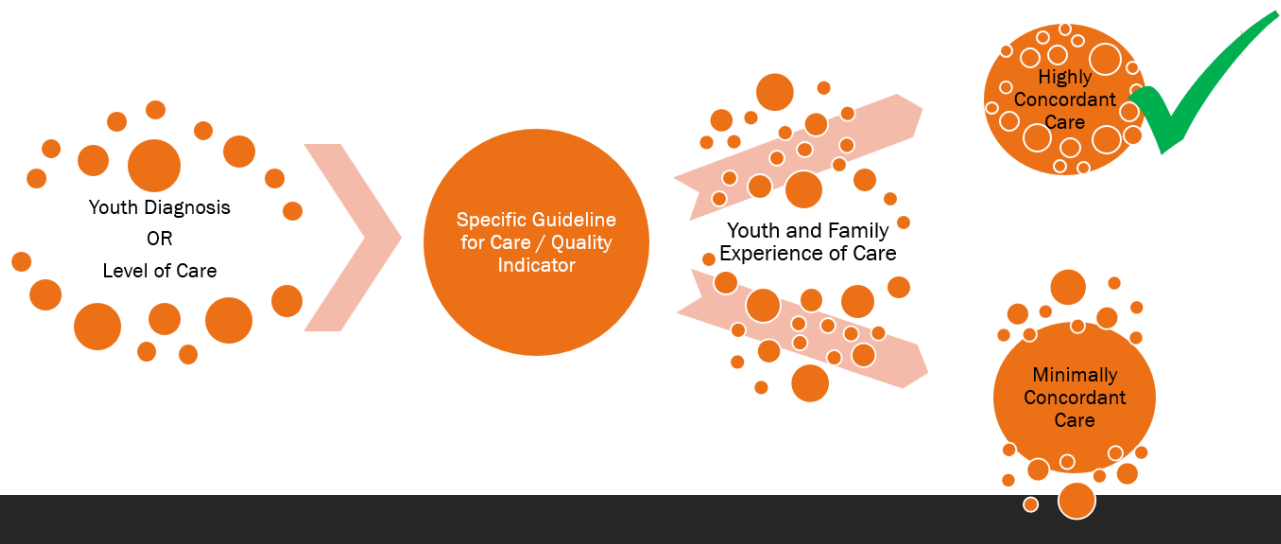
- [https://cmit.cms.gov/CMIT\\_public/ListMeasures](https://cmit.cms.gov/CMIT_public/ListMeasures)

The Centers for Medicare & Medicaid Services (CMS) Measures Inventory Tool (CMIT) is the repository of record for information about the measures CMS uses to promote healthcare quality and quality improvement. CMS and its partners use CMIT to inform stakeholders, manage its measures portfolio, and guide measure development.

The Centers for Medicare & Medicaid Services (CMS) publishes the CMS Quality Measures Inventory to comply with Section 3014 of the Patient Protection and Affordable Care Act of 2010 (ACA), which created sections 1890A of the Social Security Act and requires the Department of Health and Human Services (HHS) to develop a process for dissemination of quality measures. CMS publicly posts a list of quality measures used within CMS programs bi-annually.

The CMS Quality Measures Inventory consists of measures in CMS programs that are subject to the rule-making process and have been proposed, finalized, implemented, or removed per their respective Federal Rule. Measures used in programs and initiatives that do not undergo the rule-making process are collected as they become available. The inventory lists each measure by program and provides measure specifications including, but not limited to, numerator, denominator, exclusion criteria, healthcare priorities, measure type, and National Quality Forum (NQF) endorsement status. In addition, the CMS Quality Measures Inventory is regularly updated using Measure Specification Manuals and validated by CMS Program and Measure Leads.

# Algorithm for Evaluating Concordance with Quality Indicators / Guidelines



**Figure 2. Use of Quality Measures to Evaluate Care Processes**

clinical validity. There is evidence from two studies that timely follow-up after hospitalization for mental illness is beneficial for youth in terms of reducing subsequent risk of suicide (Fontanella et al., 2020) and re-hospitalization (Blackburn et al., 2019). Another study did not demonstrate reduced risk of re-hospitalization but did show that usage of behavioral health services was higher for youth who met this measure (Bardach et al., 2020). Given the paucity of research directly supporting the clinical validity of most youth behavioral health quality measures and guidelines (Gaynes et al., 2015; Zima et al., 2019), *Timely Follow-up After Hospitalization for Mental Illness* stands alone as a well-supported and high-impact quality measure.

**Recommended Process Measure: Follow-Up Care for Children Prescribed ADHD Medication.** This indicator is also endorsed by the NQF and Medicaid Child Core set. Two studies show that appropriate follow-up care for youth prescribed medication for ADHD is related to higher medication coverage for youth (Brinkman et al., 2016; Earla et al., 2021). Another study shows that higher medication coverage for transition-age youth with ADHD is related to significantly better clinical outcomes including reduced risk for: sexually transmitted infections, pregnancy, emergency department visits, and substance use (Rao et al., 2021).

**Recommended Process Measure: Caregiver attendance in child mental health treatment.** Caregiver attendance in child mental health treatment is strongly indicated for externalizing disorders and has also been shown to benefit youth with internalizing disorders (e.g., long-term effects of treatment for internalizing disorders are superior for



## RECOMMENDED QUALITY MEASURES

### Structure

- ✓ Number of clinicians certified to deliver EBP
- ✓ Number of EBP-certified supervisors
- ✓ Number of clinics with measurement-feedback systems

youth with greater caregiver involvement) (Birmaher et al., 2007; Cohen et al., 2010; Pliszka et al., 2007; Sun et al., 2019; Walter et al., 2020). Diagnosis-specific guidelines for parental involvement and emerging research provide a basis for testing caregiver attendance at sessions as a quality indicator (Barnett et al., 2020). This indicator applies to numerous diagnostic presentations and is consistent with Idaho YES principles of family engagement. Use of such an indicator will require attention to service availability and barriers to participation for caregivers; however, identification of these barriers will highlight quality improvement targets for system change.

**Recommended Process Measure: Minimally adequate treatment doses based on level of youth need and treatment phase.** Converging evidence from empirical studies and treatment guidelines suggests youth with less intensive needs should receive at minimum 2 mental health visits and up to 4 mental health visits during the initial/acute phase of treatment which spans the first 3 months (Birmaher et al., 2007; Lewandowski et al., 2013). Depending on youth diagnosis, these visits may focus on medication follow-up, psychotherapy, both, or other services. Youth with moderate needs should receive at least 8 mental health visits during the acute phase (i.e., initial 3 to 4 months of treatment; see Table 3). Youth with more severe needs require more sessions for a longer period of time; guidelines vary but typically evidence-based psychosocial treatments for youth require a minimum of 12 to 25 visits or more over the course of 12 months in addition to visits for medication management (Chorpita et al., 2011; Higa-McMillan et al., 2016; Silverman & Hinshaw, 2008).

