



Home and Community-Based Services (HCBS) Measures Maintenance and Development: Technical Expert Panel Meeting #2 Summary Report: August 18, 2025

Background

Technical expert panel purpose

The Centers for Medicare & Medicaid Services (CMS) contracted with Mathematica and Human Services Research Institute (HSRI) to (1) develop new measures for children, youth, and young adults (CYYA) receiving home and community-based services (HCBS) and (2) maintain existing CMS HCBS and long-term services and supports (LTSS) measures. The contract name is LTSS Analyses, Public Reporting, and Measures Maintenance and Development. The contract number is 75FCMC19D0091 and the task order number is 75FMC24F0194. As part of its measure development process, Mathematica convenes groups of technical experts who contribute direction and thoughtful input to the measure developer during measure development and maintenance.

Meeting objectives

The objectives of the Technical Expert Panel (TEP) meeting, held on August 18, 2025, were the following:

1. Collect input from TEP members on the importance, usability, and feasibility of HCBS-10: *Self-Direction of Services and Supports Among Medicaid Beneficiaries Receiving LTSS Through Managed Care Organizations* for measure maintenance
2. Discuss defining age stratifications for CYYA for measure specification
3. Collect further input from TEP members on the refined list of quality measure concepts for CYYA receiving HCBS
4. Refine the list of CYYA HCBS quality measure concepts for voting

Meeting summary

The Mathematica project team convened the second HCBS Measures Maintenance and Development TEP under the LTSS Analyses, Public Reporting, and Measures Maintenance and Development contract on August 18, 2025, with 18 TEP members present. Exhibit 1 lists the TEP members at the meeting and their organizational affiliations. During the meeting, the TEP co-chairs took roll call, and the project team provided updates. The project team discussed HCBS and LTSS measure maintenance and CYYA HCBS measure development and posed several discussion questions to the TEP. Following the meeting, the project team also surveyed the TEP for their votes on the final list of CYYA HCBS measure concepts for development.

Major discussion points

HCBS and LTSS measure maintenance

Mathematica began the August 18 meeting by discussing measure maintenance for HCBS-10: *Self-Direction of Services and Supports Among Medicaid Beneficiaries Receiving LTSS Through Managed Care Organizations*, part of the HCBS Quality Measure Set (QMS). The project team asked TEP members to weigh in on the importance, usability, and feasibility of HCBS-10 and raise any additional considerations for measure maintenance. TEP members generally agreed that the measure is important, as it is the only one in the HCBS QMS to address self-direction, and it could help states identify areas to focus on to support self-direction. However, TEP members raised concern regarding usability, as there is no fee-for-service (FFS) equivalent and there is potential variation in how states implement the measure, including how many opportunities the state provides an individual to self-direct. Additionally, TEP members expressed concern regarding feasibility and the burden of state data collection, given that data needs to be extracted from case management records. Overall, the measure's importance and the hope for this measure being respecified to include FFS generally seemed to outweigh the usability and feasibility concerns.

CYYA HCBS measure development

Overview of measure development and objectives

Mathematica transitioned to a discussion on CYYA HCBS measure development. Before the August 18 TEP meeting, Mathematica provided TEP members with a refined measure concept list for consideration. The list was refined using feedback from TEP members and key informant interviews that have been conducted since the first TEP meeting in May 2025. During the second TEP meeting, the project team presented updates to the measure concepts and posed age-range questions regarding the measures to the TEP members. The objectives of these discussions were to clarify age stratifications for CYYA for measure specification, collect further input from TEP members on the list of quality measure concepts for CYYA receiving HCBS, and further refine the list of quality measure concepts for continued consideration.

Review and discussion of CYYA age-range descriptions and definitions

The team moved on to discuss descriptions and definitions of age ranges for CYYA. The project team outlined the rationale for bringing this topic to the TEP and provided an overview of findings from a targeted environmental scan of publicly available federal, state, and international sources. This scan revealed a large degree of variation in how agencies, policies, and scholarly literature describe or define age ranges for CYYA, with seemingly no standardized framework in place. For example, some sources described "child" as beginning at birth (age 0) and ending at age 9, while other sources defined child as beginning at age 3 and extending through age 21. Similarly, depending on the agency or policy, sources variably defined "youth" as beginning at ages 14, 15, or 16 and ending at ages 21, 24, or even 25. The project team emphasized that this project sets the upper limit for CYYA at the 21st birthday, in line with Early and Periodic Screening, Diagnostic, and Treatment guidelines. The project team further discussed the age categories as defined by the U.S. Food and Drug Administration and the American Academy of Pediatrics' Bright Futures, which align reasonably well with Piaget's cognitive developmental theory. In addition, the team stated that there is some evidence to suggest that children may begin simple concrete

reporting between ages 5 and 7 with support, although reliable self-reporting generally emerges around age 8.

