

MDS 3.0 Care Area Assessment Trigger Specifications (v1.00.3)

4/22/2010

This document presents detailed specifications for the MDS 3.0 Care Area Assessment Triggers, formerly known as Resident Assessment Protocols (RAPs) with the MDS 2.0. For each Care Area, this document provides Care Area Trigger (CAT) specifications for the MDS 3.0 items used in triggering the Care Area, the conditions for triggering, and SAS code for triggering.

Care Area Assessment is included on the following OBRA comprehensive assessments in nursing homes:

- Admission assessments (item A0310A = 01)
- Annual assessments (item A0310A = 03)
- Significant change in status assessments (item A0310A = 04)
- Significant correction of prior comprehensive assessments (item A0310A = 05)

Most Care Areas have multiple triggers (multiple independent conditions that will trigger the area). Across all Care Areas, all but three triggers only consider MDS items from the current assessment. There is one trigger for Delirium and two triggers for Mood State that involve comparison of current assessment MDS items with items from a prior assessment. The prior assessment items are carried forward from the prior assessment and recorded in items V0100D through V0100F on the current assessment. This carry forward of prior items allows all Care Area trigger calculations to be performed with items on the current assessment.

The Care Area triggering indicators are items in Section V. For Care Area 1 (Delirium), the Section V triggering indicator item is V0200A01A (the 01 before the final A indicating Care Area 1). Similarly for Care Area 2 (Cognitive Loss/Dementia), the indicator is V0200A02A. The values for each triggering indicator are:

0 = not triggered (not checked in column A in Section V, items V0200)

1 = triggered (checked in column A in Section V, items V0200)

The remainder of this document presents Care Area Triggering (CAT) specifications for each of the 20 Care Areas.

CAT Specifications: 1 Delirium

Items Used (note that a prior assessment item V0100D is used on this Care Area)

Item	Description	Length	Values
A0310A	Federal OBRA reason for assessment	2	01-06,99
C0500	BIMS res interview: summary score	2	00-15, 99, -, ^
V0100D	BIMS res interview: summary score (prior assessment)	2	00-15, 99, -, ^
C1600	Acute mental status change	1	0, 1, -, ^

Triggering Conditions (any of the following):

1. Worsening mental status is indicated by the BIMS summary score having a non-missing value of 00 to 15 on both the current non-admission comprehensive assessment (A0310A = 03, 04 or 05) and the prior assessment, and the summary score on the current non-admission assessment being less than the prior assessment as indicated by:
 (A0310A = 03, 04, OR 05) AND
 ((C0500 >= 0) AND (C0500 <= 15)) AND
 ((V0100D >= 0) AND (V0100D <= 15)) AND
 (C0500 < V0100D)
2. Acute mental status change is indicated on the current comprehensive assessment as follows:
 C1600 = 1

Pseudocode (SAS)

*CAT01 Logic;

*Initialize CAT indicator to not triggered;

V0200A01A = '0';

*Trigger on Condition 1;

*Current assessment is limited to a non-admission comprehensive assessment;

IF (A0310A = '03' OR A0310A = '04' OR A0310A = '05')

THEN DO;

*Check that C0500 and V0100D both have non-missing values (00 to 15);

IF (C0500 >= '00' AND C0500 <= '15') AND
 (V0100D >= '00' AND V0100D <= '15')

THEN DO;

*Trigger Care Area if current assessment score < prior;

* assessment score;

IF C0500 < V0100D THEN V0200A01A = '1';

END;

END;

*Trigger on Condition 2;

IF C1600 = '1' THEN V0200A01A = '1';

CAT Specifications: 2 Cognitive Loss/Dementia

Items Used

Item	Description	Length	Values
C0500	BIMS resident interview: summary score	2	00-15, 99, -, ^
C0700	Staff assessment mental status: short-term memory OK	1	0,1, -, ^
C0800	Staff assessment mental status: long-term memory OK	1	0,1, -, ^
C1000	Cognitive skills for daily decision making	1	0-3, -, ^
C1300A	Signs of delirium: inattention	1	0-2, -, ^
C1300B	Signs of delirium: disorganized thinking	1	0-2, -, ^
C1300C	Signs of delirium: altered level of consciousness	1	0-2, -, ^
C1300D	Signs of delirium: psychomotor retardation	1	0-2, -, ^
E0200A	Physical behavioral symptoms directed toward others	1	0,1,2,3, -, ^
E0200B	Verbal behavioral symptoms directed toward others	1	0,1,2,3, -, ^
E0200C	Other behavioral symptoms not directed toward others	1	0,1,2,3, -, ^
E0800	Rejection of care: presence and frequency	1	0-3, -, ^
E0900	Wandering: presence and frequency	1	0-3, -, ^

Triggering Conditions (any of the following):

1. BIMS summary score is less than 13 as indicated by:
C0500 >= 00 AND C0500 < 13
2. BIMS summary score has a missing value and there is a problem with short-term memory as indicated by:
(C0500 = 99,-, OR ^) AND
(C0700 = 1)
3. BIMS summary score has a missing value and there is a problem with long-term memory as indicated by:
(C0500 = 99,-, OR ^) AND
(C0800 = 1)
4. BIMS summary score has missing value of 99 or – and at least some difficulty making decisions regarding tasks of daily life as indicated by:
(C0500 = 99,-, OR ^) AND

- (C1000 >= 1 AND C1000 <= 3)
5. BIMS, staff assessment or clinical record suggests presence of inattention, disorganized thinking, altered level of consciousness or psychomotor retardation as indicated by:
 - (C1300A = 1 OR C1300A = 2) OR
 - (C1300B = 1 OR C1300B = 2) OR
 - (C1300C = 1 OR C1300C = 2) OR
 - (C1300D = 1 OR C1300D = 2)
 6. Presence of any behavioral symptom (verbal, physical or other) as indicated by:
 - (E0200A >= 1 AND E0200A <= 3) OR
 - (E0200B >= 1 AND E0200B <= 3) OR
 - (E0200C >= 1 AND E0200C <= 3)
 7. Rejection of care occurred at least 1 day in the past 7 days as indicated by:
 - E0800 >= 1 AND E0800 <= 3
 8. Wandering occurred at least 1 day in the past 7 days as indicated by:
 - E0900 >= 1 AND E0900 <= 3

Pseudocode (SAS)

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*CAT02 Logic;
*Initialize CAT indicator to not triggered
V0200A02A = '0';

