

Appendix 1

Technical Specification of Post-Acute Care Quality Measures

Appendix 1. Technical Specification of Post-Acute Care Quality Measures

Sequence	Label/Status	Description	Specifications	Exclusions* #	Covariates
1	PAC-DELOX1/ Currently reported	Percent of short-stay residents with delirium	<p>Numerator: Residents at SNF PPS 14-day assessment (referred to as 14-day assessment thereafter) with at least one symptom of delirium that represents a departure from usual functioning (at least one B5a through B5f = 2).</p> <p>Denominator: All residents with a valid 14-day assessment</p>	<p>Residents satisfying any of the following conditions:</p> <ol style="list-style-type: none"> 1. Comatose (B1 = 1) or comatose status unknown (B1 = missing) on 14-day assessment 2. End stage disease (J5c=checked) or end stage disease status unknown (J5c = missing) on 14-day assessment 3. Hospice (P1ao = checked) or hospice status unknown (P1ao = missing) on 14-day assessment 4. QM did not trigger and there is a missing value on any of the items B5a - B5f on the 14-day assessment 	<p>Indicator of NO prior residential history preceding the current SNF stay for the resident:</p> <p>Covariate = 1 if there is NO prior residential history indicated by the following condition being satisfied: There is a recent admission assessment (AA8a = 01) AND AB5a through AB5e are not checked (value 0) and AB5f is checked (value 1).</p> <p>Covariate = 0 if there is prior residential history indicated by either of the following conditions:</p> <ol style="list-style-type: none"> a) Recent admission assessment (AA8a = 01) AND any of items AB5a through AB5e checked OR AB5f not checked (value = 0) b) No recent admission assessment (AA8a = 01)

Appendix 1. Technical Specification of Post-Acute Care Quality Measures

Sequence	Label/Status	Description	Specifications	Exclusions* #	Covariates
2	PAC-DELOX2/ Covariate report	Percent of short-stay residents with delirium	<p>Numerator: Residents at 14-day assessment with at least one symptom of delirium that represents a departure from usual functioning (at least one B5a through B5f = 2).</p> <p>Denominator: All residents with a valid 14-day assessment</p>	<p>Residents satisfying any of the following conditions:</p> <ol style="list-style-type: none"> 1. Comatose (B1 = 1) or comatose status unknown (B1 = missing) on 14-day assessment 2. End stage disease (J5c=checked) or end stage disease status unknown (J5c = missing) on 14-day assessment 3. Hospice (P1ao = checked) or hospice status unknown (P1ao = missing) on 14-day assessment 4. QM did not trigger and there is a missing value on any of the items B5a - B5f on the 14-day assessment 	NONE
3	PAC-PAIOX1 / Currently reported	Percent of short-stay residents who had moderate to severe pain	<p>Numerator: Residents at 14-day assessment with moderate pain at least daily (J2a = 2 and J2b = 2) OR horrible/excruciating pain at any frequency (J2b = 3)</p> <p>Denominator: All residents with valid 14-day assessment (AA8b = 7)</p>	<ol style="list-style-type: none"> 1. J2a or J2b missing on the 14-day assessment 2. J2a and J2b inconsistent on the 14-day assessment 	NONE

Appendix 1. Technical Specification of Post-Acute Care Quality Measures

Sequence	Label/Status	Description	Specifications	Exclusions* #	Covariates
4	PAC-PAI0X2 / Covariate report	Percent of short-stay residents with pain	<p>Numerator: Residents at the 14-day assessment with moderate pain at least daily (J2a = 2 and J2b = 2) OR horrible/excruciating pain at any frequency (J2b = 3)</p> <p>Denominator: All residents with valid 14-day assessment (AA8b = 7)</p>	<ol style="list-style-type: none"> 1. J2a or J2b missing on the 14-day assessment 2. J2a and J2b inconsistent on the 14-day assessment 	<ol style="list-style-type: none"> 1. Cognitive Performance Scale (CPS) on the SNF PPS 5-day assessment (referred to as 5-day assessment thereafter) (CPS see Technical Specifications). 2. Hip Fracture in last 180 days (J4c is checked (value 1) on the 5-day assessment). 3. Combination Alzheimer's Disease / Other Dementia (I1q OR I1u are checked [value = 1] on the 5-day assessment).
5	PAC-PRU0X1	Percent of short-stay residents whose pressure sores have not gotten better.	<p>Numerator: Residents at SNF 14-day assessment who satisfy either of the following conditions:</p> <ol style="list-style-type: none"> 1. On the 5-day assessment, no pressure sores (M2a [t-1] = 0) AND on the 14-day assessment, at least a Stage 1 pressure sore (M2a [t] = 1,2,3 or 4) 2. On the 5-day assessment, pressure sore (M2a [t-1] = 1,2,3 or 4) AND on the 14-day assessment, pressure sores worsened or failed to improve (M2a [t]>=M2a [t-1]) <p>Denominator: All residents with a valid 14-day assessment (AA8b = 7) AND a valid preceding 5-day assessment (AA8b = 1)</p>	<p>Residents satisfying the following condition:</p> <ol style="list-style-type: none"> 1. M2a is missing on the 14-day assessment (M2a [t]=missing). 2. M2a is missing on the 5-day assessment (M2a [t-1]=missing) and M2a shows presence of ulcers on the 14-day assessment (M2a [t] = 1, 2, 3, or 4). 	NONE