Following the overview, the TEP co-chairs asked TEP members to comment on how necessary it is to think about age in terms of different categories and definitions for the purpose of CYYA HCBS measure development. One TEP member described how defining age categories is essential for accurate measurement and service delivery, especially when supporting adolescents transitioning to adulthood. Further, they suggested that tailoring survey questions and measures to age-specific cognitive abilities is critical, particularly for evaluating services like HCBS.

When the TEP co-chairs asked what those categories should be, TEP members emphasized the need to distinguish between early, middle, and late adolescence and to consider both the chronological and cognitive developmental age. Some TEP members suggested that although consistent definitions across states would improve comparability, variations in age limits and service availability—such as defining “child” as up to age 18 or 21—pose challenges because states vary in service availability and in which age ranges are eligible to receive services through the children’s delivery system. Despite these differences, TEP members noted that standardized measures can still yield meaningful, actionable feedback that is comparable across states. Ultimately, however, TEP members did not agree on firm recommendations for how to define and categorize specific age ranges for CYYA HCBS measures.

Review and discussion of refined preliminary measure concepts

The project team then shifted the conversation to review a refined list of quality measure concepts for CYYA receiving HCBS. Based on TEP and key informant feedback, the project team removed several measure concepts from the preliminary list because of their limited importance, usability, or feasibility and consolidated others to reflect state-level rather than plan-level reporting. The project team asked TEP members to evaluate the remaining 11 concepts using CMS’ Measures Management System Blueprint criteria—focusing on importance, usability, and feasibility—to guide selection of up to five measures for further development and testing.

Review and discussion of measure concepts deemed important, usable, and feasible by TEP members and key informants

Based on feedback from the May TEP meeting, post-event survey, and key informant interviews, one measure concept—Admission to a Facility from the Community Among CYYA Receiving HCBS—was identified as important, usable, and feasible for further development. This outcome measure concept, adapted from a CMS-stewarded adult HCBS quality measure, utilizes claims data to track facility admissions across three durations: short-term (up to 20 days), medium-term (21–100 days), and long-term (over 100 days), reported as rates per 1,000 participant months. One TEP member remarked that the adult version of this measure concept is easily calculated using administrative claims data, so feasibility is likely to extend to CYYA. They further indicated that the measure concept is inherently usable as it provides actionable information. However, TEP members cited as a concern the overlap between adult and CYYA age ranges—adult age ranges start at age 18 and the proposed CYYA age range extends up to the 21st birthday.

Review and discussion of measure concepts deemed important and usable but less feasible by TEP members and key informants

Initial feedback from the May TEP meeting, post-event survey, and key informant interviews identified several measure concepts for CYYA receiving HCBS as important and usable, though potentially constrained by feasibility. These measure concepts include (1) Youth Receiving HCBS Who Receive Support Needed for Transitioning to Adult HCBS (specifically ages 14–20), which aligns with themes from the literature but lacks a defined data source; (2) Follow-Up After Emergency Department Visit for CYYA with Multiple High-Risk Chronic Conditions Who Receive HCBS, adapted from existing claims-based Medicaid Child Core Set measures for follow-up after emergency department visits for individuals with diagnoses of mental health or substance use disorder; (3) Reassessment and Person-Centered Plan Update After Inpatient Discharge for CYYA Receiving HCBS, which applies only to CYYA who experience inpatient discharge; and (4) CYYA Unmet Need, a de novo intermediate outcome measure assessing service delivery against person-centered plans using administrative data.

During the discussion, TEP members raised concerns about the feasibility and burden of certain measure concepts. Three TEP members noted that although Follow-Up After Emergency Department Visit for CYYA with Multiple High-Risk Chronic Conditions Who Receive HCBS appears feasible, defining high-risk chronic conditions could be challenging. Regarding Reassessment and Person-Centered Plan Update After Inpatient Discharge for CYYA Receiving HCBS, TEP members raised a concern regarding the manual effort required for abstracting data from reassessments and person-centered plan updates; an added concern was the fact that this measure concept is related to the CMS-stewarded adult HCBS quality measures LTSS-1, 2, and 3, which the project team removed for consideration, given feedback on their limited importance, usability, or feasibility. The TEP members indicated that this measure concept, as a result, is less usable without the related measures. There was strong support for prioritizing measures that reflect the lived experiences and needs of care recipients. Multiple TEP members emphasized that Youth Receiving HCBS Who Receive Support Needed for Transitioning to Adult HCBS and CYYA Unmet Need are important but potentially best captured through person- or family-reported data, rather than administrative records. In regard to CYYA Unmet Need, one TEP member stressed that receiving all authorized services is not the same as meeting needs, if authorized services are not sufficient. Another TEP member highlighted logistical issues due to state-level variation in service availability across HCBS waivers and age ranges, and potentially small sample sizes.