*Trigger on Condition 1;
IF C0500 >= '00' AND C0500 < '13' THEN V0200A02A = '1';

*Trigger on Condition 2;
*Condition 2 applicable only if BIMS summary score is not available;
IF ((C0500 = '99') OR (C0500 = '-') OR (C0500 = '^'))
  AND (C0700 = '1') THEN V0200A02A = '1';

*Trigger on Condition 3;
*Condition 3 applicable only if BIMS summary score is not available;
IF ((C0500 = '99') OR (C0500 = '-') OR (C0500 = '^'))
  AND (C0800 = '1') THEN V0200A02A = '1';

*Trigger on Condition 4;
*Condition 4 applicable only if BIMS summary score is not available;
IF ((C0500 = '99') OR (C0500 = '-') OR (C0500 = '^')) AND
  ((C1000 >= '1') AND (C1000 <= '3')) THEN V0200A02A = '1';

*Trigger on Condition 5;
IF ((C1300A = '1') OR (C1300A = '2')) OR

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((C1300B = '1') OR (C1300B = '2')) OR
((C1300C = '1') OR (C1300C = '2')) OR
((C1300D = '1') OR (C1300D = '2')) THEN V0200A02A = '1';

*Trigger on Condition 6;

IF ((E200A >= '1' AND E0200A <= '3') OR
 (E0200B >= '1' AND E0200B <= '3') OR
 (E0200C >= '1' AND E0200C <= '3')) THEN V0200A02A = '1';

*Trigger on Condition 7;

IF E0800 >= '1' AND E0800 <= '3' THEN V0200A02A = '1';

*Trigger on Condition 8;

IF E0900 >= '1' AND E0900 <= '3' THEN V0200A02A = '1';

CAT Specifications: 3 Visual Function

Items Used

Item	Description	Length	Values
B1000	Vision	1	0-4, -, ^
I6500	Cataracts, glaucoma, or macular degeneration	2	0, 1, -

Triggering Conditions (any of the following):

1. Cataracts, glaucoma, or macular degeneration on the current assessment as indicated by:
I6500 = 1
2. Vision item has a value of 1 through 4 indicating vision problems on the current assessment as indicated by:
B1000 >= 1 AND B1000 <= 4

Pseudocode (SAS)

```
*CAT03 Logic;  
*Initialize CAT indicator to not triggered;  
V0200A03A = '0';  
  
*Trigger on Condition 1;  
IF I6500 = '1' THEN V0200A03A = '1';  
  
*Trigger on Condition 2;  
IF B1000 >= '1' AND B1000 <= '4' THEN V0200A03A = '1';
```

CAT Specifications: 4 Communication

Items Used

Item	Description	Length	Values
B0200	Hearing	1	0-3,-,^
B0700	Makes self understood	1	0-3,-,^
B0800	Ability to understand others	1	0-3,-,^

Triggering Conditions (any of the following):

1. Hearing item has a value of 1 through 3 indicating hearing problems on the current assessment as indicated by:
B0200 >= 1 AND B0200 <= 3
2. Impaired ability to make self understood through verbal and non-verbal expression of ideas/wants as indicated by:
B0700 >= 1 AND B0700 <= 3
3. Impaired ability to understand others through verbal content as indicated by:
B0800 >= 1 AND B0800 <= 3

