

## **Appendix 3**

### **List of Preventive and Responsive Variables Selected for the Validation of Post-Acute Care Quality Measures**

1. List of Preventive Items Selected for the Validation of Post-Acute Care Quality Measures. The Items Were Selected from Administrative Survey (AS) and Facility Walk Through (WAM).<sup>1</sup>

Sequence Number	Item	Description
1	AS10	CNA attend care plan meeting
2	AS11A	Care plan meetings scheduled into CNAs workday
3	AS12A	Percent of families attending care plan meetings
4	AS14CB	Proportion of residents receiving eating swallowing, meal training
5	AS18A	Inquires of resident, family, or staff reasons for cognitive change
6	AS18C	Inquiries of resident family or staff for change in behavior
7	AS18E	Observes for and identifies changes in eating, sleeping, bowels, mood
8	AS21B	Restorative programs in place-passive range of motion
9	AS21C	Restorative programs in place-active range of motion
10	AS21D	Restorative programs in place-ambulation/gait training
11	AS26AA	Continuing education for CNAs in delirium, depression, mood, anxiety, behavior and activities
12	AS26FA	Continuing education for CNAs in communication change
13	AS26GA	Continuing education for CNAs in behavior function
14	AS26GB	Continuing education for licensed nursing staff on behavioral function
15	AS27B	Daily verbal reports from CNAs on behavioral function
16	AS27D	Daily verbal reports from CNAs on communication changes
17	AS27D2	Weekly verbal reports from CNAs on communication changes
18	AS28BB3	Standard assessment tools to routinely assess depression, mood and anxiety
19	AS28CB3	Standard assessment tools to routinely assess delirium
20	AS28DB3	Standard assessment tools to routinely assess bladder incontinence
21	AS28EB3	Standard assessment tools to routinely assess behavioral function
22	AS28FB3	Standard assessment tools to routinely assess communicative change
23	AS28HB3	Standard assessment tools to routinely assess pain
24	AS30A	When suspicious area of skin-schedule more frequent skin evaluation
25	AS30B	When suspicious are of skin-schedule in depth risk assessment
26	AS34	Restraint free management directive in facility
27	AS39A	CQI protocol-dehydration
28	AS39E	CQI protocol-behavioral function
29	AS39F	CQI protocol-communication change
30	AS39G	CQI protocol-Bladder Incontinence
31	AS43D	Uses CQI to conduct an overall review and evaluation to improve care
32	AS5CA	Hours worked by CNAs
33	AS8A1	Number of licensed nursing staff stopped working in last 6 month
34	AS9D	Restorative/rehabilitative aide routinely contributed to care plan
35	CNARAT2	Ratio of CNAs to licensed nurses
36	WAM1	Resident rooms personalized with furniture, pictures and other things
37	WAM11	Variety of activities for residents with different capabilities
38	WAM12	Residents up and out of bed
39	WAM17	Residents walking or independently moving about the facility
40	WAM19	Staff help resident with food and fluids
41	WAM6	Well-lighted common areas

<sup>1</sup> For more information on preventive and responsive designations, see Morris, J.N. Validation of Long-Term Care and Post-Acute Quality Indicators. Final Draft Report (Version 2). September 27, 2002, Chapter 4. Chapter 3 describes the various data collection tools and strategies used.

42	WAM9	Homelike appearance or feeling
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2. List of Responsive Validation Items Selected for the Validation of Post-Acute Care Quality Measures. The Items were Summary Measures Derived from Medical Record Review (MRR)

2a. List of Post-Acute Care Quality Measures with Its Corresponding Medical Record Review Area

