

# Full Measure Submission to Partnership for Quality Measurement

## Scientific Acceptability

### Validity

Provide the statistical results from validity testing for each level of validity testing conducted.\*

**Face Validity.** Due to lack of empirical testing, a systematic assessment of face validity was included to provide evidence of face validity. Data for the five unmet needs measures and one personal safety measure were collected via a survey of 10 members of the measure developer's technical expert panel. Results appear in **Exhibit 17** through **Exhibit 34**.

**Exhibit 17. Measure Score Face Validity Results for the Question: A measure on unmet needs in dressing or bathing effectively documents the participant experience in availability of support for dressing or bathing.**

Response Option	Response (%)	Response (#)
Strongly Agree	20.0%	2
Agree	40.0%	4
Undecided	10.0%	1
Disagree	10.0%	1
Strongly Disagree	20.0%	2

**Exhibit 18. Measure Score Face Validity Results for the Question: A measure on unmet needs in dressing or bathing due to lack of help provides meaningful data on the participant experience in availability of support for dressing or bathing.**

Response Option	Response (%)	Response (#)
Strongly Agree	20.0%	2
Agree	40.0%	4
Undecided	20.0%	2
Disagree	10.0%	1
Strongly Disagree	10.0%	1

**Exhibit 19. Measure Score Face Validity Results for the Question: Within the HCBS CAHPS Survey, the question about unmet needs in dressing or bathing due to lack of help is written clearly and can be interpreted by participants to provide an answer to this question.**

Response Option	Response (%)	Response (#)
Strongly Agree	10.0%	1
Agree	30.0%	3

Response Option	Response (%)	Response (#)
Undecided	20.0%	2
Disagree	10.0%	1
Strongly Disagree	30.0%	3

**Exhibit 20. Measure Score Face Validity Results for the Question: A measure on unmet needs in meal preparation or eating effectively documents the participant experience in availability of support for preparation or eating.**

Response Option	Response (%)	Response (#)
Strongly Agree	20.0%	2
Agree	40.0%	4
Undecided	10.0%	1
Disagree	20.0%	2
Strongly Disagree	10.0%	1

**Exhibit 21. Measure Score Face Validity Results for the Question: A measure on unmet needs in dressing or bathing due to lack of help provides meaningful data on the participant experience in availability of support for dressing or bathing.**

Response Option	Response (%)	Response (#)
Strongly Agree	30.0%	3
Agree	20.0%	2
Undecided	0.0%	0
Disagree	30.0%	3
Strongly Disagree	20.0%	2

**Exhibit 22. Measure Score Face Validity Results for the Question: Within the HCBS CAHPS Survey, the question about unmet needs in dressing or bathing due to lack of help is written clearly and can be interpreted by participants to provide an answer to this question.**

Response Option	Response (%)	Response (#)
Strongly Agree	30.0%	3
Agree	20.0%	2
Undecided	10.0%	1
Disagree	20.0%	2
Strongly Disagree	20.0%	2

**Exhibit 23. Measure Score Face Validity Results for the Question: A measure on unmet needs in medication administration effectively documents the participant experience in availability of support for administering medication.**

Response Option	Response (%)	Response (#)
Strongly Agree	20.0%	2
Agree	40.0%	4

Response Option	Response (%)	Response (#)
Undecided	20.0%	2
Disagree	10.0%	1
Strongly Disagree	10.0%	1

**Exhibit 24. Measure Score Face Validity Results for the Question: *A measure on unmet needs in medication administration due to lack of help provides meaningful data on the participant experience in availability of support for administering medication.***

Response Option	Response (%)	Response (#)
Strongly Agree	20.0%	2
Agree	40.0%	4
Undecided	20.0%	2
Disagree	10.0%	1
Strongly Disagree	10.0%	1