Pseudocode (SAS)

```
*CAT04 Logic;  
*Initialize CAT indicator to not triggered;  
V0200A04A = '0';  
  
*Trigger on Condition 1;  
IF B0200 >= '1' AND B0200 <= '3' THEN V0200A04A = '1';  
  
*Trigger on Condition 2;  
IF B0700 >= '1' AND B0700 <= '3' THEN V0200A04A = '1';  
  
*Trigger on Condition 3;  
IF B0800 >= '1' AND B0800 <= '3' THEN V0200A04A = '1';
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CAT Specifications: 5 ADL Functional/Rehabilitation Potential

Items Used

Item	Description	Length	Values
C0500	BIMS Summary Score	2	00-15,99,-,^
C1000	Cognitive skills for daily decision making	1	0-3,-,^
G0110A1	ADL: bed mobility : self-performance	1	0-4,7,8,-
G0110B1	ADL: transfer: self-performance	1	0-4,7,8,-
G0110C1	ADL: walk in room: self-performance	1	0-4,7,8,-
G0110D1	ADL: walk in corridor: self-performance	1	0-4,7,8,-
G0110E1	ADL: locomotion on unit: self-performance	1	0-4,7,8,-
G0110F1	ADL: locomotion off unit: self-performance	1	0-4,7,8,-
G0110G1	ADL: dressing: self-performance	1	0-4,7,8,-
G0110H1	ADL: eating: self-performance	1	0-4,7,8,-
G0110I1	ADL: toilet: self-performance	1	0-4,7,8,-
G0110J1	ADL: personal hygiene: self-performance	1	0-4,7,8,-
G0120A	ADL: bathing: self-performance	1	0-4,8,-
G0300A	Balance: moving from seated to standing position	1	0-2,8,-
G0300B	Balance: walking (with assistive device if used)	1	0-2,8,-
G0300C	Balance: turning around while walking	1	0-2,8,-
G0300D	Balance: moving on and off toilet	1	0-2,8,-
G0300E	Balance: surface-to-surface transfer	1	0-2,8,-
G0900A	Resident believes capable of increased independence	1	0,1,9,-,^
G0900B	Staff believes res capable of increased independence	1	0,1,-,^

Triggering Conditions (any of the following):

- Cognitive skills for daily decision making has a value of 0 through 2 or BIMS summary score is 5 or greater, while ADL assistance for bed mobility was needed as indicated by:
 (G0110A1 >= 1 AND G0110A1 <= 4) AND
 ((C1000 >= 0 AND C1000 <= 2) OR
 (C0500 >= 5 AND C0500 <= 15))

2. Cognitive skills for daily decision making has a value of 0 through 2 or BIMS summary score is 5 or greater, while ADL assistance for transfer between surfaces (excluding to/from bath/toilets) was needed as indicated by:
 (G0110B1 >= 1 AND G0110B1 <= 4) AND
 ((C1000 >= 0 AND C1000 <= 2) OR
 (C0500 >= 5 AND C0500 <= 15))
3. Cognitive skills for daily decision making has a value of 0 through 2 or BIMS summary score is 5 or greater, while ADL assistance for walking in his/her room was needed as indicated by:
 (G0110C1 >= 1 AND G0110C1 <= 4) AND
 ((C1000 >= 0 AND C1000 <= 2) OR
 (C0500 >= 5 AND C0500 <= 15))
4. Cognitive skills for daily decision making has a value of 0 through 2 or BIMS summary score is 5 or greater, while ADL assistance for walking in corridor was needed as indicated by:
 (G0110D1 >= 1 AND G0110D1 <= 4) AND
 ((C1000 >= 0 AND C1000 <= 2) OR
 (C0500 >= 5 AND C0500 <= 15))
5. Cognitive skills for daily decision making has a value of 0 through 2 or BIMS summary score is 5 or greater, while ADL assistance for locomotion on unit (including with wheel chair, if applicable) was needed as indicated by:
 (G0110E1 >= 1 AND G0110E1 <= 4) AND
 ((C1000 >= 0 AND C1000 <= 2) OR
 (C0500 >= 5 AND C0500 <= 15))
6. Cognitive skills for daily decision making has a value of 0 through 2 or BIMS summary score is 5 or greater, while ADL assistance for locomotion off unit (including with wheel chair, if applicable) was needed as indicated by:
 (G0110F1 >= 1 AND G0110F1 <= 4) AND
 ((C1000 >= 0 AND C1000 <= 2) OR
 (C0500 >= 5 AND C0500 <= 15))
7. Cognitive skills for daily decision making has a value of 0 through 2 or BIMS summary score is 5 or greater, while ADL assistance for dressing was needed as indicated by:
 (G0110G1 >= 1 AND G0110G1 <= 4) AND
 ((C1000 >= 0 AND C1000 <= 2) OR
 (C0500 >= 5 AND C0500 <= 15))
8. Cognitive skills for daily decision making has a value of 0 through 2 or BIMS summary score is 5 or greater, while ADL assistance for eating was needed as indicated by:
 (G0110H1 >= 1 AND G0110H1 <= 4) AND
 ((C1000 >= 0 AND C1000 <= 2) OR
 (C0500 >= 5 AND C0500 <= 15))

9. Cognitive skills for daily decision making has a value of 0 through 2 or BIMS summary score is 5 or greater, while ADL assistance for toilet use was needed as indicated by:
 (G0110I1 >= 1 AND G0110I1 <= 4) AND
 ((C1000 >= 0 AND C1000 <= 2) OR
 (C0500 >= 5 AND C0500 <= 15))
10. Cognitive skills for daily decision making has a value of 0 through 2 or BIMS summary score is 5 or greater, while ADL assistance for grooming/personal hygiene was needed as indicated by:
 (G0110J1 >= 1 AND G0110J1 <= 4) AND
 ((C1000 >= 0 AND C1000 <= 2) OR
 (C0500 >= 5 AND C0500 <= 15))
11. Cognitive skills for daily decision making has a value of 0 through 2 or BIMS summary score is 5 or greater, while ADL assistance for self-performance bathing (excluding washing of back and hair) has a value of 1 through 4 as indicated by:
 (G0120A >= 1 AND G0120A <= 4) AND
 ((C1000 >= 0 AND C1000 <= 2) OR
 (C0500 >= 5 AND C0500 <= 15))
12. Cognitive skills for daily decision making has a value of 0 through 2 or BIMS summary score is 5 or greater, while balance during transition has a value of 1 or 2 for any item as indicated by:
 ((G0300A = 1 OR G0300A = 2) OR
 (G0300B = 1 OR G0300B = 2) OR
 (G0300C = 1 OR G0300C = 2) OR
 (G0300D = 1 OR G0300D = 2) OR
 (G0300E = 1 OR G0300E = 2)) AND
 ((C1000 >= 0 AND C1000 <= 2) OR
 (C0500 >= 5 AND C0500 <= 15))
13. Cognitive skills for daily decision making has a value of 0 through 2 or BIMS summary score is 5 or greater, while resident believes he/she is capable of increased independence as indicated by:
 G0900A = 1 AND
 ((C1000 >= 0 AND C1000 <= 2) OR
 (C0500 >= 5 AND C0500 <= 15))
14. Cognitive skills for daily decision making has a value of 0 through 2 or BIMS summary score is 5 or greater, while direct care staff believe resident is capable of increased independence as indicated by:
 G0900B = 1 AND
 ((C1000 >= 0 AND C1000 <= 2) OR
 (C0500 >= 5 AND C0500 <= 15))

Pseudocode (SAS)

*CAT05 Logic;

*Initialize CAT indicator to not triggered;

V0200A05A = '0';

*Resident is considered if independent, modified independent or moderately;

*impaired regarding cognitive skills for daily decision making;

IF ((C1000 >= '0' AND C1000 <= '2') OR

(C0500 >= '05' AND C0500 <= '15'))

THEN DO;

 *Trigger on Condition 1;

 IF (G0110A1 >= '1' AND G0110A1 <= '4')

 THEN V0200A05A = '1';

 *Trigger on Condition 2;

 IF (G0110B1 >= '1' AND G0110B1 <= '4')

 THEN V0200A05A = '1';

 *Trigger on Condition 3;

 IF (G0110C1 >= '1' AND G0110C1 <= '4')

 THEN V0200A05A = '1';

 *Trigger on Condition 4;

 IF (G0110D1 >= '1' AND G0110D1 <= '4')

 THEN V0200A05A = '1';

 *Trigger on Condition 5;

 IF (G0110E1 >= '1' AND G0110E1 <= '4')

 THEN V0200A05A = '1';

 *Trigger on Condition 6;

 IF (G0110F1 >= '1' AND G0110F1 <= '4')

 THEN V0200A05A = '1';

 *Trigger on Condition 7;

 IF (G0110G1 >= '1' AND G0110G1 <= '4')

 THEN V0200A05A = '1';

 *Trigger on Condition 8;

 IF (G0110H1 >= '1' AND G0110H1 <= '4')

 THEN V0200A05A = '1';

*Trigger on Condition 9;
IF (G0110I1 >= '1' AND G0110I1 <= '4')
THEN V0200A05A = '1';

*Trigger on Condition 10;
IF (G0110J1 >= '1' AND G0110J1 <= '4')
THEN V0200A05A = '1';

*Trigger on Condition 11;
IF G0120A >= '1' AND G0120A <= '4' THEN V0200A05A = '1';

*Trigger on Condition 12;
IF (G0300A = '1' OR G0300A = '2') OR
 (G0300B = '1' OR G0300B = '2') OR
 (G0300C = '1' OR G0300C = '2') OR
 (G0300D = '1' OR G0300D = '2') OR
 (G0300E = '1' OR G0300E = '2') THEN V0200A05A = '1';

*Trigger on Condition 13;
IF G0900A = '1' THEN V0200A05A = '1';

*Trigger on Condition 14;
IF G0900B = '1' THEN V0200A05A = '1' ;

END;

CAT Specifications: 6 Urinary Incontinence and Indwelling Catheter

Items Used

Item	Description	Length	Values
G0110I1	ADL: toilet: self-performance	1	0-4,7,8,-
H0100A	Appliances: indwelling bladder catheter	1	0,1,-
H0100B	Appliances: external (condom) catheter	1	0,1,-
H0100D	Appliances: intermittent catheterization	1	0,1,-
H0300	Urinary continence	1	0-3,9,-

Triggering Conditions (any of the following):

1. ADL assistance for toileting was needed as indicated by:
(G0110I1 >= 2 AND G0110I1 <= 4)
2. Resident requires a indwelling catheter as indicated by:
H0100A = 1
3. Resident requires an external catheter as indicated by:
H0100B = 1
4. Resident requires intermittent catheterization as indicated by:
H0100D = 1
5. Urinary incontinence has a value of 1 through 3 as indicated by:
H0300 >= 1 AND H0300 <= 3

Pseudocode (SAS)

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*CAT06 Logic;  
*Initialize CAT indicator to not triggered;  
V0200A06A = '0';
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*Trigger on Condition 1;  
IF (G0110I1 >= '2' AND G0110I1 <= '4')  
THEN V0200A06A = '1';
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```
*Trigger on Condition 2;  
IF H0100A = '1' THEN V0200A06A = '1';
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*Trigger on Condition 3;  
IF H0100B = '1' THEN V0200A06A = '1';
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```
*Trigger on Condition 4;
```