**Recommended Structural Measures: Number of clinicians trained and certified to deliver targeted evidence-based practices (EBPs), number of supervisors certified to supervise EBPs, number of clinics with measurement-feedback systems.** Structural measures of quality assess the capacity of the system to deliver quality care. These measures are often more tangible and easier to assess than process or outcome measures. Development of these measures addresses workforce issues that are part of the Settlement agreement. Arguably, if the system does not possess basic capacity to deliver evidence-based care, recommendations about the dosage of treatment are irrelevant. Treatment guidelines, assume providers are delivering EBPs such as cognitive-behavioral therapy, interpersonal psychotherapy for depression, behavioral parent training, or other interventions. Professional educational institutions in Idaho, such as graduate programs in social work, counseling, and marriage and family therapy could be important partners in preparing practitioners for required Idaho State certifications focused on competency to deliver EBPs. Use of measurement-feedback systems is an EBP in and of itself (Fortney et al., 2017; Lewis et al., 2019); in addition, such systems form the basis for compliance with several quality process measures described in this report (e.g., Depression Response/ Remission).

**One approach for establishing quality targets that addresses level of need and incorporates a broad range of services is to rely on average expected hours of service utilization per month to determine whether youth are receiving adequate care.** Texas has an algorithm for determining the maximum average number of service hours across all types of services youth should receive based on their needs as assessed using the



CANS. The CANS is also in use in Idaho. Washington State sets a minimum level of average service hours for youth who participate in its most intensive service array (Wraparound). We could not locate any empirical studies evaluating the effects of adherence to these guidelines; however, they seem promising for use as minimum benchmarks for quality of care based on need.

**Industry standards for determining need for mental health services utilize synthetic estimates that account for poverty or prior service use.** The denominator for some quality measures is the total number of youth who need mental health services. This is an important issue on many fronts, one of which is the the Jeff D. Settlement Agreement requires Idaho State to provide an estimate of the number of youth with SED in the State. Thus, it is instructive to examine how other States estimate SED prevalence and/or need for mental health services. Not surprisingly, we could locate no States that routinely conduct large, statewide epidemiological surveys in order to estimate SED prevalence. Instead, States seem to rely on one of three methods: (1) synthetic estimates that incorporate county poverty levels, (2) methods that identify all service uses with a primary or secondary mental health diagnosis or service use in the last two years prior to the reference year, and (3) reliance upon proxy data from large national surveys conducted by the CDC or other branches of the federal government.

**Opportunities to Modify the Annual YES Family Survey:** Results of this review highlight potential items that could be added to the annual YES family survey on either a permanent or rotating basis. Potential topics include: items assessing coordination of care among service providers, items assessing the extent and nature of caregiver involvement in treatment, items assessing provider adherence to evidence-based principles for youth who received psychotherapy or counseling, and additional functional outcome indicators such as arrests and school attendance.

## RECOMMENDED NEXT STEPS

**Establish a transparent, inclusive, and stakeholder-driven process to select youth behavioral health quality measures for Idaho that align with YES principles, satisfy conditions of the Jeff D. Settlement Agreement, and support the emerging Idaho Behavioral Health Council Strategic Plan which includes multiple provisions related to key performance indicators.**

**Contract with a third-party vendor to generate and report quality measures for Idaho using a statewide performance report card on quality measures.**

**Partner with university researchers to evaluate the clinical validity of measures selected by the State.** Regardless of which quality measures are ultimately selected, there is a high need for research to empirically test their clinical validity. Numerous writers have noted the severe lack of evidence for behavioral healthcare quality measures, particularly those for youth. Given that understanding how to support the implementation of research evidence into clinical care is a high national priority for research funders including the U.S. National Institutes of Health, the U.S. Agency for

Healthcare Research and Quality, and several private foundations as well as services agencies (e.g., the U. S. Substance Abuse and Mental Health Services Administration), Idaho State should partner with researchers to develop competitive research proposals that will simultaneously support implementation of quality measures while evaluating their clinical validity and contributing to evidence for other youth and families.

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**Table 1. Behavioral Health Quality Measures from National Quality Organizations**

Ref #	NQF#	Measure Title	Measure Description	HEDIS (2021)	Core Set (2021)	NQF (2021)	Measure Steward	Measure Type	Condition	Data Source	Level of Analysis	Target Population	Supporting Evidence
1	3489	Follow-Up After Emergency Department Visit for Mental Illness	The percentage of emergency department (ED) visits for members 6 years of age and older with a principal diagnosis of mental illness or intentional self-harm, who had a follow-up visit for mental illness. Two rates are reported: - The percentage of ED visits for which the member received follow-up within 30 days of the ED visit (31 total days). - The percentage of ED visits for which the member received follow-up within 7 days of the ED visit (8 total days).	x	x	x	NCQA	Process	Behavioral Health	Claims	Health Plan	Populations at Risk	2020, Fontanella et al.  2020, Bardach et al.  2019, Blackburn et al.
2	576	Follow-Up After Hospitalization for Mental Illness (FUH)	The percentage of discharges for members 6 years of age and older who were hospitalized for treatment of selected mental illness or intentional self-harm and who had a follow-up visit with a mental health provider.  Two rates are reported: 1. Percentage for which follow-up occurred within 30 days after discharge. 2. Percentage for which follow-up occurred within 7 days after discharge.	x	x	x	NCQA	Process	Behavioral Health	Claims	Health Plan	Children, Elderly, Populations at Risk	

Ref #	NQF#	Measure Title	Measure Description	HEDIS (2021)	Core Set (2021)	NQF (2021)	Measure Steward	Measure Type	Condition	Data Source	Level of Analysis	Target Population	Supporting Evidence
3	2806	Pediatric Psychosis: Screening for Drugs of Abuse in the Emergency Department	Percentage of children/adolescents age =5 to =19 years-old seen in the emergency department with psychotic symptoms who are screened for alcohol or drugs of abuse			x	Seattle Children's Research Institute	Process	Behavioral Health	EHR; charts; Claims	Facility	Children	
4	3205	Medication Continuation Following Inpatient Psychiatric Discharge	This measure assesses whether patients discharged from an inpatient psychiatric facility (IPF) with major depressive disorder (MDD), schizophrenia, or bipolar disorder filled a prescription for evidence-based medication within 2 days prior to discharge and 30 days post-discharge. This measure evaluates admissions over a two-year period.			x	Centers for Medicare & Medicaid Services	Process	Behavioral Health	Claims	Facility	Populations at Risk	
5	2337	Antipsychotic Use in Children Under 5 Years Old	The percentage of children under age 5 who were dispensed antipsychotic medications during the measurement period.				Pharmacy Quality Alliance	Process	Behavioral Health	Claims	Health Plan	Children, Populations at Risk	
6	NA	Use of Multiple Concurrent Antipsychotics in Children and Adolescents (APC-CH)	Percentage of children and adolescents ages 1 to 17 who were treated with antipsychotic medications and who were on two or more concurrent antipsychotic medications for at least 90 consecutive days during the measurement year.	x			NCQA	Process	Behavioral Health	Claims	Health Plan	Children	