Appendix 1. Technical Specification of Post-Acute Care Quality Measures

Sequence	Label/Status	Description	Specifications	Exclusions* #	Covariates
6	PAC-PRU0X2/ Currently reported	Percent of short-stay residents whose pressure sores have not gotten better.	<p>Numerator: Residents who satisfy either of the following conditions:</p> <ol style="list-style-type: none"> 1. On the 5-day assessment, the resident had no pressure sores (M2a [t-1] = 0) AND, on the 14-day assessment, the resident has at least a stage 1 pressure sore (M2a [t] = 1, 2, 3, or 4). 2. On the 5-day assessment, the resident had a pressure sore (M2a [t-1] = 1, 2, 3, or 4) AND on the 14-day assessment, pressure sores worsened or failed to improve (M2a [t] >= M2a [t-1]). <p>Denominator: All residents with a valid 14-day assessment (AA8b = 7) AND a valid preceding 5-day assessment (AA8b = 1).</p>	<p>Residents satisfying any of the following conditions:</p> <ol style="list-style-type: none"> 1. M2a is missing on the 14-day assessment (M2a [t]=missing). 2. M2a is missing on the 5-day assessment (M2a [t-1]=missing) and M2a shows presence of ulcers on the 14-day assessment (M2a [t] = 1, 2, 3, or 4). 	<ol style="list-style-type: none"> 1. Indicator of history of unresolved pressure sore on the 5-day assessment: Covariate = 1 if M3 = 1. Covariate = 0 if M3 = 0. 2. Indicator of requiring limited or more assistance in bed mobility on the 5-day assessment: Covariate = 1 if G1a(A) = 2, 3, 4, or 8. Covariate = 0 if G1a(A) = 0 or 1 3. Indicator of bowel incontinence at least one week on the 5-day assessment: Covariate = 1 if H1a 2, 3, or 4. Covariate = 0 if H1a = 0 or 1. 4. Indicator of diabetes or peripheral vascular disease on the 5-day assessment: Covariate = 1 if I1a checked (value 1) OR I1j checked (value 1). Covariate = 0 if I1a not checked (value 0) AND I1j not checked (value 0).

Appendix 1. Technical Specification of Post-Acute Care Quality Measures

Sequence	Label/Status	Description	Specifications	Exclusions* #	Covariates
					<p>5. Indicator of low Body Mass Index (BMI) on the 5-day assessment:</p> <p>Covariate = 1 if BMI \geq 12 AND \leq 19.</p> <p>Covariate = 0 if BMI $>$ 19 AND \leq 40.</p> <p>Where: BMI = weight-in-kilograms / height-in-meters-squared = $(K2b * 0.45) / [(K2a * .0254)^2]$</p> <p>(Note: An implausible BMI value $<$ 12 or $>$ 40 will be treated as a missing value on this covariate.)</p>
7	PAC-PRU0X 3 / Covariate report	Percent of short-stay residents whose pressure sores have not gotten better	<p>Numerator: Residents who satisfy either of the following conditions:</p> <ol style="list-style-type: none"> 1. On the 5-day assessment, the resident had no pressure sores (M2a [t-1] = 0) AND, on the 14-day assessment, the resident has at least a stage 1 pressure sore (M2a [t] = 1, 2, 3, or 4). 2. On the 5-day assessment, the resident had a pressure sore (M2a [t-1] = 1, 2, 3, or 4) AND on the 14-day assessment, pressure sores worsened or failed to improve (M2a [t] \geq M2a [t-1]). <p>Denominator: All residents with a valid 14-day assessment (AA8b = 7) AND a valid preceding 5-day assessment (AA8b = 1).</p>	<p>Residents satisfying any of the following conditions:</p> <ol style="list-style-type: none"> 1. M2a is missing on the 14-day assessment (M2a [t]=missing). 2. M2a is missing on the 5-day assessment (M2a [t-1]=missing) and M2a shows presence of ulcers on the 14-day assessment (M2a [t] = 1, 2, 3, or 4). 	<ol style="list-style-type: none"> 1. RUG Clinically Complex (R_CLN; see technical specifications) on the 5-day assessment. 2. RUG Nursing CMI (R_CMIP; see technical specifications) on the 5-day assessment. 3. RUG Late Loss ADL (R_ADL; see technical specifications) on the 5-day assessment.

Appendix 1. Technical Specification of Post-Acute Care Quality Measures

Sequence	Label/Status	Description	Specifications	Exclusions* #	Covariates
8	PAC-ADL04 / HRCA, 2/2004	Percent of short-stay residents with improving level of ADL functioning	<p>Numerator: Residents with ADL-Long Form (ADLLF) lower at 14-day assessment than at 5-day assessment (ADLLF [t]-ADLLF [t-1]<0). ADLLF defined as sum of G1aA, G1bA, G1eA, G1gA, G1hA, G1iA, and G1jA, with 8's recoded to 4's.</p> <p>Denominator: All residents with a valid 14-day assessment (AA8b = 7) AND a valid preceding 5-day assessment (AA8b = 1)</p>	<p>Residents satisfying any of the following conditions:</p> <ol style="list-style-type: none"> 1. Comatose (B1 = 1) or comatose status unknown (B1 = missing) on 14-day assessment 2. End stage disease (J5c=checked) or end stage disease status unknown (J5c = missing) on 14-day assessment 3. Hospice (P1ao = checked) or hospice status unknown (P1ao = missing) on 14-day assessment 4. Non-valid ADLLF scale at 5-day OR 14-day assessment. 5. ADLLF at 5-day assessment equal to 0 (ADLLF [t-1] = 0) 	CPS on the 5-day assessment (see technical specifications)