IF H0100D = '1' THEN V0200A06A = '1';

*Trigger on Condition 5;

IF H0300 >= '1' AND H0300 <= '3' THEN V0200A06A = '1';

CAT Specifications: 7 Psychological Well-Being

Items Used

Item	Description	Length	Values
D0200A1	PHQ resident mood interview: little interest or pleasure in doing things - presence	1	0,1,9,-,^
D0500A1	PHQ staff assessment of resident mood: little interest or pleasure in doing things - presence	1	0,1,-,^
E0200A	Physical behavioral symptoms directed toward others	1	0-3,-,^
E0200B	Verbal behavioral symptoms directed toward others	1	0-3,-,^
F0500A	Resident interview: how important is it to you to have books, newspaper, magazines to read	1	1-5,9,-,^
F0500B	Resident interview: how important is it to you to listen to music	1	1-5,9,-,^
F0500C	Resident interview: how important is it to you to be around animals/pets	1	1-5,9,-,^
F0500D	Resident interview: how important is it to you to keep up with news	1	1-5,9,-,^
F0500E	Resident interview: how important is it to you to do things with groups of people	1	1-5,9,-,^
F0500F	Resident interview: how important is it to you to do your favorite activities	1	1-5,9,-,^
F0500G	Resident interview: how important is it to you to go outside in good weather	1	1-5,9,-,^
F0500H	Resident interview: how important is it to you to participate in religious practices	1	1-5,9,-,^
F0600	Primary respondent: daily/activities preferences	1	1,2,9,-,^
F0800Q	Staff assessment: participating in favorite activities	1	0,1,-,^
I4200	Alzheimer's disease	1	0,1,-
I4800	Dementia	1	0,1,-

Triggering Conditions (any of the following):

1. Resident mood interview indicates the presence of little interest or pleasure in doing things as indicated by:
D0200A1 = 1
2. Staff assessment of resident mood indicates the presence of little interest or pleasure in doing things as indicated by:
D0500A1 = 1

3. Interview for activity preference item "How important is it to you to do your favorite activities?" has a value of 3 or 4 as indicated by:
F0500F = 3 OR F0500F = 4
4. Staff assessment of daily and activity preferences did not indicate that resident prefers participating in favorite activities:
F0800Q = not checked
5. Physical behavioral symptoms directed toward others has a value of 1 through 3 and neither dementia nor Alzheimer's disease is present as indicated by:
(E0200A >= 1 AND E0200A <= 3) AND
(I4800 = 0 OR I4800 = -) AND
(I4200 = 0 OR I4200 = -)
6. Verbal behavioral symptoms directed toward others has a value of 1 through 3 and neither dementia nor Alzheimer's disease is present as indicated by:
(E0200B >= 1 AND E0200B <= 3) AND
(I4800 = 0 OR I4800 = -) AND
(I4200 = 0 OR I4200 = -)
7. Any six items for interview for activity preferences has the value of 4 and resident is primary respondent for daily and activity preferences as indicated by:
(Any 6 of F0500A through F0500H = 4) AND
(F0600 = 1)

Pseudocode (SAS)

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*CAT07 Logic;
*Initialize CAT indicator to not triggered;
V0200A07A = '0';

*Trigger on Condition 1;
IF D0200A1 = '1' THEN V0200A07A = '1';

*Trigger on Condition 2;
IF D0500A1 = '1' THEN V0200A07A = '1';

*Trigger on Condition 3;
IF F0500F = '3' OR F0500F = '4' THEN V0200A07A = '1';

*Trigger on Condition 4;
IF F0800Q = '0' THEN V0200A07A = '1';

*Trigger on Condition 5;
IF (E0200A >= '1' AND E0200A <= '3') AND
   (I4800 = '0' OR I4800 = '-') AND

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(I4200 = '0' OR I4200 = '-') THEN V0200A07A = '1';

*Trigger on Condition 6;

IF (E0200B >= '1' AND E0200B <= '3') AND
(I4800 = '0' OR I4800 = '-') AND
(I4200 = '0' OR I4200 = '-') THEN V0200A07A = '1';

*Trigger on Condition 7;

*Count number of F0500 items = 4;

n_f0500eq4 = 0;

IF F0500A = '4' THEN n_f0500eq4 = n_f0500eq4 + 1;

IF F0500B = '4' THEN n_f0500eq4 = n_f0500eq4 + 1;