Ref #	NQF#	Measure Title	Measure Description	HEDIS (2021)	Core Set (2021)	NQF (2021)	Measure Steward	Measure Type	Condition	Data Source	Level of Analysis	Target Population	Supporting Evidence
7	2800	Metabolic Monitoring for Children and Adolescents on Antipsychotics	The percentage of children and adolescents 1-17 years of age who had two or more antipsychotic prescriptions and had metabolic testing.	x	x	x	NCQA	Process	Behavioral Health	Claims	Health Plan	Children, Populations at Risk	
8	2801	Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics	Percentage of children and adolescents 1-17 years of age who had a new prescription for an antipsychotic medication, but no U.S. Food and Drug Administration primary indication for antipsychotics, and had documentation of psychosocial care as first-line treatment.	x	x	x	NCQA	Process	Behavioral Health	Claims	Health Plan	Children, Populations at Risk	
9	1401	Maternal Depression Screening	The percentage of children 6 months of age who had documentation of a maternal depression screening for the mother.††	x			NCQA	Process	Behavioral Health	EHR; charts	Clinician Group/ Practice	Children, Women	
10	1394	Depression Screening By 13 years of age	The percentage of adolescents 13 years of age who had a screening for depression using a standardized tool.				NCQA	Process	Depression	EHR; charts	Clinician Group/ Practice Health Plan	Children	
11	1515	Depression Screening By 18 Years of Age	The percentage of adolescents 18 years of age who had a screening for depression using a standardized tool.				NCQA	Process	Depression	EHR; charts	Clinician Group/ Practice	Children	

Ref #	NQF#	Measure Title	Measure Description	HEDIS (2021)	Core Set (2021)	NQF (2021)	Measure Steward	Measure Type	Condition	Data Source	Level of Analysis	Target Population	Supporting Evidence
12	418	Screening for Depression and Follow-Up Plan	Percentage of patients aged 12 years and older screened for depression on the date of the encounter or 14 days prior to the date of the encounter using an age appropriate standardized depression screening tool AND if positive, a follow-up plan is documented on the date of the eligible encounter	x	x		Centers for Medicare & Medicaid Services	Process	Depression, Behavioral Health	HER; charts; Claims	Clinician Group/ Practice	Children, Elderly	
13	0712e	Depression Utilization of the PHQ-9 Tool	The percentage of adolescent patients (12 to 17 years of age) and adult patients (18 years of age or older) with a diagnosis of major depression or dysthymia who have a completed PHQ-9 or PHQ-9M tool during the measurement period.	x		x	MN Community Measurement	Process	Depression	EHR; charts	Facility Clinician Group/ Practice	Populations at Risk: Populations at Risk	
14	1365e	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			x	Mathematica Policy Research	Process	Suicide, Depression	EHR; charts	Clinician Group/ Practice	Children, Populations at Risk	
15	1884	Depression Response at Six Months- Progress Towards Remission	The percentage of adolescent patients (12 to 17 years of age) and adult patients (18 years of age or older) with major depression or dysthymia who demonstrated a response to treatment six months (+/- 60 days) after an index visit. †	x		x	MN Community Measurement	Outcome: PRO-PM	Depression	EHR; charts	Facility Clinician Group/ Practice	Populations at Risk: Populations at Risk	

Ref #	NQF#	Measure Title	Measure Description	HEDIS (2021)	Core Set (2021)	NQF (2021)	Measure Steward	Measure Type	Condition	Data Source	Level of Analysis	Target Population	Supporting Evidence
16	711	Depression Remission at Six Months	The percentage of adolescent patients (12 to 17 years of age) and adult patients (18 years of age or older) with major depression or dysthymia who reach remission six months (+/- 60 days) after an index visit. †	x		x	MN Community Measurement	Outcome: PRO-PM	Depression	EHR; charts	Facility Clinician Group/ Practice	Populations at Risk: Populations at Risk	
17	105	Antidepressant Medication Management (AMM)	<p>The percentage of members 18 years of age and older who were treated antidepressant medication, had a diagnosis of major depression, and who remained on an antidepressant medication treatment.</p> <p>Two rates are reported.</p> <p>a) Effective Acute Phase Treatment. The percentage of patients who remained on an antidepressant medication for at least 84 days (12 weeks).</p> <p>b) Effective Continuation Phase Treatment. The percentage of patients who remained on an antidepressant medication for at least 180 days (6 months).</p>	x	x	x	NCQA	Process	Depression	Claims	Health Plan	Populations at Risk	

Ref #	NQF#	Measure Title	Measure Description	HEDIS (2021)	Core Set (2021)	NQF (2021)	Measure Steward	Measure Type	Condition	Data Source	Level of Analysis	Target Population	Supporting Evidence
18	1885	Depression Response at Twelve Months-Progress Towards Remission	The percentage of adolescent patients (12 to 17 years of age) and adult patients (18 years of age or older) with major depression or dysthymia who demonstrated a response to treatment twelve months (+/- 60 days) after an index visit.			x	MN Community Measurement	Outcome: PRO-PM	Depression	EHR; charts	Facility Clinician Group/ Practice	Populations at Risk: Populations at Risk	
19	0710e	Depression Remission at Twelve Months	The percentage of adolescent patients (12 to 17 years of age) and adult patients (18 years of age or older) with major depression or dysthymia who reach remission twelve months (+/- 60 days) after an index visit.			x	MN Community Measurement	Outcome: PRO-PM	Depression	EHR; charts	Facility Clinician Group/ Practice	Populations at Risk: Populations at Risk	
20	108	Follow-Up Care for Children Prescribed ADHD Medication (ADD)	Percentage of children newly prescribed attention-deficit/hyperactivity disorder (ADHD) medication who had at least three follow-up care visits within a 10-month period, one of which is within 30 days of when the first ADHD medication was dispensed. An Initiation Phase Rate and Continuation and Maintenance Phase Rate are reported.	x	x	x	NCQA	Process	ADHD	Claims	Health Plan	Children	2021, Earla et al.  2017, Blackburn et al.  2016, Brinkman et al.