Appendix 1. Technical Specification of Post-Acute Care Quality Measures

Sequence	Label/Status	Description	Specifications	Exclusions* #	Covariates
9	PAC-ADL05 / HRCA, 2/2004	Percent of short-stay residents who improve status on mid-loss ADL functioning (transfer, locomotion) or remain completely independent in mid-loss ADLs	<p>Numerator:</p> <ol style="list-style-type: none"> Residents with a MLADL change score that is negative ($MLADL[t] - MLADL[t-1] < 0$) OR Residents with a MLADL score of 0 at 5-day AND 14-day assessments ($MLADL[t]=0$ AND $MLADL[t-1]=0$). <p>MLADL is defined as the sum of G1b(A), G1e(A) and G1d(A), with 8's recoded to 4's)</p> <p>Denominator: All residents with a valid 14-day assessment (AA8b = 7) AND a valid preceding 5-day assessment (AA8b = 1)</p>	<p>Residents satisfying any of the following conditions:</p> <ol style="list-style-type: none"> Comatose ($B1 = 1$) or comatose status unknown ($B1 = \text{missing}$) on 14-day assessment End stage disease ($J5c = \text{checked}$) or end stage disease status unknown ($J5c = \text{missing}$) on 14-day assessment Hospice ($P1ao = \text{checked}$) or hospice status unknown ($P1ao = \text{missing}$) on 14-day assessment Residents with non-valid Mid-Loss ADL at the 14-day assessment ($MLADL[t] = \text{missing}$) Residents with non-valid Mid-Loss ADL at the 5-day assessment ($MLADL[t-1] = \text{missing}$) AND MLADL is greater than 0 at the 14-day assessment ($MLADL[t] > 0$) 	<ol style="list-style-type: none"> CPS on the 5-Day assessment RUG Late Loss ADL Scale (R_ADL; see technical specifications) on the 5-day assessment.

Appendix 1. Technical Specification of Post-Acute Care Quality Measures

Sequence	Label/Status	Description	Specifications	Exclusions* #	Covariates
10	PAC-ADL06 / HRCA,2/2004	Percent of short-stay residents who improve status on early-loss ADL functioning (dressing and personal hygiene) or remain completely independent in early-loss ADLs (ELADL).	<p>Numerator:</p> <ol style="list-style-type: none"> Residents with a ELADL change score that is negative ($ELADL[t] - ELADL[t-1] < 0$) OR Residents with a ELADL score of 0 at 5-day AND 14-day assessments ($ELADL[t] = 0$ AND $ELADL[t-1] = 0$). <p>ELADL is defined as the sum of G1g(A) and G1j(A), with 8's recoded to 4's</p> <p>Denominator: All residents with a valid 14-day assessment (AA8b = 7) AND a valid preceding 5-day assessment (AA8b = 1)</p>	<p>Residents satisfying any of the following conditions:</p> <ol style="list-style-type: none"> Comatose ($B1 = 1$) or comatose status unknown ($B1 = \text{missing}$) on 14-day assessment End stage disease ($J5c = \text{checked}$) or end stage disease status unknown ($J5c = \text{missing}$) on 14-day assessment Hospice ($P1ao = \text{checked}$) or hospice status unknown ($P1ao = \text{missing}$) on 14-day assessment Residents with non-valid Early Loss ADL at the 14-day assessment ($ELADL[t] = \text{missing}$) Residents with non-valid Early-Loss ADL at the 5-day assessment ($ELADL[t-1] = \text{missing}$) AND ELADL is greater than 0 at the 14-day assessment ($ELADL[t] > 0$) 	<ol style="list-style-type: none"> CPS on the 5-day assessment RUG Late Loss ADL Scale (R_ADL; see technical specifications) on the 5-day assessment.
11	PAC-MOD04/ HRCA,2/2004	Percent of short-stay residents who improve their mood or remain free from symptoms of depression (based on MDS Depression Rating Scale)	<p>Numerator:</p> <ol style="list-style-type: none"> Residents who have a DRS scale change score that is negative between 5- and 14-day assessments ($DRS[t] - DRS[t-1] < 0$) OR Residents who have a DRS score of 0 at 5- AND 14-day assessments (see technical specifications for definition of Depression Rating Scale). <p>Denominator: All residents with a valid 14-day assessment (AA8b = 7) AND a</p>	<ol style="list-style-type: none"> Residents with non-valid DRS at the 14-day assessment ($DRS[t] = \text{missing}$) Residents with non-valid DRS at the 5-day assessment ($DRS[t-1] = \text{missing}$) AND DRS greater than 0 at the 14-day assessment ($DRS[t] > 0$). 	NONE

Appendix 1. Technical Specification of Post-Acute Care Quality Measures

Sequence	Label/Status	Description	Specifications	Exclusions* #	Covariates
			valid preceding 5-day assessment (AA8b = 1)		
12	PAC-CAT03/ HRCA,2/2004	Percent of short-stay residents who do not have a catheter at 14-day assessment	Numerator: Residents with H3d not checked (value = 0) on the 14-day assessment. Denominator: All residents with a valid 14-day assessment (AA8b = 7)	Residents with non-valid H3d on the 14-day assessment.	1. RUG Late Loss ADL Scale (R_ADL; see technical specifications for definition) on the 5-day assessment; 2. RUG Clinically Complex (R_CLN; see technical specifications for definition) on the 5-day assessment.