Sequence Number	Label/status of PAC QM	Description	Matched MRR <sup>2</sup> Area
1	PAC-DELOX1/ Currently reported	Percent of short-stay residents with delirium	c. delirium
2	PAC-DELOX2/ Covariate report	Percent of short-stay residents with delirium	c. delirium
3	PAC-PAIOX1 / Currently reported	Percent of short-stay residents who had moderate to severe pain	k. pain
4	PAC-PAIOX2 / Covariate report	Percent of short-stay residents with pain	k. pain
5	PAC-PRUOX1 / Currently reported	Percent of short-stay residents with pressure sores	s. pressure sores
6	PAC-PRUOX2/ Validation Report	Percent of residents whose pressure sores have not gotten better.	s. pressure sores
7	PAC-PRUOX3 / Covariate report	Percent of short-stay residents whose pressure sores have not gotten better	s. pressure sores
8	PAC-ADL04 / HRCA, 2/2004	Percent of residents with improving level of ADL functioning	f. ADL improvement
9	PAC-ADL05 / HRCA, 2/2004	Percent of residents who improve status on mid-loss ADL functioning (transfer, locomotion) or remain completely independent in mid-loss ADLs	f. ADL improvement
10	PAC-ADL06 / HRCA,2/2004	Percent of residents who improve status on early-loss ADL functioning (dressing and personal hygiene) or remain completely independent in early-loss ADLs (ELADL).	f. ADL improvement
11	PAC-MOD04/ HRCA,2/2004	Percent of residents who improve their mood or remain free from symptoms of depression (based on MDS Depression Rating Scale)	d. mood
12	PAC-CAT03/ HRCA,2/2004	Percent of residents who do not have a catheter at 14-day assessment	o. catheter
13	PAC-PAIO2/ HRCA,2/2004	Percent of residents who improve their pain status or remain free from pain, (based on the MDS Pain Scale)	k. pain
14	PAC-RSP02/ HRCA,2/2004	Percent of residents who do not have shortness of breath	NA
15	PAC-BAL01/ HRCA,2/2004	Percent of residents who improve their balance function or remain free from impairment in balance function between 5 and 14-day assessment	NA
16	PAC-ROM01/ HRCA,2/2004	Percent of residents who improve their range of motion or remain free from impairment in ROM between 5 and 14-day assessment	NA

<sup>2</sup> For a discussion of medical record review data collection approaches, see Morris, J.N. (op. cit.), Chapter 3.

Sequence Number	Label/status of PAC QM	Description	Matched MRR <sup>2</sup> Area
17	PAC-ADLOX1/ Validation Report	Percent of residents who have not improved since admission	g. ADL decline
18	PAC-ADLOX2/ Covariate report	Percent of short-stay residents who have not improved since admission	g. ADL decline
19	PAC-CNT0X1/ Validation Report	Failure to Improve Bladder Incontinence	p. bladder Incontinence
20	PAC-CNT0X2/ Covariate report	Failure to Improve Bladder Incontinence	p. bladder incontinence
21	PAC-RSP0X1/ Covariate Report	Percent of short-stay residents who have developed a respiratory infection or have not gotten better	r. infections
22	PAC-RSP0X2/ Covariate Report	Percent of short-stay residents who have developed a respiratory infection or have not gotten better	r. infections
23	PAC-WAL0X1 / Validation Report	Percent of residents who walk as well or better on day 14 as on day 5 of their stay.	h. mobility
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	h. mobility
25	PAC-WAL02/ HRCA,2/2004	Percent of residents with improving level of locomotion functioning or who remained completely independent in locomotion functioning	h. mobility
26	PAC-CNT04 / Validation Report for Chronic	Prevalence of urinary tract infections	r. infections

2b. The Nine Responsive Items Selected for Each Area of Care in PAC QM validation analysis:

- x\_1 Documentation in the medical record of a comprehensive assessment.
- x\_2 Was the resident seen by a physician (or psychiatrist)?
- x\_4 Clear evidence in the record (other than MDS and Care Plan) that the resident had a problem/issue in this area
- x\_7 Evidence that resident's status changed.
- x\_8 Change was evaluated within 72 hours.
- x\_9 Physician was notified of change.
- x\_10 Therapies were ordered in response to change.
- x\_11 Referral or consult ordered in response to change.
- x\_12 Treatment plan is in place to address this issue.