Ref #	NQF#	Measure Title	Measure Description	HEDIS (2021)	Core Set (2021)	NQF (2021)	Measure Steward	Measure Type	Condition	Data Source	Level of Analysis	Target Population	Supporting Evidence
21	107	Management of attention deficit hyperactivity disorder (ADHD) in primary care for school age children and adolescents	Percentage of patients, aged 6-18 years old, treated with psychostimulant medication for the diagnosis of attention deficit hyperactivity disorder (ADHD) whose medical record contains documentation of follow-up visits at least twice a year that include height, weight, a discussion of medication, a discussion of school progress and a care plan.				Institute for Clinical Systems Improvement	Process	ADHD	Claims	Clinician Group/ Practice Health Plan	Children	
22	722	Pediatric Symptom Checklist (PSC)	The Pediatric Symptom Checklist (PSC) is a brief parent-report questionnaire that is used to assess overall psychosocial functioning in children from 3 to 18 years of age. Used as a quality indicator and as an outcome measure to assess changes in functioning over time. In addition to the original 35 item parent report form of the PSC in English, there are now many other validated forms including translations of the original form into about two dozen other languages, a youth self-report, a pictorial version, and a briefer 17 item version for both the parent and youth forms.				Massachusetts General Hospital	Outcome	Behavioral Health	EHR; charts	Population Facility Clinician Group/ Practice Health Plan	Children	

Ref #	NQF#	Measure Title	Measure Description	HEDIS (2021)	Core Set (2021)	NQF (2021)	Measure Steward	Measure Type	Condition	Data Source	Level of Analysis	Target Population	Supporting Evidence
23	8	Experience of Care and Health Outcomes (ECHO) Survey	<p>The ECHO is a survey that includes 5 multiple item measures and 12 single item measures that assess: getting treatment quickly, how well clinicians communicate, perceived improvement, getting treatment and information from the plan, informed about treatment options, and others.</p> <p>The measures are based on reports of care experiences over the previous six months from adult (18 years of age or older) patients receiving behavioral health care (mental health and substance abuse treatment) and the organization that provides or manages their treatment and health outcomes.</p>				Agency for Healthcare Research and Quality	Outcome: PRO-PM	Behavioral Health	Survey	Health Plan	Adults	
24	1406	Risky Behavior Assessment or Counseling by Age 13 Years	The percentage of children with documentation of a risk assessment or counseling for risky behaviors by 13 years of age. Four rates are reported: Risk Assessment or Counseling for Alcohol Use, Risk Assessment or Counseling for Tobacco Use, Risk Assessment or Counseling for Other Substance Use, Risk Assessment or Counseling for Sexual Activity.				NCQA	Process	Behavioral Health	EHR; charts	Clinician Group/ Practice	Children	

Ref #	NQF#	Measure Title	Measure Description	HEDIS (2021)	Core Set (2021)	NQF (2021)	Measure Steward	Measure Type	Condition	Data Source	Level of Analysis	Target Population	Supporting Evidence
25	1507	Risky Behavior Assessment or Counseling by Age 18 Years	The percentage of adolescents with documentation of assessment or counseling for risky behavior by the age of 18 years. Four rates are reported: Risk Assessment or Counseling for Alcohol Use, Risk Assessment or Counseling for Tobacco Use, Risk Assessment or Counseling for Other Substance Use, and Risk Assessment or Counseling for Sexual Activity.				NCQA	Process	Behavioral Health	EHR; charts	Clinician Group/ Practice	Children	
26	NA	Mental Health Utilization	This measure summarizes the number and percentage of members receiving the following mental health services during the measurement year: (1) Inpatient, (2) Intensive outpatient or partial hospitalization, (3) Outpatient, (4) Emergency department, (5) Telehealth, (6) Any service.	x			NCQA	Process	Behavioral Health	Claims	Health Plan	Children, Adults	

Notes: NCQA HEDIS Measure (2021); Medicaid Behavioral Health Core Set and/or Child Core Set Measure (2021); NQF Endorsed (2021)

+ HEDIS measures use a 4-8 month timeframe instead of 6 months. HEDIS also includes a measure of The percentage of members 12 years of age and older with a diagnosis of depression and an elevated PHQ-9 score, who have a follow-up PHQ-9 score documented within 4–8 months after the initial elevated PHQ-9 score.

++ HEDIS measures calculate two rates: The percentage of deliveries in which members were screened for clinical depression during the postpartum period, and if screened positive, received follow-up care. Two rates are reported: (1) Depression Screening: The percentage of deliveries in which members were screened for clinical depression using a standardized instrument during the postpartum period. (2) Follow-Up on Positive Screen: The percentage of deliveries in which members received follow-up care within 30 days of a positive depression screen finding.

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**Table 2. Behavioral Health Quality Measures Derived from Professional Practice Guidelines (AACAP)**

Ref #	Measure Description	Possible Measure	Measure Type	Condition	Level of Analysis
27	Each Phase of Treatment for Depression Should Include Psychoeducation, Supportive Management, and Family and School Involvement - "Even in the absence of formal family therapy, it is virtually impossible to successfully treat a child or adolescent patient without the close involvement of parents"	Percent of youth with documented parent involvement in at least one visit within first 30 days of treatment initiation.	Process	Depression	Youth
28	Education, Support, and Case Management Appear to Be Sufficient Treatment for the Management of Depressed Children and Adolescents With an Uncomplicated or Brief Depression or With Mild Psychosocial Impairment - "It is expected to observe response after 4 to 6 weeks of supportive therapy"	Percent of youth diagnosed with depressive disorders AND in a lower CANS tier who have at least 4 visits within a 3-month period.	Process	Depression	Youth
29	For Children and Adolescents Who Do Not Respond to Supportive Psychotherapy or Who Have More Complicated Depressions, a Trial With Specific Types of Psychotherapy and/or Antidepressants Is Indicated - minimum dose is "6-8 weeks of CBT or IPT"	Percent of youth diagnosed with depressive disorders AND in a mid- to high-range CANS tier who have at least 8 visits within a 6-month period.	Process	Depression	Youth
30	AACAP recommends that cognitive-behavioral therapy (CBT) be offered to patients 6 to 18 years old with social anxiety, generalized anxiety, separation anxiety, specific phobia, or panic disorder; the goal of structured CBT is to achieve meaningful symptomatic and functional improvement within 12 to 20 sessions	Percent of youth diagnosed with anxiety disorders who do not have a prescription and who have at least 12 visits within a 6-month period.	Process	Anxiety	Youth
31	AACAP recommends that selective serotonergic reuptake inhibitors (SSRIs) be offered to patients 6 to 18 years old with social anxiety, generalized anxiety, separation anxiety, or panic disorder	Percent of youth diagnosed with anxiety disorders who do not attend psychotherapy sessions who have a prescription.	Process	Anxiety	Youth
32	Outpatient psychosocial interventions are the initial treatment of choice for children and adolescents with eating disorders; Family therapy, particularly family-based treatment (FBT), <sup>13</sup> is effective and superior to comparison individual therapies. FBT is an outpatient form of family therapy that consists of 10 to 20 family meetings over a 6- to 12-month treatment course	Percent of youth diagnosed with eating disorders who received at least 10 family therapy sessions within a 6-month period.	Process	Eating disorders	Youth
33	Antipsychotic medication is a primary treatment for schizophrenia spectrum disorders in children and adolescents	Percent of youth diagnosed with schizophrenia spectrum disorders who have a prescription for one or more psychotropic medication.	Process	Schizophrenia	Youth
34	Psychotherapeutic interventions should be provided in combination with medication therapies	Percent of youth diagnosed with schizophrenia spectrum disorders who have one or more psychosocial intervention visits in conjunction with medication within 60 days of treatment initiation.	Process	Schizophrenia	Youth