Appendix 1. Technical Specification of Post-Acute Care Quality Measures

Sequence	Label/Status	Description	Specifications	Exclusions* #	Covariates
13	PAC-PAI02/ HRCA,2/2004	Percent of short-stay residents who improve their pain status or remain free from pain, (based on the MDS Pain Scale)	<p>Numerator:</p> <ol style="list-style-type: none"> Residents who have a PAIN scale change score that is negative between 5- and 14-day assessments ($PS[t]-PS[t-1]<0$) OR Residents who have a PAIN scale score of 0 at 5- AND 14-day assessments ($PS[t]=0$ AND $PS[t-1]=0$). <p>Denominator: All residents with a valid 14-day assessment (AA8b = 7) AND a valid preceding 5-day assessment (AA8b = 1)</p> <p>Pain Scale (PS) Score Definition (range 0 through 3):</p> <p>PS = 0 if J2a = 0.</p> <p>PS = 1 if J2a = 1.</p> <p>PS = 2 if J2a > 1 AND J2b = 1 or 2.</p> <p>PS = 3 if J2a > 1 AND J2b = 3.</p> <ol style="list-style-type: none"> PS value is missing if J2a or J2b is missing. Missing values for J2a are any values other than 0 through 2; missing values for J2b are any values other than 1, 2, 3, and blank. PS value is missing if the J2a and J2b values are inconsistent. The values of J2a and J2b are inconsistent in the following 2 cases: <ol style="list-style-type: none"> J2a is 0 and J2b is a value of 1 through 3. J2a > 0 and J2b is a value 	<ol style="list-style-type: none"> Residents with non-valid PAIN scale score at the 14-day assessment ($PS[t] = \text{missing}$) Residents with non-valid Pain Scale at the 5-day assessment ($PS[t-1]=\text{missing}$) AND Pain Scale is greater than 0 at the 14-day assessment ($PS[t]>0$) 	<ol style="list-style-type: none"> CPS on the 5-day assessment (see technical specifications for definition); Hip Fracture in last 180 days (J4c = checked on the 5-day assessment)

Appendix 1. Technical Specification of Post-Acute Care Quality Measures

Sequence	Label/Status	Description	Specifications	Exclusions* #	Covariates
			other than 1 through 3.		
14	PAC-RSP02/ HRCA,2/2004	Percent of short-stay residents who do not have shortness of breath	<p>Numerator: Residents who do not have shortness of breath (J1l=not checked [Value=0]) AND do not have inability to lie flat due to shortness of breath (J1b=not checked [Value = 0] at 14-day assessment.</p> <p>Denominator: All residents with a valid 14-day assessment (AA8b = 7)</p>	Residents with non-valid J1l or J1b at the 14-day assessment.	Emphysema/COPD (I1ii= checked) on the 5-day assessment.
15	PAC-BAL01/ HRCA,2/2004	Percent of short-stay residents who improve their balance function or remain free from impairment in balance function between 5 and 14-day assessment	<p>Numerator:</p> <ol style="list-style-type: none"> Residents who have a BALANCE scale change score that is negative (BALANCE[t] - BALANCE[t-1]<0, where BALANCE = G3a+G3b), OR Have a BALANCE score of 0 at 5- and 14 day assessments. <p>Denominator: All residents with a valid 14-day assessment (AA8b = 7) AND a valid 5-day assessment (AA8b = 1)</p>	<p>Residents satisfying any of the following conditions:</p> <ol style="list-style-type: none"> Comatose (B1 = 1) or comatose status unknown (B1 = missing) on 14-day assessment End stage disease (J5c=checked) or end stage disease unknown (J5c = missing) on 14-day assessment Hospice (P1ao = checked) or hospice status unknown (P1ao = missing) on 14-day assessment Residents with non-valid BALANCE scale score at the 14-day assessment (BALANCE[t] = missing) Residents with non-valid BALANCE scale at the 5-day assessment (BALANCE[t-1] = missing) AND BALANCE greater than 0 at the 14-day assessment (BALANCE[t]>0) 	<ol style="list-style-type: none"> CPS on 5-day assessment (see technical specifications for definition); RUG Late Loss ADL (R_ADL; see technical specifications for definition) on the 5-day assessment