**Exhibit 25. Measure Score Face Validity Results for the Question: *Within the HCBS CAHPS Survey, the question about unmet needs in medication administration due to lack of help is written clearly and can be interpreted by participants to provide an answer to this question.***

Response Option	Response (%)	Response (#)
Strongly Agree	20.0%	2
Agree	40.0%	4
Undecided	0.0%	0
Disagree	30.0%	3
Strongly Disagree	10.0%	1

**Exhibit 26. Measure Score Face Validity Results for the Question: *A measure on unmet needs in toileting effectively documents the participant experience in availability of support for toileting.***

Response Option	Response (%)	Response (#)
Strongly Agree	20.0%	2
Agree	50.0%	5
Undecided	0.0%	0
Disagree	20.0%	2
Strongly Disagree	10.0%	1

**Exhibit 27. Measure Score Face Validity Results for the Question: *A measure on unmet needs in toileting due to lack of help provides meaningful data on the participant experience in availability of support for toileting.***

Response Option	Response (%)	Response (#)
Strongly Agree	20.0%	2
Agree	40.0%	4

Response Option	Response (%)	Response (#)
Undecided	20.0%	2
Disagree	10.0%	1
Strongly Disagree	10.0%	1

**Exhibit 28. Measure Score Face Validity Results for the Question: *Within the HCBS CAHPS Survey, the question about unmet needs in toileting due to lack of help is written clearly and can be interpreted by participants to provide an answer to this question.***

Response Option	Response (%)	Response (#)
Strongly Agree	20.0%	2
Agree	40.0%	4
Undecided	30.0%	3
Disagree	10.0%	1
Strongly Disagree	0.0%	0

**Exhibit 29. Measure Score Face Validity Results for the Question: *A measure on unmet needs in household tasks effectively documents the participant experience in availability of support for completion of household tasks.***

Response Option	Response (%)	Response (#)
Strongly Agree	20.0%	2
Agree	40.0%	4
Undecided	0.0%	0
Disagree	30.0%	3
Strongly Disagree	10.0%	1

**Exhibit 30. Measure Score Face Validity Results for the Question: *A measure on unmet needs in household tasks due to lack of help provides meaningful data on the participant experience in availability of support for completion of household tasks.***

Response Option	Response (%)	Response (#)
Strongly Agree	20.0%	2
Agree	50.0%	5
Undecided	0.0%	0
Disagree	20.0%	20
Strongly Disagree	10.0%	10

**Exhibit 31. Measure Score Face Validity Results for the Question: *Within the HCBS CAHPS Survey, the question about unmet needs in household tasks due to lack of help is written clearly and can be interpreted by participants to provide an answer to this question.***

Response Option	Response (%)	Response (#)
Strongly Agree	20.0%	2
Agree	50.0%	5

Response Option	Response (%)	Response (#)
Undecided	10.0%	1
Disagree	10.0%	1
Strongly Disagree	10.0%	1

**Exhibit 32. Measure Score Face Validity Results for the Question: *A measure evaluating whether a participant has been hit or hurt by staff effectively documents the participant experience in participant safety.***

Response Option	Response (%)	Response (#)
Strongly Agree	10.0%	1
Agree	10.0%	1
Undecided	40.0%	4
Disagree	30.0%	3
Strongly Disagree	10.0%	1

**Exhibit 33. Measure Score Face Validity Results for the Question: *A measure on participant safety provides meaningful data on the participant experience in whether they were hit or hurt by a staff member (or members).***

Response Option	Response (%)	Response (#)
Strongly Agree	10.0%	1
Agree	60.0%	6
Undecided	20.0%	2
Disagree	10.0%	1
Strongly Disagree	0.0%	0

**Exhibit 34. Measure Score Face Validity Results for the Question: *Within the HCBS CAHPS Survey, the question about participant safety is written clearly and can be interpreted by participants to provide an answer to this question.***

Response Option	Response (%)	Response (#)
Strongly Agree	22.2%	2
Agree	44.4%	4
Undecided	22.2%	2
Disagree	0.0%	0
Strongly Disagree	11.1%	1

**Construct Validity.** **Exhibit 35** and **Exhibit 36** display estimates related to the two construct validity tests—confirmatory factor analysis and scale measure correlation. **Exhibit 35** presents the model fit statistics and factor loading from the confirmatory factor analysis. A majority of questions for each factor had loadings of 0.40 or greater; only one value fell below 0.20. Moreover, the questions with scores below 0.40 did not load onto multiple factors. **Exhibit 36** shows the correlation between the scale measures using participant-level data.