Ref #	Measure Description	Possible Measure	Measure Type	Condition	Level of Analysis
35	Ongoing medication therapy should be provided to most youth with schizophrenia to improve functioning and prevent relapse - Patients should maintain regular physician contact to monitor symptom course, side effects, and adherence	Percent of youth diagnosed with schizophrenia spectrum disorders who have at least two visits with a prescriber per year.	Process	Schizophrenia	Youth
36	When possible, CBT is the first line treatment for mild to moderate cases of OCD in children - minimum "8 to 10 total sessions"	Percent of youth diagnosed with OCD who have at least 8 psychotherapy visits within a 6-month period.	Process	OCD	Youth
37	For moderate to severe OCD, medication is indicated in addition to CBT.; SRIs are the first-line medications recommended for OCD in children and should be used according to AACAP guidelines to monitor response, tolerability, and safety		Process	OCD	Youth
38	Among the trauma-focused psychotherapies, TF-CBT66 has received the most empirical support for the treatment of childhood PTSD - 12 to 16 weekly sessions, although the number of sessions can be increased to 25 for youth who present with complex trauma	Percent of youth diagnosed with PTSD who have at least 12 psychotherapy visits within a 6-month period including at least one session involving a caregiver.	Process	PTSD	Youth
39	The Clinician Should Develop an Individualized Treatment Plan Based on the Specific Clinical Situation - "Treatment must be delivered for an adequate duration (usually several months or longer)"	Percent of youth diagnosed with ODD who have at least 1 mental health visit per month within a 12-month period.	Process	ODD	Youth
40	The Clinician Should Consider Parent Intervention Based on One of the Empirically Tested Interventions; Parent management training in the use of contingency management methods to help them better handle disruptive behavior is one of the most substantiated treatment approaches in child mental health	Percent of youth diagnosed with ODD who have at least 8 mental health visits that involve caregivers within a 6-month period.	Process	ODD	Youth
41	The Initial Psychopharmacological Treatment of ADHD Should Be a Trial with an Agent Approved by the Food and Drug Administration for the Treatment of ADHD. If a patient with ADHD has a robust response to psychopharmacological treatment and subsequently shows normative functioning in academic, family, and social functioning, then psychopharmacological treatment of the adhd alone is satisfactory.	Percent of youth with ADHD who receive psychotherapy AND who are in the lowest CANS Tier who have documentation of FDA-approved pharmacological agents as first-line treatment.	Process	ADHD	Youth
42	If a patient with ADHD has a less than optimal response to medication, has a comorbid disorder, or experiences stressors in family life, then psychosocial treatment in conjunction with medication treatment is often beneficial; a number of controlled studies have shown short-term effectiveness of behavioral parent training; In general, parents are involved in 10 to 20 sessions of 1 to 2 hours	Percent of youth with ADHD and mid CANS Tier rating who have evidence of caregiver involvement in at least 10 sessions within 6 months.	Process	ADHD	Youth

Note: All measures are based on treatment guidelines published by the American Academy of Child and Adolescent Psychiatry (AACAP)

**References for Table 2:**

Practice parameters for the American Academy of Child and Adolescent Psychiatry can be found at:

[https://www.aacap.org/aacap/Resources\\_for\\_Primary\\_Care/Practice\\_Parameters\\_and\\_Resource\\_Centers/Practice\\_Parameters.aspx](https://www.aacap.org/aacap/Resources_for_Primary_Care/Practice_Parameters_and_Resource_Centers/Practice_Parameters.aspx)

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**Table 3. Behavioral Health Quality Measures Derived from Empirical Research Studies**

Ref #	Measure Title	Measure Description	Measure Type	Condition	Level of Analysis	Target Population	N of Studies	Study Citations
43	Minimally adequate psychotherapy dose – General	Percent of youth who have mental health visits at least monthly for 12 months	Process	Behavioral Health	Youth	Children	2	Zima, B. T., Hurlburt, M. S., Knapp, P., Ladd, H., Tang, L., Duan, N., ... & Wells, K. B. (2005). Quality of publicly-funded outpatient specialty mental health care for common childhood psychiatric disorders in California. <i>Journal of the American Academy of Child &amp; Adolescent Psychiatry, 44</i> (2), 130-144.  Duhoux, A., Fournier, L., Gauvin, L., & Roberge, P. (2012). Quality of care for major depression and its determinants: a multilevel analysis. <i>BMC psychiatry, 12</i> (1), 1-15.
44	Minimally adequate behavioral health care - General	Percent of youth who had eight or more mental health visits, or four or more mental health visits plus receipt of a psychotropic medication, during an episode of care, where a 12 week or greater break in services starts a new episode of care.	Process	Behavioral Health	Youth	Children	3	Saloner, B., Carson, N., & Cook, B. L. (2014). Episodes of mental health treatment among a nationally representative sample of children and adolescents. <i>Medical Care Research and Review, 71</i> (3), 261-279.  Angold, A., Costello, E. J., Burns, B. J., Erkanli, A., & Farmer, E. M. (2000). Effectiveness of nonresidential specialty mental health services for children and adolescents in the “real world”. <i>Journal of the American Academy of Child &amp; Adolescent Psychiatry, 39</i> (2), 154-160.  Weersing, V. R., & Weisz, J. R. (2002). Community clinic treatment of depressed youth: benchmarking usual care against CBT clinical trials. <i>Journal of consulting and clinical psychology, 70</i> (2), 299.
45	Unmet need for behavioral health services - General	Percent of youth service-users who received fewer than 3 visits (1 or 2) – youths who received services but received fewer than 3 were considered service users who did not have met need	Process	Behavioral Health	Youth	Children	1	Sturm, R., Ringel, J. S., & Andreyeva, T. (2003). Geographic disparities in children’s mental health care. <i>Pediatrics, 112</i> (4), e308-e308.
46	Collateral contact for school-related problems	Percent of youth who experience poor academic functioning or classroom behavior problems, who have 1 or more collateral contacts with school or school records requested/obtained	Process	Behavioral Health	Youth	Adults	1	Zima, B. T., Hurlburt, M. S., Knapp, P., Ladd, H., Tang, L., Duan, N., ... & Wells, K. B. (2005). Quality of publicly-funded outpatient specialty mental health care for common childhood psychiatric disorders in California. <i>Journal of the American Academy of Child &amp; Adolescent Psychiatry, 44</i> (2), 130-144.