Appendix 1. Technical Specification of Post-Acute Care Quality Measures

Sequence	Label/Status	Description	Specifications	Exclusions* #	Covariates
16	PAC-ROM01/ HRCA,2/2004	Percent of short-stay residents who improve their range of motion or remain free from impairment in ROM between 5 and 14-day assessment	<p>Numerator:</p> <ol style="list-style-type: none"> Residents who have a ROM scale change score that is negative ($ROM[t]-ROM[t-1]<0$, where $ROM=G4a(A)+G4b(A)+G4c(A)+G4d(A)+G4e(A)$) OR Have a ROM score of 0 at 5- and 14-day assessments. <p>Denominator: All residents with a valid 14-day assessment (AA8b = 7) AND a valid preceding 5-day assessment (AA8b = 1)</p>	<p>Residents satisfying any of the following conditions:</p> <ol style="list-style-type: none"> Comatose (B1 = 1) or comatose status unknown (B1 = missing) on 14-day assessment End stage disease (J5c=checked) or end stage disease status unknown (J5c = missing) on 14-day assessment Hospice (P1ao = checked) or hospice status unknown (P1ao = missing) on 14-day assessment Residents with non-valid ROM scale at the 14-day assessment (ROM[t]= missing) Residents with non-valid ROM at the 5-day assessment AND ROM greater than 0 at the 14-day assessment (ROM[t-1]=missing AND ROM[t]>0). 	<ol style="list-style-type: none"> Hip Fracture in last 180 days (J4c = checked) on 5-day assessment; RUG Late Loss ADL (R_ADL; see technical specifications for definition) on the 5-day assessment.

Appendix 1. Technical Specification of Post-Acute Care Quality Measures

Sequence	Label/Status	Description	Specifications	Exclusions* #	Covariates
17	PAC-ADL0X1/ Validation Report	Percent of short-stay residents who have not improved since admission	<p>Numerator: Residents who satisfy one of the following three conditions based on the ADL Long Form scale (ADLLF) defined in the Technical Comments below:</p> <ol style="list-style-type: none"> 1. The resident was fully independent on the ADLLF at the 5-day assessment AND failed to remain independent at the 14-day assessment (ADLLF[t-1]=0 AND ADLLF[t]>0). 2. When only 1 point improvement is possible, the resident failed to improve 1 point from the 5-day assessment to the 14-day assessment (ADLLF[t-1] = 1 AND ADLLF[t] > 0). 3. When 2 points or more improvement is possible, the resident failed to improve at least 2 points on ADLLF scale from the 5-day assessment to the 14-day assessment (ADLLF[t-1]>1 AND ADLLF[t-1]-ADLLF[t]<2). <p>Denominator: All residents with a valid 14-day assessment (AA8b = 7) AND a valid 5-day assessment (AA8b = 1).</p>	<p>Residents satisfying any of the following conditions:</p> <ol style="list-style-type: none"> 1. Residents in coma (B1=1) or coma status unknown (B1 = missing) on the 14-day assessment. 2. Residents with end-stage disease (J5c=checked (value 1)) or end-stage disease status unknown (J5c = missing) on the 14-day assessment. 3. The resident is receiving hospice care (P1ao = checked) or hospice status is unknown (P1ao = missing) on the 14-day assessment. 4. The ADLLF score is missing on the 14-day assessment [t]. 5. The ADLLF score is missing on the 5-day assessment [t-1] and the ADLLF score shows some dependence on the 14-day assessment (ADLLF[t] > 0). 	<p>Indicator of NO prior residential history preceding the current SNF stay for the resident:</p> <p>Covariate = 1 if there is NO prior residential history indicated by the following condition being satisfied: There is a recent admission assessment (AA8a = 01) AND AB5a through AB5e are not checked (value 0) and AB5f is checked (value 1).</p> <p>Covariate = 0 if there is prior residential history indicated by either of the following conditions:</p> <ol style="list-style-type: none"> a) Recent admission assessment (AA8a = 01 AND any of items AB5a through AB5e checked OR AB5f not checked (value = 0) b) No recent admission assessment (AA8a = 01)

Appendix 1. Technical Specification of Post-Acute Care Quality Measures

Sequence	Label/Status	Description	Specifications	Exclusions* #	Covariates
18	PAC-ADL0X2/ Covariate report	Percent of short-stay residents who have not improved since admission	<p>Numerator: Residents who satisfy one of the following three conditions based on the ADL Long Form scale (ADLLF) defined in the Technical Comments below:</p> <ol style="list-style-type: none"> 1. The resident was fully independent on the ADLLF at the 5-day assessment AND failed to remain independent at the 14-day assessment (ADLLF[t-1]=0 AND ADLLF[t]>0). 2. When only 1 point improvement is possible, the resident failed to improve 1 point from the 5-day assessment to the 14-day assessment (ADLLF[t-1] = 1 AND ADLLF[t] > 0). 3. When 2 points or more improvement is possible, the resident failed to improve at least 2 points on ADLLF scale from the 5-day assessment to the 14-day assessment (ADLLF[t-1]>1 AND ADLLF[t-1]-ADLLF[t]<2). <p>Denominator: All residents with a valid 14-day assessment (AA8b = 7) AND a valid 5-day assessment (AA8b = 1).</p>	<p>Residents satisfying any of the following conditions:</p> <ol style="list-style-type: none"> 1. Residents in coma (B1=1) or coma status unknown (B1 = missing) on the 14-day assessment. 2. Residents with end-stage disease (J5c=checked (value 1)) or end-stage disease status unknown (J5c = missing) on the 14-day assessment. 3. The resident is receiving hospice care (P1ao = checked) or hospice status is unknown (P1ao = missing) on the 14-day assessment. 4. The ADLLF score is missing on the 14-day assessment [t]. 5. The ADLLF score is missing on the 5-day assessment [t-1] and the ADLLF score shows some dependence on the 14-day assessment (ADLLF[t] > 0). 	CPS on the 5-day assessment (see technical specifications for definition).