### Exhibit 35. Model Fit and Factor Loading for Confirmatory Factor Analysis

Model Fit:						
Standardized RMR (SRMR): 0.05						
Adjusted GFI (AGFI): 0.96						
Bentler-Bonett NFI: 0.94						
Standard Factor Loading and Item Correlation Based on Unweighted Least Squares Estimation Method* (Item [Factor Loading, Correlation])						
Factor 1 <i>Staff Are Reliable and Helpful</i>	Factor 2 <i>Staff Listen and Communicate Well</i>	Factor 3 <i>Case Manager is Helpful</i>	Factor 4 <i>Choosing the Services that Matter to You</i>	Factor 5 <i>Transportation to Medical Appointments</i>	Factor 6 <i>Personal Safety and Respect</i>	Factor 7 <i>Planning your Time and Activities</i>
Q13 (1.02, 0.72)	Q28 (0.92, 0.81)	Q49 (0.62, 0.73)	Q56 (0.93, 0.21)	Q59 (0.99, 1.00)	Q64 (0.33, 0.69)	Q75 (1.00, 0.12)
Q14 (1.14, 0.74)	Q29 (0.25, 0.76)	Q51 (1.66, 0.11)	Q57 (1.00, 1.00)	Q61 (0.18, 0.08)	Q65 (0.86, 0.90)	Q77 (0.99, 0.07)
Q15 (0.24, 0.44)	Q30 (0.79, 0.78)	Q53 (1.67, 0.13)		Q62 (0.98, 0.09)	Q68 (1.09, 0.89)	Q78 (0.91, 0.52)
Q19 (0.31, 0.38)	Q31 (0.65, 0.81)					Q79 (0.91, 0.80)
Q37 (1.21, 0.48)	Q32 (0.73, 0.82)					Q80 (0.35, 0.49)
Q38 (1.28, 0.50)	Q33 (0.30, 0.77)					Q81 (0.30, 0.51)
	Q41 (0.95, 0.51)					
	Q42 (0.52, 0.49)					
	Q43 (0.95, 0.49)					
	Q44					

<b>Model Fit:</b>						
Standardized RMR (SRMR): 0.05						
Adjusted GFI (AGFI): 0.96						
Bentler-Bonett NFI: 0.94						
<b>Standard Factor Loading and Item Correlation Based on Unweighted Least Squares Estimation Method* (Item [Factor Loading, Correlation])</b>						
	(0.88, 0.50)					
	Q45					
	(0.15, 0.50)					

Note: The cutoffs for good model fit are: (i) SRMR <0.08; (ii) AGFI ≥0.90; and (iii) NFI ≥ 0.95.

\* Factor loading based on the unweighted least squares method (Ferro, 2009), using participant-level data with missing items imputed for cases that had at least one item response for a measure. The diagonally weighted least squares showed similar model fit, with SRMR=0.05, AGFI=0.99 and NFI=0.93. The factor loading and item correlation show the item's relationship with the measure construct.