Ref #	Measure Title	Measure Description	Measure Type	Condition	Level of Analysis	Target Population	N of Studies	Study Citations
47	Minimally adequate caregiver involvement	Percent of youth who have evidence of least one family intervention/ session or referral of parent for care during a treatment episode	Process	Behavioral Health	Youth	Children	1	Zima, B. T., Hurlburt, M. S., Knapp, P., Ladd, H., Tang, L., Duan, N., ... & Wells, K. B. (2005). Quality of publicly-funded outpatient specialty mental health care for common childhood psychiatric disorders in California. <i>Journal of the American Academy of Child &amp; Adolescent Psychiatry, 44</i> (2), 130-144.
48	Caregiver involvement - proportion of a child's psychotherapy claims in which a caregiver was present	Caregiver attendance for each session claim was determined based on whether one of the following CPT codes was used: Family Psychotherapy with Patient Present(90,847)and Collateral(90,887). These CPT codes were chosen because they are traditionally used by community therapists to bill for sessions with caregiver presence. The proportion of claims with caregiver present per child was calculated by aggregating the CPT codes to the child-level and determining the proportion of claims per child in which the caregiver was present.	Process	Behavioral Health	Youth	Children	1	Barnett, M. L., Lau, A. S., Lind, T., Wright, B., Stadnick, N. A., Innes-Gomberg, D., ... & Brookman-Frazee, L. (2020). Caregiver attendance as a quality indicator in the implementation of multiple evidence-based practices for children. <i>Journal of Clinical Child &amp; Adolescent Psychology, 49</i> (6), 868-882.
49	Medication monitoring - General	Percent of youth who have monthly or more frequent monitoring of medication by prescriber during first 3 months (visits or telehealth)	Process	Behavioral Health	Youth	Children	1	Zima, B. T., Hurlburt, M. S., Knapp, P., Ladd, H., Tang, L., Duan, N., ... & Wells, K. B. (2005). Quality of publicly-funded outpatient specialty mental health care for common childhood psychiatric disorders in California. <i>Journal of the American Academy of Child &amp; Adolescent Psychiatry, 44</i> (2), 130-144.
50	Youth Death by Suicide	Rate of death by suicide for children/youth	Outcome	Behavioral Health	Youth	Children	1	Yang, J., Kurdyak, P., & Guttman, A. (2016). Developing Indicators for the Child and Youth Mental Health System in Ontario. <i>Healthcare quarterly (Toronto, Ont.), 19</i> (3), 6-9.
51	Rate of ED visits for self-harm	Rate of ED visits for deliberate self harm for children/youth	Process	Behavioral Health	Youth	Children	1	Yang, J., Kurdyak, P., & Guttman, A. (2016). Developing Indicators for the Child and Youth Mental Health System in Ontario. <i>Healthcare quarterly (Toronto, Ont.), 19</i> (3), 6-9.
52	Rate of ED visits for behavioral health or addictions	Rate of ED visits related to MH addiction for children/youth	Process	Behavioral Health	Youth	Children	1	Yang, J., Kurdyak, P., & Guttman, A. (2016). Developing Indicators for the Child and Youth Mental Health System in Ontario. <i>Healthcare quarterly (Toronto, Ont.), 19</i> (3), 6-9.

Ref #	Measure Title	Measure Description	Measure Type	Condition	Level of Analysis	Target Population	N of Studies	Study Citations
53	Rate of hospital admissions for behavioral health or addictions	Rate of hospital admissions related to mental health addition for children/ youth	Process	Behavioral Health	Youth	Children	1	Yang, J., Kurdyak, P., & Guttman, A. (2016). Developing Indicators for the Child and Youth Mental Health System in Ontario. <i>Healthcare quarterly (Toronto, Ont.)</i> , 19(3), 6-9.
54	Clinicians Trained to Deliver EBP	Number of staff who completed training or certification	Structural	Behavioral Health	Health System	Children	1	England, M. J., Butler, A. S., & Gonzalez, M. L. (2015). Psychosocial interventions for mental and substance use disorders: a framework for establishing evidence-based standards.
55	Supervisors Qualified for EBP	Number of supervisors who completed certification and/or training for supervising EBP delivery	Structural	Behavioral Health	Health System	Children	1	England, M. J., Butler, A. S., & Gonzalez, M. L. (2015). Psychosocial interventions for mental and substance use disorders: a framework for establishing evidence-based standards.
56	Capability for measuring outcomes	Presence and documented use of measurement-feedback system	Structural	Behavioral Health	Health System	Children	1	England, M. J., Butler, A. S., & Gonzalez, M. L. (2015). Psychosocial interventions for mental and substance use disorders: a framework for establishing evidence-based standards.
57	Infrastructure for quality improvement	Presence of documented quality improvement procedures	Structural	Behavioral Health	Health System	Children	1	England, M. J., Butler, A. S., & Gonzalez, M. L. (2015). Psychosocial interventions for mental and substance use disorders: a framework for establishing evidence-based standards.
58	Minimally adequate brief supportive counseling for minor depression	Adolescents with a diagnosis of mild depression who received at least 2 contacts consisting of brief supportive counseling (ie, problem-solving, education, active listening) within 8wk of assessment	Process	Depression	Youth	Children	1	Lewandowski, R. E., Aciri, M. C., Hoagwood, K. E., Olfson, M., Clarke, G., Gardner, W., ... & Horwitz, S. M. (2013). Evidence for the management of adolescent depression. <i>Pediatrics</i> , 132(4), e996-e1009.
59	Adequate psychotherapy dose - MDD	Percent of youth with MDD who have one or more psychosocial visit per month for at least 6 months	Process	Depression	Youth	Children	1	Zima, B. T., Hurlburt, M. S., Knapp, P., Ladd, H., Tang, L., Duan, N., ... & Wells, K. B. (2005). Quality of publicly-funded outpatient specialty mental health care for common childhood psychiatric disorders in California. <i>Journal of the American Academy of Child &amp; Adolescent Psychiatry</i> , 44(2), 130-144.