Appendix 1. Technical Specification of Post-Acute Care Quality Measures

Sequence	Label/Status	Description	Specifications	Exclusions* #	Covariates
19	PAC-CNT0X1/ Validation Report	Percent of short-stay residents who failed to Improve their bladder incontinence	<p>Numerator: Residents who satisfy any of the following three conditions:</p> <ol style="list-style-type: none"> 1. On the 5-day assessment, the resident did not have a catheter (H3d[t-1] not checked (value 0)) AND was fully bladder continent (H1b[t-1] = 0). <p>AND</p> <p>On the 14-day assessment, the resident had a catheter (H3d[t] checked (value 1)) OR was less than fully bladder continent (H1b[t] >0).</p> <ol style="list-style-type: none"> 2. On the 5-day assessment (AA8b = 1), the resident did not have a catheter (H3d[t-1] not checked (value 0)) AND was less than fully bladder continent (H1b[t-1] > 0). <p>AND</p> <p>On the 14-day assessment (AA8b = 7), the resident had a new catheter (H3d[t] = checked (value 1)) OR was the same or worse on bladder continence (H1b[t] >= H1b[t-1])</p> <ol style="list-style-type: none"> 3. On the 5-day assessment (AA8b = 1), the resident did have a catheter (H3d[t-1] checked (value 1)). <p>AND</p> <p>On the 14-day assessment (AA8b = 7), the resident still had a catheter (H3d[t] = checked (value 1)) OR had no catheter but was frequently or fully incontinent (H3d[t] not checked</p>	<p>Residents satisfying the following condition:</p> <ol style="list-style-type: none"> 1. There are missing values for H1b or H3d on either the SNF PPS 5-day or 14-day assessment. 2. The resident is comatose (B1 = 1) or comatose status is unknown (B1= missing) on the 14-day assessment. 3. The resident has paraplegia (I1x = 1) or paraplegia status unknown (I1x missing) on the 14-day assessment. 4. The resident has quadriplegia (I1z = 1) or quadriplegia status unknown (I1z missing) on the 14-day assessment. 	NONE

Appendix 1. Technical Specification of Post-Acute Care Quality Measures

Sequence	Label/Status	Description	Specifications	Exclusions* #	Covariates
			(value 0) AND H1b[t] > 2) Denominator: All residents with a valid 14-day assessment (AA8b = 7) AND a valid preceding 5-day assessment (AA8b = 1).		
20	PAC-CNT0X2/ Covariate report	Percent of short-stay residents who failed to improve their bladder incontinence	<p>Numerator: Residents who satisfy any of the following three conditions:</p> <ol style="list-style-type: none"> On the 5-day assessment, the resident did not have a catheter (H3d[t-1] not checked (value 0)) AND was fully bladder continent (H1b[t-1] = 0). <p>AND</p> <p>On the 14-day assessment, the resident had a catheter (H3d[t] checked (value 1)) OR was less than fully bladder continent (H1b[t] > 0).</p> <ol style="list-style-type: none"> On the 5-day assessment (AA8b = 1), the resident did not have a catheter (H3d[t-1] not checked (value 0)) AND was less than fully bladder continent (H1b[t-1] > 0). <p>AND</p> <p>On the 14-day assessment (AA8b = 7), the resident had a new catheter (H3d[t] = checked (value 1)) OR was the same or worse on bladder continence (H1b[t] >= H1b[t-1])</p> <ol style="list-style-type: none"> On the 5-day assessment (AA8b = 1), the resident did have a catheter (H3d[t-1] checked (value 1)). 	<p>Residents satisfying the following condition:</p> <ol style="list-style-type: none"> There are missing values for H1b or H3d on either the SNF PPS 5-day or 14-day assessment. The resident is comatose (B1 = 1) or comatose status is unknown (B1= missing) on the 14-day assessment. The resident has paraplegia (I1x = 1) or paraplegia status unknown (I1x missing) on the 14-day assessment. The resident has quadriplegia (I1z = 1) or quadriplegia status unknown (I1z missing) on the 14-day assessment. 	<ol style="list-style-type: none"> RUG Nursing CMI on the 5-day assessment RUG Late Loss ADL on the 5-day assessment

Appendix 1. Technical Specification of Post-Acute Care Quality Measures

Sequence	Label/Status	Description	Specifications	Exclusions* #	Covariates
			<p>AND</p> <p>On the 14-day assessment (AA8b = 7), the resident still had a catheter (H3d[t] = checked (value 1)) OR had no catheter but was frequently or fully incontinent (H3d[t] not checked (value 0) AND H1b[t] > 2)</p> <p>Denominator: All residents with a valid 14-day assessment (AA8b = 7) AND a valid preceding 5-day assessment (AA8b = 1).</p>		