### 3. List of Validation Scales<sup>3</sup> Selected for the Validation of Post-Acute Care Quality Measures

Sequence Number	Scale	Description
1	val2	Monitor Change in Function/Cognitive Care (JNM) VAL2+
2	val5	Communication of Falls (BERG) VAL5+
3	val6	Licensed Nurse Involved in Care Planning (JNM) VAL6+
4	val8	Polypharmacy Monitoring (JNM) VAL8+
5	val10	General Management Instability (JNM) VAL10-
6	val11	Facility Management contract change (YH) VAL11-
7	val16	Use of QA nurse as38 (YH,VM) VAL16+
8	val17	Formal Communication (BERG) VAL17+
9	val18	Behavioral Items (YH) VAL18+
10	val26	CQI for pain as39 (YH) VAL 26+
11	val32	Incontinence Management (JNM) VAL32+
12	val36	Focus on Incontinence (JNM) VAL36+
13	val37	CDCPI-Incontinence (JNM) VAL37+
14	val39	CDCPI-Psychosocial (JNM) VAL39+
15	val40	CDCPI-Clinical Complications (JNM) VAL40+
16	val42	CDCPI3-Cross Domain Quality Response (JNM) VAL42+
17	val45	Pain Assessment (ASSESS) (VM) VAL45+
18	val46	Change Response (CHNGRESP) (VM) VAL46+
19	val47	Pain Care Planning Specificity (PAINPLAN) (VM) VAL47+
20	val49	Ownership Change as1 (VM) VAL49-
21	val52	RN+LPN FTE/BED (VM) VAL52+
22	val53	5%+ RN, LPN Float, Contract (VM) VAL53-
23	val55	Lic Staff turnover last 6mo (%Deciles)(VM) VAL55-
24	val57	CNA Involved in Care Planning (VM, JT) VAL57+
25	val64	Num CQI Approaches in Use (VM) val64+
26	val65	Record of MH Prof (RNJ) val65+
27	val72	Observation of Movement Scale (JS) val72+
28	val74	Focus on Catheter (JNM) VAL74+
29	val75	Physical Restraints (JA) VAL75+
30	val80	Frequency of Comprehensive Assessments (JT) VAL80+
31	val81	% Res w/Tx Plans for Weight Loss (JT) VAL81+
32	val88	Cognitive Behavioral Care Practices (PILOT) VAL88+
33	val93	Activities in NH (PILOT) VAL93+
34	val99	Training & Policy for Suspicious Skin (PILOT) VAL99+
35	val103	COGimp Improvement Scale (JNM)val103+
36	val109	ADLdec Improvement Scale (JNM)val109+
37	val118	BladCont Improvement Scale (JNM)val118+
38	val121	PressUlc Improvement Scale (JNM)val121+
39	val147	Total Involvement in Care Planning (SC) val147+
40	val148	COG Change (based on val46) (VM) val148+

<sup>3</sup> See Morris, J.N., op. cit., Chapter 4 for a discussion of the process used to generate validation scales.

<b>Sequence Number</b>	<b>Scale</b>	<b>Description</b>
41	val151	MOD Change (based on val46) (VM) val151+
42	val156	FAL Change (based on val46) (VM) val156+
43	val159	NUT Change (based on val46) (VM) val159+
44	val160	WGT Change (based on val46) (VM) val160+
45	val164	INF Change (based on val46) (VM) val164+
46	val165	PRU Change (based on val46) (VM) val165+
47	val166	BUR Change (based on val46) (VM) val166+
48	val168	Match of K2 & Care Plan (MATCHPLAN) (VM) VAL168+
49	val173	Match of Chart & Care Plan (INF) VAL173+
50	val174	Match of Chart & Care Plan (PRU) VAL174+