### Exhibit 36. Inter-Scale Correlations, Using Participant-Level Data

Scale Measures	Staff are Reliable and Helpful	Staff Listen and Communicate Well	Case Manager is Helpful	Choosing the Services that Matter to You	Transportation to Medical Appointments	Personal Safety and Respect	Planning your Time and Activities
Staff are Reliable and Helpful	1.00	—	—	—	—	—	—
Staff Listen and Communicate Well	0.45*	1.00	—	—	—	—	—
Case Manager is Helpful	0.11*	0.07	1.00	—	—	—	—
Choosing the Services that Matter to You	0.29*	0.29*	0.11*	1.00	—	—	—
Transportation to Medical Appointments	0.17*	0.20*	0.02	0.15*	1.00	—	—
Personal Safety and Respect	0.11*	0.18*	0.02	0.05	0.21*	1.00	—
Planning your Time and Activities	0.13*	0.19*	0.07*	0.16*	0.24*	0.18*	1.00

\* Values are significantly different from zero ( $p < 0.0001$ ), except for the following correlations: *Case manager is helpful—Transportation to medical appointments* and *Case manager is helpful—Personal safety and respect*. Although these correlations are significantly different from zero, the magnitude is low.

### Exhibit 37. Correlation of Scale Measures and Related Single-Item Measures—Global Rating, Recommendation Measures, and Physical Safety

Measure	Correlation with Global Rating of Personal Assistance Staff	Correlation with Recommendation of Personal Assistance Staff
Staff are Reliable and Helpful	0.32*	0.36*
Staff Listen and Communicate Well	0.41*	0.43*
Personal Safety and Respect	0.04*	0.07*

Measure	Correlation with Global Rating of Homemaker	Correlation with Recommendation of Homemaker
Staff are Reliable and Helpful	0.32*	0.36*
Staff Listen and Communicate Well	0.41*	0.43*
Personal Safety and Respect	0.04*	0.06*
Measure	Correlation with Global Rating of Case Manager	Correlation with Recommendation of Case Manager
Case Manager is Helpful	0.17*	0.20*
Choosing the Services that Matter to You	0.26*	0.20*
Measure	Correlation with Physical Safety Measure	
Personal Safety and Respect	0.08*	

Note: The Point-Biserial Correlation was calculated between the continuous scale measure and binary single-item measures.

\*Values are significantly different from zero ( $p < 0.0001$ ).

**Convergent Validity.** Exhibit 38 through Exhibit 44 display the inter-item correlation between items of same scale measure, used to assess for measure convergent validity. A moderate to high correlation between the items indicate that they capture a similar concept.

#### Respondent-Level Intra-Scale Correlations

##### Exhibit 38. Items Related to Staff are Reliable and Helpful (Scale Measure 1)

Staff Are Reliable and Helpful	Q13	Q14	Q15	Q19	Q37	Q38
Staff Come to Work on Time (Q13)*	1.00	—	—	—	—	—
Staff Work as Long as They are Supposed to (Q14)*	0.55*	1.00	—	—	—	—
Someone Tells you if Staff Cannot Come (Q15)	0.10*	0.12*	1.00	—	—	—
Staff Make Sure you Have Enough Privacy for Dressing, Showering, Bathing (Q19)	0.13*	0.12*	0.02	1.00	—	—
Homemakers Come to Work on Time (Q37)*	0.65*	0.73*	0.12*	0.12*	1.00	—
Homemakers Work as Long as They are Supposed to (Q38)*	0.68*	0.82*	0.14*	0.13*	0.87*	1.00

\* Values are significantly different from zero at the 90-percent confidence level (except for the Q15—Q19 correlation).