Appendix 1. Technical Specification of Post-Acute Care Quality Measures

Sequence	Label/Status	Description	Specifications	Exclusions* #	Covariates
21	PAC-RSP0X1/ Validation Report	Percent of short-stay residents who have developed a respiratory infection or have not gotten better.	<p>Numerator: Residents with none of the selected respiratory conditions at 5-day assessment AND with at least one of the respiratory conditions at the 14-day assessment (Respiratory_Count[t-1]=0 AND Respiratory_Count[t]>0), OR residents with at least one of the respiratory conditions at the 5-day assessment AND with the same or a higher count of selected respiratory conditions on the 14-day assessment than on the 5-day assessment (Respiratory_Count[t-1] > 0 AND Respiratory_Count [t] >= Respiratory_Count [t-1]).</p> <p>The respiratory conditions included in the count (range 0 to 4) are:</p> <ol style="list-style-type: none"> 1. Pneumonia (I2e=checked (value 1)). 2. Inability to lie flat due to shortness of breath (J1b=checked (value 1)). 3. Shortness of breath (J1l=checked (value 1)). 4. Recurrent aspirations (J1k=checked (value 1)). <p>Denominator: All residents with a valid 14-day assessment (AA8b = 7) AND a valid preceding 5-day assessment (AA8b = 1).</p>	<p>Residents satisfying any of the following conditions:</p> <ol style="list-style-type: none"> 1. Residents with non-valid Respiratory Count at the 14-day assessment (Respiratory_Count [t] = missing) 2. Residents with non-valid Respiratory Count at the 5-day assessment AND has at least one of the selected respiratory conditions at the 14-day assessment (Respiratory_Count [t-1] = missing AND Respiratory_Count[t]>0) 	<ol style="list-style-type: none"> 1. Indicator of asthma on the 5-day assessment: <ol style="list-style-type: none"> a. Covariate = 1 if I1hh checked (value 1). b. Covariate = 0 if I1hh not checked (value 0). 2. Indicator of Emphysema/COPD on the 5-day assessment: <ol style="list-style-type: none"> a. Covariate = 1 if I1ii checked (value 1). b. Covariate = 0 if I1ii not checked (value 0).

Appendix 1. Technical Specification of Post-Acute Care Quality Measures

Sequence	Label/Status	Description	Specifications	Exclusions* #	Covariates
22	PAC-RSP0X2/ Covariate Report	Percent of short-stay residents who have developed a respiratory infection or have not gotten better	<p>Numerator: Residents with none of the selected respiratory conditions at 5-day assessment AND with at least one of the respiratory conditions at the 14-day assessment (Respiratory_Count[t-1]=0 AND respiratory_Count[t]>0), OR</p> <p>Residents with at least one of the respiratory conditions at the 5-day assessment AND with the same or a higher count of selected respiratory conditions on the 14-day assessment than on the 5-day assessment (Respiratory_Count [t-1] > 0 AND Respiratory_Count [t] >= Respiratory_Count [t-1]).</p> <p>The respiratory conditions included in the count (range 0 to 4) are:</p> <ol style="list-style-type: none"> 1. Pneumonia (I2e=checked (value 1)). 2. Inability to lie flat due to shortness of breath (J1b=checked (value 1)). 3. Shortness of breath (J1l=checked (value 1)). 4. Recurrent aspirations (J1k=checked (value 1)). <p>Denominator: All residents with a valid 14-day assessment (AA8b = 7) AND a valid preceding 5-day assessment (AA8b = 1).</p>	<p>Residents satisfying any of the following conditions:</p> <ol style="list-style-type: none"> 1. Residents with non-valid Respiratory_Count at the 14-day assessment (Respiratory_Count [t] = missing) 2. Residents with non-valid Respiratory_Count at the 5-day assessment AND has at least one of the selected respiratory conditions at the 14-day assessment (Respiratory_Count [t-1] = missing AND Respiratory_Count[t]>0) 	RUG Clinically Complex (R_CLN; see technical specifications for definition) on the 5-day assessment.

Appendix 1. Technical Specification of Post-Acute Care Quality Measures

Sequence	Label/Status	Description	Specifications	Exclusions* #	Covariates
23	PAC-WAL0X1 / Validation Report	Percent of short-stay residents who walk as well or better on day 14 as on day 5 of their stay.	<p>Numerator: Residents who satisfy either of the following conditions:</p> <ol style="list-style-type: none"> 1. Independence in walking is maintained from the 5-day assessment to the 14-day assessment: WALK1[t-1]=0 AND WALK1[t]=0 2. Improvement in walking ability is evidenced from the 5-day assessment to the 14-day assessment (WALK1[t-1] > WALK1[t]) <p>WALK1 is defined as the sum of G1c(A) and G1d(A) Note: Convert 8's (activity did not occur) to 4's (total dependence) on G1d(A) and G1c(A) for this comparison.</p> <p>Denominator: All residents with a valid 14-day assessment (AA8b = 7) and a valid preceding 5-day assessment (AA8b = 1).</p>	<p>Residents satisfying any of the following conditions:</p> <ol style="list-style-type: none"> 1. Comatose (B1=1) or comatose status unknown (B1 = missing) on the 14-day assessment. 2. End-stage disease (J5c=checked (value 1)) or end-stage disease status unknown (J5c = missing) on the 14-day assessment. 3. The resident is receiving hospice care (P1ao = checked) or hospice status is unknown (P1ao = missing) on the 14-day assessment. 4. Ventilator dependent (P1al checked (value 1)) or ventilator status is unknown (P1al = missing) on the 14-day assessment. 5. Quadriplegic (I1z = checked (value 1)) or quadriplegic status is unknown (I1z = missing) on the 14-day assessment. 6. Paraplegic (I1x = checked (value 1)) or paraplegic status is unknown (I1x = missing) on the 14-day assessment. 7. Residents with non-valid WALK1 at the 14-day assessment (WALK1[t]=missing) 8. Residents with non-valid WALK1 at the 5-day assessment and have some dependence in walking on the 14-day assessment (WALK1[t-1]=missing AND WALK1[t]>0) 	NONE