IF F0500C = '4' THEN n_f0500eq4 = n_f0500eq4 + 1;

IF F0500D = '4' THEN n_f0500eq4 = n_f0500eq4 + 1;

IF F0500E = '4' THEN n_f0500eq4 = n_f0500eq4 + 1;

IF F0500F = '4' THEN n_f0500eq4 = n_f0500eq4 + 1;

IF F0500G = '4' THEN n_f0500eq4 = n_f0500eq4 + 1;

IF F0500H = '4' THEN n_f0500eq4 = n_f0500eq4 + 1;

IF (n_f0500eq4 >= 6) AND F0600 = '1' THEN V0200A07A = '1';

CAT Specifications: 8 Mood State

Items Used (note that prior assessment item V0100E is used on this CAT)

Item	Description	Length	Values
A0310A	Federal OBRA reason for assessment	2	01-06.99
D0200I1	PHQ resident mood interview: thoughts better off dead -presence	1	0,1,9,-,^
D0300	PHQ resident mood interview: total mood severity score	2	00-27,99,-,^
V0100E	PHQ resident mood interview: total mood severity score (prior assessment)	2	00-27,99,-,^
D0500I1	PHQ staff assessment: thoughts better off dead -presence	1	0,1,-,^
D0600	PHQ staff assessment: total mood score	2	00-30,-,^
V0100F	PHQ staff assessment: total mood score (prior assessment)	2	00-30,-,^

Triggering Conditions (any of the following):

- Resident has had thoughts he/she would be better off dead, or thoughts of hurting him/herself as indicated by:
D0200I1 = 1
- Staff assessment of resident mood suggests resident states life isn't worth living, wishes for death, or attempts to harm self as indicated by:
D0500I1 = 1
- The resident mood interview total severity score has a non-missing value (0 to 27) on both the current non-admission comprehensive assessment (A0310A = 03, 04, or 05) and the prior assessment, and the resident interview summary score on the current non-admission comprehensive assessment (D0300) is greater than the prior assessment (V0100E) as indicated by:
((A0310A = 03) OR (A0310A = 04) OR (A0310A = 05)) AND
((D0300 >= 00) AND (D0300 <= 27)) AND
((V0100E >= 00) AND (V0100E <= 27)) AND
(D0300 > V0100E)
- The resident mood interview is not successfully completed (missing value on D0300), the staff assessment of resident mood has a non-missing value (0 to 30) on both the current non-admission comprehensive assessment (A0310A = 03, 04, or 05) and the prior assessment, and the staff assessment current total severity score on the current non-admission comprehensive assessment (D0600) is greater than the prior assessment (V0100F) as indicated by:
((A0310A = 03) OR (A0310A = 04) OR (A0310A = 05)) AND
((D0300 < 00) OR (D0300 > 27)) AND
((D0600 >= 00) AND (D0600 <= 30)) AND
((V0100F >= 00) AND (V0100F <= 30)) AND

- (D0600 > V0100F)
5. The resident mood interview is successfully completed and the current total severity score has a value of 10 through 27 as indicated by:
D0300 >= 10 AND D0300 <= 27
 6. The staff assessment of resident mood is recorded and the current total severity score has a value of 10 through 30 as indicated by:
D0600 >= 10 AND D0600 <= 30

Pseudocode (SAS)

*CAT08 Logic;

*Initialize CAT indicator to not triggered;

V0200A08A = '0';

*Trigger on Condition 1;

IF D0200I1 = '1' THEN V0200A08A = '1';

*Trigger on Condition 2;

IF D0500I1 = '1' THEN V0200A08A = '1';

*Trigger on Condition 3;

*Current assessment is limited to a non-admission comprehensive assessment;

IF (A0310A = '03' OR A0310A = '04' OR A0310A = '05')

THEN DO;

*Check that D0300 and V0100E both have non-missing values (00 to 27);

IF (D0300 >= '00' AND D0300 <= '27') AND
(V0100E >= '00' AND V0100E <= '27')

THEN DO;

*Trigger CAT if current assessment score > prior;

* assessment score;

IF D0300 > V0100E THEN V0200A08A = '1';

END;

END;

*Trigger on Condition 4;

*Current assessment is limited to a non-admission comprehensive assessment,;

* and the resident interview is not successfully completed;

IF (A0310A = '03' OR A0310A = '04' OR A0310A = '05') AND
(D0300 < '00' OR D0300 > '27')

THEN DO;

```

*Check that D0600 and V0100F both have non-missing values (00 to
30);
IF (D0600 >= '00' AND D0600 <= '30') AND
  (V0100F >= '00' AND V0100F <= '30')
THEN DO;
    *Trigger CAT if current assessment score > prior;
    *assessment score;
    IF D0600 > V0100F THEN V0200A08A = '1';
END;
END;

*Trigger on Condition 5;
IF D0300 >= '10' AND D0300 <= '27' THEN V0200A08A = '1';

*Trigger on Condition 6;
IF D0600 >= '10' AND D0600 <= '30' THEN V0200A08A = '1';

```

CAT Specifications: 9 Behavioral Symptoms

Items Used

Item	Description	Length	Values
E0300	Overall presence of behavioral symptoms	1	0,1,-,^
E0800	Rejection of care: presence and frequency	1	0-3,-,^
E0900	Wandering: presence and frequency	1	0-3,-,^
E1100	Change in behavioral or other symptoms	1	0-3,-,^

Triggering Conditions (any of the following):

1. Rejection of care has a value of 1 through 3 indicating resident has rejected evaluation or care necessary to achieve his/her goals for health and well-being as indicated by:
E0800 >= 1 AND E0800 <= 3
2. Wandering has a value of 1 through 3 as indicated by:
E0900 >= 1 AND E0900 <= 3
3. Change in behavior indicates behavior, care rejection or wandering has gotten worse since prior assessment as indicated by:
E1100 = 2
4. Presence of at least one behavioral symptom as indicated by:
E0300 = 1

Pseudocode (SAS)

```
*CAT09 Logic;  
*Initialize CAT indicator to not triggered;  
V0200A09A = '0';  
  
*Trigger on Condition 1;  
IF E0800 >= '1' AND E0800 <= '3' THEN V0200A09A = '1';  
  
*Trigger on Condition 2;  
IF E0900 >= '1' AND E0900 <= '3' THEN V0200A09A = '1';  
  
*Trigger on Condition 3;  
IF E1100 = '2' THEN V0200A09A = '1';  
  
*Trigger on Condition 4;  
IF E0300 = '1' THEN V0200A09A = '1';
```