Review and discussion of measure concepts deemed important but less usable or feasible by TEP members and key informants

Initial feedback from TEP members and key informants identified two measure concepts as important but potentially facing challenges with usability or feasibility. The first—Improvement or Maintenance of Functioning for Youth with a Mental and/or Substance Use Disorder—focuses on tracking improvement or maintenance of functioning in youth aged 12 and older with mental health or substance use disorders; this tracking would require standardized assessments at multiple time points. The second—Chronic Absenteeism Among CYYA Receiving HCBS—addresses chronic absenteeism among school-aged CYYA receiving HCBS, using the education field’s definition of students’ missing 10 percent or more school days. The project team noted that the measure source was to be determined for this concept and asked for the

TEP's suggestions on this, adding that both concepts were considered meaningful but could require complex data collection.

TEP members discussed the feasibility of these two proposed measures and raised significant concerns about the feasibility of data collection and implementation. Regarding Improvement or Maintenance of Functioning for Youth with a Mental and/or Substance Use Disorder, TEP members questioned the practicality of using standardized tools and obtaining a sufficient sample size. Regarding Chronic Absenteeism Among CYYA Receiving HCBS, they noted challenges with accessing reliable education data across states and the variability in the ages of CYYA in the education system. They also highlighted complicating factors such as inconsistent data sharing, weather-related absences, home and private schooling, the lack of alignment between the school and calendar year, and transportation issues. TEP members expressed doubts about the accuracy of self-reported data when measuring absenteeism. Ultimately, 4 (Improvement or Maintenance of Functioning) and 5 (Chronic Absenteeism) of 18 TEP members in attendance expressed concerns about these measure concepts due to usability, feasibility, and the ability to collect consistent and meaningful data.

Review and discussion of measure concepts deemed feasible but less important or usable by TEP members and key informants

The project team reviewed four measure concepts that appear feasible but may have limited usefulness or relevance, according to initial TEP and key informant feedback. These include Self-Direction of Services and Supports Among CYYA Receiving HCBS Through Managed Care Plans, All-Cause Readmission Among CYYA Receiving HCBS, Minimizing Facility Length of Stay for CYYA Receiving HCBS, and Successful Transition After Long-Term Facility Stay for CYYA Receiving HCBS. Each of these measure concepts is adapted from an existing adult measure in the HCBS QMS and relies on administrative claims or case management data. TEP members and key informants raised initial concerns about their overall value and applicability to CYYA, and TEP members were asked for additional feedback.

TEP members described All-Cause Readmission Among CYYA Receiving HCBS and Minimizing Facility Length of Stay for CYYA Receiving HCBS as important, because they reflect the adequacy of community supports and care transitions and the companion adult measures have general support from the HCBS community. Although these measures could be adapted to younger populations, TEP members raised concerns about overlapping age range with the existing adult measures. TEP members also noted that the Self-Direction of Services and Supports Among CYYA Receiving HCBS Through Managed Care Plans concept had similar challenges to those raised earlier regarding the current HCBS-10 adult measure. One member added that this concept may be better suited for survey-based reporting, given the difficulty of extracting meaningful data from case management records. One member noted that "successful transitions," as defined in Successful Transition After Long-Term Facility Stay for CYYA Receiving HCBS, may vary by state and can have different meanings.

When the TEP co-chairs asked the TEP members to identify the most and least important, usable, and feasible measure concepts, their feedback reiterated several themes they raised earlier in the discussion. Six TEP members cited the need for quality measures that are actionable, such as those focused on transitions between facilities and the community. One TEP member noted that self-direction was a lower priority due to difficulties with abstraction from case management records. Another TEP member noted

that this measure concept is not relevant in FFS states. One TEP member highlighted that acute readmission rates and minimizing facility length of stay are top concerns; the TEP member viewed them as key indicators of service gaps and essential for building long-term HCBS capacity. Another TEP member identified respecifying LTSS-6, which measures the number of adult admissions to a facility from the community, as the most practical and useful measure concept. Four TEP members underscored the advantages of claims-based measures, suggesting that respecifying the adult versions of LTSS-6, 7, and 8 would offer a strong balance between meaningful insights and manageable data collection. The group also discussed the importance of updating service plans after discharge, with one member supporting this concept as important. Additionally, one member noted that measuring unmet need, although the data source was not yet clearly defined, would be highly relevant to families. Another member noted that measuring support for youth transitioning to adult services emerged as a central priority in their work and may be worth exploring despite the development challenges.