**Exhibit 39. Items Related to Staff Listen and Communicate Well (Scale Measure 2)**

Staff Listen and Communicate Well	Q28	Q29	Q30	Q31	Q32	Q33	Q41	Q42	Q43	Q44	Q45
Staff Treat you with Courtesy and Respect (Q28)	1.00	—	—	—	—	—	—	—	—	—	—
Staff Explanations are Easy to Understand (Q29)	0.11*	1.00	—	—	—	—	—	—	—	—	—
Staff Treat you the Way you Want Them to (Q30)	0.57*	0.11*	1.00	—	—	—	—	—	—	—	—
Staff Explain Things in a Way that is Easy to Understand (Q31)	0.42*	0.15*	0.45*	1.00	—	—	—	—	—	—	—
Staff Listen Carefully to You (Q32)	0.48*	0.10*	0.50*	0.50*	1.00	—	—	—	—	—	—
Staff Know What Kind of Help you Need with Everyday Activities (Q33)	0.15*	0.09*	0.17*	0.14*	0.12*	1.00	—	—	—	—	—
Homemakers Treat you with Courtesy and Respect (Q41)	0.89*	0.10*	0.57*	0.48*	0.54*	0.18*	1.00	—	—	—	—
Homemaker Explanations are Easy to Understand* (Q42)	0.36*	0.48*	0.24*	0.40*	0.30*	0.31*	0.35*	1.00	—	—	—
Homemakers Treat you the Way you Want Them To (Q43)	0.75*	0.12*	0.72*	0.49*	0.57*	0.21*	0.80*	0.34*	1.00	—	—
Homemakers Listen Carefully (Q44)	0.83*	0.19	0.51*	0.36*	0.55*	0.17*	0.78*	0.41*	0.50*	1.00	—
Homemakers Know What Kind of Help You Need (Q45)	0.10*	0.08	0.08*	0.07*	0.06*	0.03*	0.12*	0.13*	0.25*	0.21*	1.00

\* Values are significantly different from zero (no correlation) at the 90-percent confidence level.

**Exhibit 40. Items Related to Case Manager is Helpful (Scale Measure 3)**

Case Manager is Helpful	Q49	Q51	Q53
Able to Contact this Case Manager when Needed (Q49)	1.00	—	—
Case Manager Helped when Asked for Help with Getting or Fixing Equipment (Q51)	0.22*	1.00	—
Case Manager Helped when Asked for Help with Getting Other Changes to See (Q53)	0.27*	0.78*	1.00

\* Values are significantly different from zero (no correlation) at the 90-percent confidence level.

**Exhibit 41. Items Related to Choosing the Services that Matter to You (Scale Measure 4)**

Choosing the Services that Matter to You	Q56	Q57
Person-Centered Service Plan Included all of the Things that are Important (Q56)	1.00	—

Choosing the Services that Matter to You	Q56	Q57
Staff Knows What's on the Service Plan, including the Things that are Important (Q57)	0.15*	1.00

\* Values are significantly different from zero (no correlation) at the 90-percent confidence level.

#### **Exhibit 42. Items Related to Transportation to Medical Appointments (Scale Measure 5)**

Transportation to Medical Appointments	Q59	Q61	Q62
Have a Way to Get to your Medical Appointments (Q59)	1.00	—	—
Able to Get In and Out of this Ride Easily (Q61)	0.06*	1.00	—
Ride Arrives on Time to Pick you Up (Q62)	0.65*	0.07	1.00

\* Values are significantly different from zero (no correlation) at the 90-percent confidence level (except for the Q61—Q62 correlation).

#### **Exhibit 43. Items Related to Personal Safety and Respect (Scale Measure 6)**

Personal Safety and Respect	Q64	Q65	Q68
Have Someone to Talk to if Someone Hurts you or Does Something to you that you Don't Like (Q64)	1.00	—	—
None of the Staff Take Money or Things Without Asking (Q65)	0.01	1.00	—
None of the Staff Yell, Swear, or Curse (Q68)	0.00	0.22*	1.00

\* Values are significantly different from zero (no correlation) at the 90-percent confidence level for the Q68—Q65 correlation.