Ref #	Measure Title	Measure Description	Measure Type	Condition	Level of Analysis	Target Population	N of Studies	Study Citations
60	Minimally adequate psychotherapy dose for Depression – Acute Period	Percent of youth who had four or more individual, group, or family psychotherapy visits during the first 84 days (12 weeks) of a depression treatment episode	Process	Depression	Youth	Children	5	<p>Stein, B. D., Sorbero, M. J., Dalton, E., Ayers, A. M., Farmer, C., Kogan, J. N., &amp; Goswami, U. (2013). Predictors of adequate depression treatment among Medicaid-enrolled youth. <i>Social psychiatry and psychiatric epidemiology</i>, 48(5), 757-765.</p> <p>Katon, W. J., Richardson, L., Russo, J., Lozano, P., &amp; McCauley, E. (2006). Quality of mental health care for youth with asthma and comorbid anxiety and depression. <i>Medical care</i>, 1064-1072.</p> <p>Cummings, J. R., Ji, X., Lally, C., &amp; Druss, B. G. (2019). Racial and ethnic differences in minimally adequate depression care among Medicaid-enrolled youth. <i>Journal of the American Academy of Child &amp; Adolescent Psychiatry</i>, 58(1), 128-138.</p> <p>Cummings, J. R., Ji, X., &amp; Druss, B. G. (2020). Mental health service use by Medicaid-enrolled children and adolescents in primary care Safety-Net clinics. <i>Psychiatric services</i>, 71(4), 328-336.</p> <p>Fullerton, C. A., Busch, A. B., Normand, S. L. T., McGuire, T. G., &amp; Epstein, A. M. (2011). Ten-year trends in quality of care and spending for depression: 1996 through 2005. <i>Archives of general psychiatry</i>, 68(12), 1218-1226.</p>
61	Minimum necessary treatment dose for non-responsive youth depression	Percent of youth who are non-responsive to less intensive treatment who have 9 or more sessions of CBT.	Process	Depression	Youth	Children	1	<p>Kennard, B. D., Clarke, G. N., Weersing, V. R., Asarnow, J. R., Shamseddeen, W., Porta, G., Berk, M., Hughes, J. L., Spirito, A., Emslie, G. J., Keller, M. B., Wagner, K. D., &amp; Brent, D. A. (2009). Effective components of TORDIA cognitive-behavioral therapy for adolescent depression: Preliminary findings. <i>Journal of Consulting and Clinical Psychology</i>, 77(6), 1033–1041</p>
62	Adequacy of treatment course: antidepressant medication	Adolescents who received antidepressant treatment of duration of at least 60 d.	Process	Depression	Youth	Children	1	<p>Lewandowski, R. E., Acri, M. C., Hoagwood, K. E., Olfson, M., Clarke, G., Gardner, W., ... &amp; Horwitz, S. M. (2013). Evidence for the management of adolescent depression. <i>Pediatrics</i>, 132(4), e996-e1009.</p>

Ref #	Measure Title	Measure Description	Measure Type	Condition	Level of Analysis	Target Population	N of Studies	Study Citations
63	Minimally adequate pharmacotherapy for Depression – Acute Period	<p>Percent of youth who had a filled prescription for an antidepressant for 84 of the 144 days following the index visit.</p> <p><i>Note: This is a minor modification of the HEDIS acute antidepressant treatment measure, which measures appropriate pharmacotherapy as a filled prescription for an antidepressant medication on 84 out of the first 114 days of treatment. Studies that used the HEDIS measure are included here.</i></p>	Process	Depression	Youth	Children	4	<p>Stein, B. D., Sorbero, M. J., Dalton, E., Ayers, A. M., Farmer, C., Kogan, J. N., &amp; Goswami, U. (2013). Predictors of adequate depression treatment among Medicaid-enrolled youth. <i>Social psychiatry and psychiatric epidemiology</i>, 48(5), 757-765.</p> <p>Cummings, J. R., Ji, X., Lally, C., &amp; Druss, B. G. (2019). Racial and ethnic differences in minimally adequate depression care among Medicaid-enrolled youth. <i>Journal of the American Academy of Child &amp; Adolescent Psychiatry</i>, 58(1), 128-138.</p> <p>Cummings, J. R., Ji, X., &amp; Druss, B. G. (2020). Mental health service use by Medicaid-enrolled children and adolescents in primary care Safety-Net clinics. <i>Psychiatric services</i>, 71(4), 328-336.</p> <p>Fullerton, C. A., Busch, A. B., Normand, S. L. T., McGuire, T. G., &amp; Epstein, A. M. (2011). Ten-year trends in quality of care and spending for depression: 1996 through 2005. <i>Archives of general psychiatry</i>, 68(12), 1218-1226.</p>
64	Minimally adequate follow-up for medication follow-up - Depression	Depression - Adequate follow-up of the prescription, The respondent consulted 3 times or more the professional who prescribed the medication (among those who received an anti-depressant prescription)	Process	Depression	Youth	Adults	1	<p>Duhoux, A., Fournier, L., Gauvin, L., &amp; Roberge, P. (2012). Quality of care for major depression and its determinants: a multilevel analysis. <i>BMC psychiatry</i>, 12(1), 1-15.</p>

Ref #	Measure Title	Measure Description	Measure Type	Condition	Level of Analysis	Target Population	N of Studies	Study Citations
65	Minimally adequate depression treatment – Full course	Percent of youth who had at least four antidepressant prescriptions at the minimum adequate daily dosage OR at least eight outpatient or office-based psychotherapy or counseling visits within a period of 12 weeks, 16 weeks, for 12 months.	Process	Depression	Youth	Children	5	<p>Harman, J. S., Edlund, M. J., &amp; Fortney, J. C. (2004). Disparities in the adequacy of depression treatment in the United States. <i>Psychiatric Services</i>, 55, 1379-1385.</p> <p>Carson, N. J., Stewart, M., Lin, J. Y., &amp; Alegria, M. (2011). Use and quality of mental health services for Haitian youth. <i>Ethnicity &amp; Health</i>, 16, 567-582.</p> <p>Katon, W. J., Richardson, L., Russo, J., Lozano, P., &amp; McCauley, E. (2006). Quality of mental health care for youth with asthma and comorbid anxiety and depression. <i>Medical Care</i>, 44, 1064-1072.</p> <p>Petrosyan, Y., Sahakyan, Y., Barnsley, J. M., Kuluski, K., Liu, B., &amp; Wodchis, W. P. (2017). Quality indicators for care of depression in primary care settings: a systematic review. <i>Systematic reviews</i>, 6(1), 1-14.</p> <p>Lewandowski, R. E., Acri, M. C., Hoagwood, K. E., Olfson, M., Clarke, G., Gardner, W., ... &amp; Horwitz, S. M. (2013). Evidence for the management of adolescent depression. <i>Pediatrics</i>, 132(4), e996-e1009.</p>
66	Standardized ADHD screen for youths diagnosed with ADHD	Percent of youth with ADHD who have one or more parent or teacher reported standardized symptom rating	Process	ADHD	Youth	Adults	1	<p>Zima, B. T., Hurlburt, M. S., Knapp, P., Ladd, H., Tang, L., Duan, N., ... &amp; Wells, K. B. (2005). Quality of publicly-funded outpatient specialty mental health care for common childhood psychiatric disorders in California. <i>Journal of the American Academy of Child &amp; Adolescent Psychiatry</i>, 44(2), 130-144.</p>
67	Guideline-adherent treatment for ADHD	Percent of youth with either (a) treatment with a stimulant medication or atomoxetine; or, in the absence of medication, (b) at least eight sessions of psychotherapy involving a parent (parent training).	Process	ADHD	Youth	Children	2	<p>Cummings, J. R., Ji, X., Allen, L., Lally, C., &amp; Druss, B. G. (2017). Racial and ethnic differences in ADHD treatment quality among Medicaid-enrolled youth. <i>Pediatrics</i>, 139(6).</p> <p>Carson, N. J., Stewart, M., Lin, J. Y., &amp; Alegria, M. (2011). Use and quality of mental health services for Haitian youth. <i>Ethnicity &amp; Health</i>, 16, 567-582.</p>
68	Adequate follow-up care for ADHD medication treatment – initiation phase	Percent of youth with at least one visit with a health care provider during the first 30 days after initiating medication	Process	ADHD	Youth	Children	1	<p>Cummings, J. R., Ji, X., &amp; Druss, B. G. (2020). Mental health service use by Medicaid-enrolled children and adolescents in primary care Safety-Net clinics. <i>Psychiatric services</i>, 71(4), 328-336.</p>