TEP co-chairs asked TEP members to identify any measure concepts they believed should no longer be considered for further development. One TEP member suggested Self-Direction of Services and Supports Among CYYA Receiving HCBS Through Managed Care Plans, mentioning that some states do not provide self-direction through managed care plans and would not have a comparable way of gathering that information. Another TEP member expressed concerns with Reassessment and Person-Centered Plan Update After Inpatient Discharge for CYYA Receiving HCBS, indicating that the companion measure concepts (respecified versions of LTSS-1, 2, and 3) had been removed from consideration after the first TEP meeting, and without those measures there was no baseline for comparison. Some TEP members raised concerns about the inability to find a consistent way to measure chronic absenteeism across states and the lack of relevant data sources as reasons to remove Chronic Absenteeism Among CYYA Receiving HCBS from further consideration. Four TEP members reiterated that the CYYA Unmet Need de novo concept may be better measured using person-reported outcomes data.

Voting on measure concepts

Following the TEP meeting, the project team invited TEP members to complete a survey that provided the opportunity to vote on and rank which CYYA HCBS measure concepts they would support for further development and testing. Fourteen out of eighteen TEP members completed the post-meeting survey as of the survey closing date of September 2, 2025. The survey responses largely aligned with the feedback provided during the TEP meeting.

The following measure concepts received the most support due to the perceived importance, usability, and feasibility of claims-based measures:

- Admission to a Facility from the Community Among CYYA Receiving HCBS (respecified MLTSS/FFS LTSS-6)
- Follow-Up After Emergency Department Visit for CYYA with Multiple High-Risk Chronic Conditions Who Receive HCBS
- All-Cause Readmission Among CYYA Receiving HCBS
- Minimizing Facility Length of Stay for CYYA Receiving HCBS (respecified MLTSS/FFS LTSS-7)

- Successful Transition After Long-Term Facility Stay for CYYA Receiving HCBS (respecified MLTSS/FFS LTSS-8)

The following measure concepts received the least support due to the perceived lack of importance and usability and the high burden of data collection by states:

- Reassessment and Person-Centered Plan Update After Inpatient Discharge for CYYA Receiving HCBS (respecified MLTSS/FFS LTSS-4)
- Improvement or Maintenance of Functioning for Youth with a Mental and/or Substance Use Disorder
- Chronic Absenteeism Among CYYA Receiving HCBS
- Self-Direction of Services and Supports Among CYYA Receiving HCBS Through Managed Care Plans (respecified HCBS-10)

The following measure concepts received mixed support due to their perceived importance but lack of usability and feasibility as administrative-based measures. TEP members indicated that these measures would likely be better suited as survey-based measures:

- Youth Receiving HCBS Who Receive Support Needed for Transitioning to Adult HCBS
- CYYA Unmet Need

Appendix A: TEP members and project team

Exhibit 1. TEP members

Name	Organizational affiliation
Anne Deutsch*	RTI International
Brittany Pennington	Minnesota Department of Human Services
Camille Dobson	ADvancing States
Colleen McKiernan	The Lewin Group
Coretta Lankford	American Institutes for Research (AIR)
Donna Martin	American Network of Community Options and Resources (ANCOR)
Eric Carlson	Justice in Aging
Joseph Caldwell	Brandeis University
Kayla Trzruc*	North Dakota Department of Health and Human Services
Kim Grasty	Iowa Department of Health and Human Services
Linda Riccio	Transitional Care Management
Martha Ryan	MassHealth
Renata Ticha	University of Minnesota Institute on Community Integration
Sara Hackbart	Elevance Health
Tamara Poluszek	Aetna Better Health of Florida
Therence James	University of Connecticut Center on Aging
Tom Rice	Caregiver and family member of a person receiving HCBS; ANCOR
Victoria Wagner	New York State Department of Health

*TEP co-chair

Exhibit 2. Project team

Name	Organizational affiliation
Kerry Lida	Centers for Medicare & Medicaid Services
Jen Bowdoin	Centers for Medicare & Medicaid Services
Melanie Brown	Centers for Medicare & Medicaid Services
Mary Botticelli	Centers for Medicare & Medicaid Services
Jessica Lee	Centers for Medicare & Medicaid Services
Susan Ruiz	Centers for Medicare & Medicaid Services
Andrea Wysocki	Mathematica
Elizabeth Boystak	Mathematica
Elizabeth Greener	Mathematica
Sara Galantowicz	Human Services Research Institute
Stephanie Giordano	Human Services Research Institute
Krista Hammons	Mathematica
Cassidy Kantoris	Mathematica
Linda Newton-Curtis	Human Services Research Institute
Jessica Ross	Mathematica
Alena Tourtellotte	Mathematica