Appendix 1. Technical Specification of Post-Acute Care Quality Measures

Sequence	Label/Status	Description	Specifications	Exclusions* #	Covariates
24	PAC-WAL0X2 / Covariate report	Percent of short-stay residents who walk as well or better on day 14 as on day 5 of their stay	<p>Numerator: Residents who satisfy either of the following conditions:</p> <ol style="list-style-type: none"> 1. Independence in walking is maintained from the 5-day assessment to the 14-day assessment: WALK1[t-1]=0 AND WALK1[t]=0 2. Improvement in walking ability is evidenced from the 5-day assessment to the 14-day assessment (WALK1[t-1] > WALK1[t]) <p>WALK1 is defined as the sum of G1c(A) and G1d(A) Note: Convert 8's (activity did not occur) to 4's (total dependence) on G1d(A) and G1c(A) for this comparison.</p> <p>Denominator: All residents with a valid 14-day assessment (AA8b = 7) and a valid preceding 5-day assessment (AA8b = 1).</p>	<p>Residents satisfying any of the following conditions:</p> <ol style="list-style-type: none"> 1. Comatose (B1=1) or comatose status unknown (B1 = missing) on the 14-day assessment. 2. End-stage disease (J5c=checked (value 1)) or end-stage disease status unknown (J5c = missing) on the 14-day assessment. 3. The resident is receiving hospice care (P1ao = checked) or hospice status is unknown (P1ao = missing) on the 14-day assessment. 4. Ventilator dependent (P1al checked (value 1)) or ventilator status is unknown (P1al = missing) on the 14-day assessment. 5. Quadriplegic (I1z = checked (value 1)) or quadriplegic status is unknown (I1z = missing) on the 14-day assessment. 6. Paraplegic (I1x = checked (value 1)) or paraplegic status is unknown (I1x = missing) on the 14-day assessment. 7. Residents with non-valid WALK1 at the 14-day assessment (WALK1[t]=missing) 8. Residents with non-valid WALK1 at the 5-day assessment and have some dependence in walking on the 14-day assessment (WALK1[t- 	<ol style="list-style-type: none"> 1. RUG Late Loss ADL (R_ADL; see technical specifications for definition) on the 5-day assessment; 2. RUG Nursing CMI (R_CMIP; see technical specifications for definition) on the 5-day assessment; 3. CPS on the 5-day assessment (see technical specifications for definition).

Appendix 1. Technical Specification of Post-Acute Care Quality Measures

Sequence	Label/Status	Description	Specifications	Exclusions* #	Covariates
				1]=missing AND WALK1[t]>0)	
25	PAC-WAL02/ HRCA,2/2004	Percent of short-stay residents with improving level of locomotion functioning or who remained completely independent in locomotion functioning	<p>Numerator:</p> <ol style="list-style-type: none"> Residents for whom the WALK2 score is lower at 14-day than at 5-day assessment after recoding 8's to 4's (WALK2[t]-WALK2[t-1]<0) OR Residents for whom WALK2 = 0 at 5- AND 14-day assessments. <p>WALK2 is defined as the sum of G1eA and G1fA after recoding 8's to 4's for both G1eA and G1fA</p> <p>Denominator: All residents with a valid 14-day assessment (AA8b = 7) AND a valid preceding 5-day assessment (AA8b = 1)</p>	<p>Residents satisfying any of the following conditions:</p> <ol style="list-style-type: none"> Comatose (B1=1) or comatose status unknown (B1 = missing) on the 14-day assessment. End-stage disease (J5c=checked (value 1)) or end-stage disease status unknown (J5c = missing) on the 14-day assessment. The resident is receiving hospice care (P1ao = checked) or hospice status is unknown (P1ao = missing) on the 14-day assessment. Residents with non-valid WALK2 score at the 14-day assessment (WALK2 [t] = missing) Residents with non-valid WALK2 score at the 5-day assessment AND show some dependence in walking at the 14-day assessment (WALK2[t-1]=missing AND WALK2[t]>0). 	<ol style="list-style-type: none"> CPS on 5-Day assessment (see technical specifications for definition). RUG Late Loss ADL Scale (R_ADL; see technical specifications) on the 5-day assessment.
26	PAC-CNT04 / Validation Report for Chronic	Percent of short-stay residents with urinary tract infections	<p>Numerator: Residents with urinary tract infection on SNF-PPS 14-day assessment (I2j = checked).</p> <p>Denominator: All residents with a valid 14-day assessment.</p>	<p>Residents satisfying any of the following conditions:</p> <ol style="list-style-type: none"> I2j is missing on the 14-day assessment. 	NONE

* Global exclusion: The resident is in a facility with an Acute Care Admission Sample size of 0 (i.e., there are no 5-day assessments with AA8b = 1 in the facility over the previous 12 months).

Global rule: Unless otherwise specified, a scale (ADLL, MLADL, LLADL, ELADL, ADLLF, COMSCORE, DRS, BALANCE, ROM, Respiratory_Count, WALK1 and WALK2) is considered missing/invalid if any of the MDS items it comprises is missing or invalid.