CAT Specifications: 10 Activities

Items Used

Item	Description	Length	Values
D0200A1	PHQ resident mood interview: little interest or pleasure in doing things-presence	1	0,1,9,-,^
D0500A1	PHQ staff assessment of resident mood: little interest or pleasure in doing things -presence	1	0,1,-,^
F0500A	Resident interview: how important is it to you to have books, newspaper, magazines to read	1	1-5,9,-,^
F0500B	Resident interview: how important is it to you to listen to music	1	1-5,9,-,^
F0500C	Resident interview: how important is it to you to be around animals/pets	1	1-5,9,-,^
F0500D	Resident interview: how important is it to you to keep up with news	1	1-5,9,-,^
F0500E	Resident interview: how important is it to you to do things with groups of people	1	1-5,9,-,^
F0500F	Resident interview: how important is it to you to do your favorite activities	1	1-5,9,-,^
F0500G	Resident interview: how important is it to you to go outside in good weather	1	1-5,9,-,^
F0500H	Resident interview: how important is it to you to participate in religious practices	1	1-5,9,-,^
F0800L	Staff assessment: reading books, newspapers, magazines	1	0,1,-,^
F0800M	Staff assessment: listening to music	1	0,1,-,^
F0800N	Staff assessment: being around animals/pets	1	0,1,-,^
F0800O	Staff assessment: keeping up with news	1	0,1,-,^
F0800P	Staff assessment: doing things with groups	1	0,1,-,^
F0800Q	Staff assessment: participate in favorite activities	1	0,1,-,^
F0800R	Staff assessment: spend time away from nursing home	1	0,1,-,^
F0800S	Staff assessment: spend time outdoors	1	0,1,-,^
F0800T	Staff assessment: participate religious activities	1	0,1,-,^

Triggering Conditions (any of the following):

1. Resident has little interest or pleasure in doing things as indicated by:
D0200A1 = 1

2. Staff assessment of resident mood suggests resident states little interest or pleasure in doing things as indicated by:
D0500A1 = 1
3. Any 6 items for interview for activity preferences has the value of 4 (not important at all) or 5 (important, but cannot do or no choice) as indicated by:
Any 6 of F0500A through F0500H = 4 or 5
4. Any 6 items for staff assessment of activity preference item L through T are not checked as indicated by:
Any 6 of F0800L through F0800T = not checked

Pseudocode (SAS)

*CAT10 Logic;

*Initialize CAT indicator to not triggered;

V0200A10A = '0';

*Trigger on Condition 1;

IF D0200A1 = '1' THEN V0200A10A = '1';

*Trigger on Condition 2;

IF D0500A1 = '1' THEN V0200A10A = '1';

*Trigger on Condition 3;

*Count number of F0500 items = 4 or 5;

n_f0500eq45 = 0;

IF (F0500A = '4' OR F0500A = '5') THEN n_f0500eq45 = n_f0500eq45 + 1;

IF (F0500B = '4' OR F0500B = '5') THEN n_f0500eq45 = n_f0500eq45 + 1;

IF (F0500C = '4' OR F0500C = '5') THEN n_f0500eq45 = n_f0500eq45 + 1;

IF (F0500D = '4' OR F0500D = '5') THEN n_f0500eq45 = n_f0500eq45 + 1;

IF (F0500E = '4' OR F0500E = '5') THEN n_f0500eq45 = n_f0500eq45 + 1;

IF (F0500F = '4' OR F0500F = '5') THEN n_f0500eq45 = n_f0500eq45 + 1;

IF (F0500G = '4' OR F0500G = '5') THEN n_f0500eq45 = n_f0500eq45 + 1;

IF (F0500H = '4' OR F0500H = '5') THEN n_f0500eq45 = n_f0500eq45 + 1;

IF (n_f0500eq45 >= 6) THEN V0200A10A = '1';

*Trigger on Condition 4;

*Count number of F0800L through F0800T not checked;

n_f0800eq0 = 0;

IF F0800L = '0' THEN n_f0800eq0 = n_f0800eq0 + 1;

IF F0800M = '0' THEN n_f0800eq0 = n_f0800eq0 + 1;

IF F0800N = '0' THEN n_f0800eq0 = n_f0800eq0 + 1;

IF F0800O = '0' THEN n_f0800eq0 = n_f0800eq0 + 1;

IF F0800P = '0' THEN n_f0800eq0 = n_f0800eq0 + 1;

IF F0800Q = '0' THEN n_f0800eq0 = n_f0800eq0 + 1;
IF F0800R = '0' THEN n_f0800eq0 = n_f0800eq0 + 1;
IF F0800S = '0' THEN n_f0800eq0 = n_f0800eq0 + 1;
IF F0800T = '0' THEN n_f0800eq0 = n_f0800eq0 + 1;

IF (n_f0800eq0 >= 6) THEN V0200A10A = '1';

CAT Specifications: 11 Falls

Items Used

Item	Description	Length	Values
A0310A	Federal OBRA reason for assessment	2	01-06, 99
E0900	Wandering: presence and frequency	1	0-3,-,^
G0300A	Balance: moving from seated to standing position	1	0-2,8,-
G0300B	Balance: walking (with assistive device if used)	1	0-2,8,-
G0300C	Balance: turning around while walking	1	0-2,8,-
G0300D	Balance: moving on and off toilet	1	0-2,8,-
G0300E	Balance: surface-to-surface transfer	1	0-2,8,-
J1700A	Fall history: fall during month before entry	1	0,1,9,-,^
J1700B	Fall history: fall 2 to 6 months before entry	1	0,1,9,-,^
J1800	Falls since admit/prior assessment: any falls	1	0,1,-,^
N0400B	Medications: antianxiety	1	0,1,-
N0400C	Medications: antidepressant	1	0,1,-
P0100B	Restraints used in bed: trunk restraint	1	0-2,-
P0100E	Restraints in chair/out of bed: trunk restraint	1	0-2,-

Triggering Conditions (any of the following):