Ref #	Measure Title	Measure Description	Measure Type	Condition	Level of Analysis	Target Population	N of Studies	Study Citations
69	Adequate medication coverage for ADHD continuation and maintenance phase	Percent of youth who filled medication for 210 of the 300-day continuation and maintenance (C&M) phase following the 30-day medication initiation period. Assessed for those with continuous Medicaid enrollment in the C&M phase.	Process	ADHD	Youth	Children	1	Cummings, J. R., Ji, X., & Druss, B. G. (2020). Mental health service use by Medicaid-enrolled children and adolescents in primary care Safety-Net clinics. <i>Psychiatric services, 71</i> (4), 328-336.
70	Adequate follow-up care for ADHD medication – continuation and maintenance phase	Percent of youth who received at least two additional health care visits in the 300-day C&M phase. Assessed for those with continuous enrollment and continuous medication in the C&M phase.	Process	ADHD	Youth	Children	1	Cummings, J. R., Ji, X., & Druss, B. G. (2020). Mental health service use by Medicaid-enrolled children and adolescents in primary care Safety-Net clinics. <i>Psychiatric services, 71</i> (4), 328-336.
71	Adequate psychosocial treatment dose - ODD	Percent of youth with at least 11 sessions within a 4-month period.	Process	ODD	Youth	Children	1	Lindhiem, O., & Kolko, D. J. (2010). Trajectories of symptom reduction and engagement during treatment for childhood behavior disorders: Differences across settings. <i>Journal of abnormal child psychology, 38</i> (7), 995-1005.

**Table 4. Behavioral Health Quality Measures Derived from Industry Standards**

Ref #	Measure Title	Measure Description	Measure Type	Condition	Data Source	Level of Analysis	Target Population	Measure Steward
72	Disparity Measure: Emergency Department Utilization among Members with Mental Illness	Number of ED visits per 1,000 member months for adult members enrolled within the organization who are identified as having experienced mental illness.	Process	Behavioral Health	Claims	Coordinated Care Organization	Adults	Oregon Health Authority
73	Mental Health Service Penetration (Broad Version)	The percentage of members with a mental health service need who received mental health services in the measurement year. Separate reporting for two age groups: 6-17 years and 18 years and older.  <i>Need</i> is defined as receipt of any mental health service or any mental health diagnosis (primary or secondary) within 24 months prior to index period.	Process	Behavioral Health	Claims	Health Plan	Children and Adults	Washington State Department of Social and Health Services
74	School Attendance	School attendance rates among MH utilizers	Outcome	Behavioral Health	Consumer Survey	Youth	Children	California Mental Health Services Oversight and Accountability Commission (MHSOAC)
75	Employment	Proportion of transition-age youth MH utilizers who are employed and not employed	Outcome	Behavioral Health	Consumer Survey	Youth	Children	California Mental Health Services Oversight and Accountability Commission (MHSOAC)
76	Arrests	Proportion of transition-age youth MH utilizers with reported arrests	Outcome	Behavioral Health	Consumer Survey	Youth	Children	California Mental Health Services Oversight and Accountability Commission (MHSOAC)
77	Demographic profile of consumers served	Demographic composition of MH service utilizers	Process	Behavioral Health	Claims	Health Plan	Children	California Mental Health Services Oversight and Accountability Commission (MHSOAC)
78	Demographic profile of new consumers	Demographic composition of new MH service utilizers (i.e., not served in previous fiscal year)	Process	Behavioral Health	Claims	Health Plan	Children	California Mental Health Services Oversight and Accountability Commission (MHSOAC)
79	Penetration of mental health services	Public mental health service access relative to estimates of need for mental health services (based on county-level, poverty-indexed synthetic estimates)	Process	Behavioral Health	Claims	Health Plan	Children	California Mental Health Services Oversight and Accountability Commission (MHSOAC)

**Table 5. Measures Derived from Level of Care Utilization Guidelines**

Ref #	State	Level of Care	Name of Care Level	Ave. Expected Hours of Mental Health Service Utilization per Month	Core services	Criteria
80a	TX	1	Medication Management	0.5	<ul style="list-style-type: none"> <li>▪ Psychiatric diagnostic evaluation</li> <li>▪ Pharmacological management contacts</li> </ul>	Youth demonstrate a low level of needs and are stable. Youth in this LOC will rarely be new clients, but will likely be individuals who have successfully completed a course of treatment (e.g., counseling, skills training) and now need medication maintenance services
80b	TX	2	Targeted Services	3.0	<ul style="list-style-type: none"> <li>▪ Psychiatric diagnostic evaluation</li> <li>▪ Routine case management</li> <li>▪ Counseling/ Psychotherapy</li> <li>▪ Skill training and development</li> </ul>	Youth demonstrate a low to moderate level of needs, and an intensity of services and resources focusing on one primary need.
80c	TX	3	Complex Services	5.0	<ul style="list-style-type: none"> <li>▪ Psychiatric diagnostic evaluation</li> <li>▪ Routine case management</li> <li>▪ Counseling/ Psychotherapy</li> <li>▪ Skill training and development</li> </ul>	Youth have needs identified in both the Child Emotional/Behavioral Needs and Life Domain Functioning domains.
80d	TX	4	Intensive Family Services	7.5	<ul style="list-style-type: none"> <li>▪ Psychiatric diagnostic evaluation</li> <li>▪ Counseling/ Psychotherapy</li> <li>▪ Skill training and development</li> <li>▪ Family partner supports</li> <li>▪ Wraparound</li> </ul>	Youth have multi-system involvement and are at risk of out-of-home placement.
80e	TX	5	YES Waiver	Not applicable*  <i>*This level of care does not have a defined limit of hours.</i>	<ul style="list-style-type: none"> <li>▪ Psychiatric diagnostic evaluation</li> <li>▪ Counseling/ Psychotherapy</li> <li>▪ Skill training and development</li> <li>▪ Family partner supports</li> <li>▪ Wraparound</li> </ul>	Youth have multi-system involvement and are at risk of out-of-home placement.
80f	WA	5	Wraparound with Intensive Service (WISe)	≥ 10.5	<ul style="list-style-type: none"> <li>▪ Full service array</li> <li>▪ Wraparound</li> </ul>	Youth have multi-system involvement and are at risk of out-of-home placement.