#### **Exhibit 44. Items Related to Planning your Time and Activities (Scale Measure 7)**

Planning your Time and Activities	Q75	Q77	Q78	Q79**	Q80	Q81
Can Get Together with Nearby Family (Q75)	1.00	—	—	—	—	—
Can Get Together with Nearby Friends (Q77)	0.53*	1.00	—	—	—	—
Can do Things in Community (Q78)	0.39*	0.53*	1.00	—	—	—
Needs More Help to Do Things in Community (Q79)	0.05*	0.02	0.04*	1.00	—	—
Takes Part in Deciding What to Do with their Time (Q80)	0.10	0.08*	0.08*	0.03*	1.00	—
Takes Part in Deciding When they do Things Each Day (Q81)	0.11*	0.08	0.05*	0.05*	0.56*	1.00

\* Values are significantly different from zero (no correlation) at the 90-percent confidence level (except for the Q77—Q79 correlation).

**Discriminant Validity.** Exhibit 45 displays the results of the multi-trait analysis for the scale measures to assess for measure discriminant validity.

#### **Exhibit 45. Multi-Trait Analysis Results Using Respondent-Level Data (Discriminant Validity)**

Scale Measure	N Responses	Coefficient Alpha	Average Scale Measure	Std Dev of Scale Measures	Scaling Success (%)*
Staff are Reliable and Helpful	3,711	0.75	0.90	0.20	100
Staff Listen and Communicate Well	3,711	0.85	0.91	0.17	100
Case Manager is Helpful	3,711	0.68	0.95	0.16	100
Choosing the Services that Matter to You	3,711	0.18	0.82	0.26	100
Transportation to Medical Appointments	3,711	0.58	0.84	0.26	100
Personal Safety and Respect	3,711	0.07	0.94	0.13	100
Planning your Time and Activities	3,711	0.56	0.59	0.22	100

\* *Scaling success* represents the percent of items defined in the measure construct that represent the particular measure, relative to other measures. Scaling success is achieved when items demonstrate stronger loadings on their intended traits compared to other traits.

### Provide your interpretation of the results in terms of demonstrating validity.\*

The measure developer performed validity testing of all measures using methods appropriate for each measure. **Exhibit 46** presents a summary of the validity testing. A detailed description of results for each type of validity testing appears below the exhibit. **Exhibit 46. Summary of Validity Testing**

HCBS CAHPS Measures	Type of Validity Testing				
	Face	Construct	Convergent	Discriminant	Criterion
<b>Scale Measures</b>					
Staff are Reliable and Helpful		✓ High	Moderate	✓ 100% Scaling, Alpha>0.70	Moderate
Staff Listen and Communicate Well		✓ High	Moderate	✓ 100% Scaling, Alpha>0.70	Moderate
Case Manager is Helpful		✓ High	Moderate	100% Scaling	Low
Choosing the Services that Matter to You		✓ High	Moderate	100% Scaling	Low
Transportation to Medical Appointments		✓ High	Moderate	100% Scaling	
Personal Safety and Respect		✓ High	Moderate	100% Scaling	Low
Planning your Time and Activities		✓ High	Moderate	100% Scaling	
<b>Global Rating Measures</b>					

<b>Global Rating of PCA or Behavioral Health Staff</b>					Moderate
<b>Global Rating of Homemaker</b>					Moderate
<b>Global Rating of Case Manager</b>					Low
<b>Recommendation Measures</b>					
<b>Recommendation of PCA or Behavioral Health Staff</b>					Moderate
<b>Recommendation of Homemaker</b>					Moderate
<b>Recommendation of Case Manager</b>					Low
<b>Unmet Needs Measures</b>					
<b>Sufficient Staff to Help Dress, Shower, or Bathe</b>	Moderate				
<b>Sufficient Staff to Help you with Meals</b>	Low/Moderate				
<b>Sufficient Staff to Help you with Medications</b>	Moderate				
<b>Sufficient Staff to Help you with Toileting</b>	Moderate				
<b>Sufficient Homemakers to Help you with Household Tasks</b>	Moderate				
<b>Physical Safety Measure</b>					
<b>Not Hit or Hurt by Staff</b>	Low/Moderate				