- Wandering occurs as indicated by a value of 1 through 3 as follows:
E0900 >= 1 AND E0900 <= 3
- Balance problems during transition indicated by a value of 1 or 2 for any item as follows:
(G0300A = 1 OR G0300A = 2) OR
(G0300B = 1 OR G0300B = 2) OR
(G0300C = 1 OR G0300C = 2) OR
(G0300D = 1 OR G0300D = 2) OR
(G0300E = 1 OR G0300E = 2)
- For OBRA admission assessment: fall history at admission indicates resident fell anytime in the last month prior to admission as indicated by:
If A0310A = 01 AND J1700A = 1
- For OBRA admission assessment: fall history at admission indicates resident fell anytime in the last 2 to 6 months prior to admission as indicated by:
If A0310A = 01 AND J1700B = 1
- Resident has fallen at least one time since admission or the prior assessment as indicated by:

- J1800 = 1
6. Resident received antianxiety medication during the last 7 days or since admission/reentry if less than 7 days as indicated by:
 N0400B = 1
 7. Resident received antidepressant medication during the last 7 days or since admission/reentry if less than 7 days as indicated by:
 N0400C = 1
 8. Trunk restraint used in bed as indicated by a value of 1 or 2 as follows:
 P0100B = 1 OR P0100B = 2
 9. Trunk restraint used in chair or out of bed as indicated by a value of 1 or 2 as follows:
 P0100E = 1 OR P0100E = 2

Pseudocode (SAS)

```

*CAT11 Logic;
*Initialize CAT indicator to not triggered;
V0200A11A = '0';

*Trigger on Condition 1;
IF E0900 >= '1' AND E0900 <= '3' THEN V0200A11A = '1';

*Trigger on Condition 2;
IF (G0300A = '1' OR G0300A = '2') OR
   (G0300B = '1' OR G0300B = '2') OR
   (G0300C = '1' OR G0300C = '2') OR
   (G0300D = '1' OR G0300D = '2') OR
   (G0300E = '1' OR G0300E = '2') THEN V0200A11A = '1';

*Trigger on Condition 3;
IF (A0310A = '01' AND J1700A = '1') THEN V0200A11A = '1';

*Trigger on Condition 4;
IF (A0310A = '01' AND J1700B = '1') THEN V0200A11A = '1';

*Trigger on Condition 5;
IF J1800 = '1' THEN V0200A11A = '1';

*Trigger on Condition 6;
IF N0400B = '1' THEN V0200A11A = '1';

*Trigger on Condition 7;
IF N0400C = '1' THEN V0200A11A = '1';

```

*Trigger on Condition 8;
IF P0100B = '1' OR P0100B = '2' THEN V0200A11A = '1';

*Trigger on Condition 9;
IF P0100E = '1' OR P0100E = '2' THEN V0200A11A = '1';

CAT Specifications: 12 Nutritional Status

Items Used

Item	Description	Length	Values
J1550C	Problem conditions: dehydrated	1	0,1,-
K0200A	Height	2	00-99,-
K0200B	Weight	3	000-999,-
K0300	Weight loss	1	0-2,-
K0500A	Nutritional approaches: parenteral /IV feeding	1	0,1,-
K0500C	Nutritional approaches: mechanically altered diet	1	0,1,-
K0500D	Nutritional approaches: therapeutic diet	1	0,1,-
M0300B1	Number of Stage 2 pressure ulcers	1	0-9,-,^
M0300C1	Number of Stage 3 pressure ulcers	1	0-9,-,^
M0300D1	Number of Stage 4 pressure ulcers	1	0-9,-,^
M0300E1	Number of unstaged pressure ulcers due to dressing	1	0-9,-,^
M0300F1	Number of pressure ulcers unstaged due to slough/eschar	1	0-9,-,^
M0300G1	Number of pressure ulcers unstaged – deep tissue	1	0-9,-,^

Triggering Conditions (any of the following):

- Dehydration is selected as a problem health condition as indicated by:
J1550C = 1
- Body mass index (BMI) is too low or too high as indicated by:
BMI < 18.5 OR BMI > 24.9
- Any weight loss as indicated by a value of 1 or 2 as follows:
K0300 = 1 OR K0300 = 2
- Parenteral/IV feeding is used as nutritional approach as indicated by:
K0500A = 1
- Mechanically altered diet is used as nutritional approach as indicated by:
K0500C = 1
- Therapeutic diet is used as nutritional approach as indicated by:
K0500D = 1
- Resident has one or more unhealed pressure ulcer(s) at Stage 2 or higher, or one or more likely pressure ulcers that are unstageable at this time as indicated by:
((M0300B1 > 0 AND M0300B1 <= 9) OR
(M0300C1 > 0 AND M0300C1 <= 9) OR
(M0300D1 > 0 AND M0300D1 <= 9) OR
(M0300E1 > 0 AND M0300E1 <= 9) OR

(M0300F1 > 0 AND M0300F1 <= 9) OR
(M0300G1 > 0 AND M0300G1 <= 9))

Pseudocode (SAS)

```
*CAT12 Logic;
*Initialize CAT indicator to not triggered;
V0200A12A = '0';

*Trigger on Condition 1;
IF J1550C = '1' THEN V0200A12A = '1';

*Trigger on Condition 2;
*Set BMI to 20 (will not trigger) if K0200A or K0200B missing;
* else calculate actual value;
IF K0200A = '-' OR K0200A = '00' OR K0200B = '-' OR K0200B = '000'
  THEN BMI = 20.;
ELSE
  BMI = (INPUT(K0200B, 3.) * 703) / (INPUT(K0200A, 2.)**2);
*Trigger on BMI;
IF BMI < 18.5 OR BMI > 24.9 THEN V0200A12A = '1';

*Trigger on Condition 3;
IF K0300 = '1' OR K0300 = '2' THEN V0200A12A = '1';

*Trigger on Condition 4;
IF K0500A = '1' THEN V0200A12A = '1';

*Trigger on Condition 5;
IF K0500C = '1' THEN V0200A12A = '1';

*Trigger on Condition 6;
IF K0500D = '1' THEN V0200A12A = '1';

*Trigger on Condition 7;
IF ((M0300B1 > '0' AND M0300B1 <= '9') OR
    (M0300C1 > '0' AND M0300C1 <= '9') OR
    (M0300D1 > '0' AND M0300D1 <= '9') OR
    (M0300E1 > '0' AND M0300E1 <= '9') OR
    (M0300F1 > '0' AND M0300F1 <= '9') OR
    (M0300G1 > '0' AND M0300G1 <= '9'))
  THEN V0200A12A = '1';
```

CAT Specifications: 13 Feeding Tubes

Items Used

Item	Description	Length	Values
K0500B	Nutritional approaches: feeding tube	1	0,1,-

Triggering Conditions (any of the following):

1. Feeding tube is used as nutritional approach as indicated by:
K0500B = 1

Pseudocode (SAS)

```
*CAT13 Logic;  
*Initialize CAT indicator to not triggered;  
V0200A13A = '0';  
  
*Trigger on Condition 1;  
IF K0500B = '1' THEN V0200A13A = '1';
```

CAT Specifications: 14 Dehydration/Fluid Maintenance

Items Used

Item	Description	Length	Values
H0600	Constipation	1	0,1,-
I1700	Multidrug-Resistant Organism (MDRO)	1	0,1,-
I2000	Pneumonia	1	0,1,-
I2100	Septicemia	1	0,1,-
I2200	Tuberculosis	1	0,1,-
I2300	Urinary tract infection (UTI) (LAST 30 DAYS)	1	0,1,-
I2400	Viral hepatitis (includes type A, B, C, D, and E)	1	0,1,-
I2500	Wound infection (other than foot)	1	0,1,-
J1550A	Problem conditions: fever	1	0,1,-
J1550B	Problem conditions: vomiting	1	0,1,-
J1550C	Problem conditions: dehydrated	1	0,1,-
J1550D	Problem conditions: internal bleeding	1	0,1,-
K0500A	Nutritional approaches: parenteral /IV feeding	1	0,1,-
K0500B	Nutritional approaches: feeding tube	1	0,1,-
M1040A	Infection of the foot	1	0,1,-

Triggering Conditions (any of the following):

1. Fever is selected as a problem health condition as indicated by:
J1550A = 1
2. Vomiting is selected as a problem health condition as indicated by:
J1550B = 1
3. Dehydration is selected as a problem health condition as indicated by:
J1550C = 1
4. Internal bleeding is selected as a problem health condition as indicated by:
J1550D = 1
5. Infection present as indicated by:
(I1700 = 1) OR
(I2000 = 1) OR
(I2100 = 1) OR
(I2200 = 1) OR
(I2300 = 1) OR
(I2400 = 1) OR
(I2500 = 1) OR
((M1040A = 1))
6. Constipation present as indicated by:
H0600 = 1

7. Parenteral/IV feeding is used as nutritional approach as indicated by:
K0500A = 1
8. Feeding tube is used as nutritional approach as indicated by:
K0500B = 1

Pseudocode (SAS)

```
*CAT14 Logic;  
*Initialize CAT indicator to not triggered;  
V0200A14A = '0';  
  
*Trigger on Condition 1;  
IF J1550A = '1' THEN V0200A14A = '1';  
  
*Trigger on Condition 2;  
IF J1550B = '1' THEN V0200A14A = '1';  
  
*Trigger on Condition 3;  
IF J1550C = '1' THEN V0200A14A = '1';  
  
*Trigger on Condition 4;  
IF J1550D = '1' THEN V0200A14A = '1';  
  
*Trigger on Condition 5;  
IF  
    (I1700 = '1') OR  
    (I2000 = '1') OR  
    (I2100 = '1') OR  
    (I2200 = '1') OR  
    (I2300 = '1') OR  
    (I2400 = '1') OR  
    (I2500 = '1') OR  
    ((M1040A = '1'))  
    THEN V0200A14A = '1';  
  
*Trigger on Condition 6;  
IF H0600 = '1' THEN V0200A14A = '1';  
  
*Trigger on Condition 7;  
IF K0500A = '1' THEN V0200A14A = '1';  
  
*Trigger on Condition 8;  
IF K0500B = '1' THEN V0200A14A = '1';
```

CAT Specifications: 15 Dental Care

Items Used

Item	Description	Length	Values
L0200A	Dental: broken or loosely fitting denture	1	0,1,-,^
L0200B	Dental: no natural teeth or tooth fragment(s)	1	0,1,-,^
L0200C	Dental: abnormal mouth tissue	1	0,1,-,^
L0200D	Dental: cavity or broken natural teeth	1	0,1,-,^
L0200E	Dental: inflamed/bleeding gums or loose teeth	1	0,1,-,^
L0200F	Dental: pain, discomfort, difficulty chewing	1	0,1,-,^

Triggering Conditions (any of the following):

- Any dental problem indicated by:
(L0200A = 1) OR
(L0200B = 1) OR
(L0200C = 1) OR
(L0200D = 1) OR
(L0200E = 1) OR
(L0200F = 1)

Pseudocode (SAS)

*CAT15 Logic;

*Initialize CAT indicator to not triggered;
V0200A15A = '0';

*Trigger on Condition 1;

IF (L0200A = '1') OR
(L0200B = '1') OR
(L0200C = '1') OR
(L0200D = '1') OR
(L0200E = '1') OR
(L0200F = '1') THEN V0200A15A = '1';

CAT Specifications: 16 Pressure Ulcer

Items Used

Item	Description	Length	Values
G0110A1	ADL: bed mobility : self-performance	1	0-4,7,8,-
H0300	Urinary continence	1	0-3,9,-
H0400	Bowel continence	1	0-3,9,-
K0300	Weight loss	1	0-2,-
M0150	Is resident at risk of developing pressure ulcer	1	0,1,-
M0300A	Number of Stage 1 pressure ulcers	1	0-9,-
M0300B1	Number of Stage 2 pressure ulcers	1	0-9,-,^
M0300C1	Number of Stage 3 pressure ulcers	1	0-9,-,^
M0300D1	Number of Stage 4 pressure ulcers	1	0-9,-,^
M0300E1	Number of pressure ulcers unstaged due to dressing	1	0-9,-,^
M0300F1	Number of pressure ulcers unstaged due to slough/eschar	1	0-9,-,^
M0300G1	Number of pressure ulcers unstaged – deep tissue	1	0-9,-,^
M0800A	Worsened since prior assessment: Stage 2 pressure ulcers	1	0-9,-,^
M0800B	Worsened since prior assessment: Stage 3 pressure ulcers	1	0-9,-,^
M0800C	Worsened since prior assessment: Stage 4 pressure ulcers	1	0-9,-,^
P0100B	Restraints used in bed: trunk restraint	1	0-2,-
P0100E	Restraints in chair/out of bed: trunk restraint	1	0-2,-

Triggering Conditions (any of the following):

- ADL assistance for bed mobility was needed, or activity did not occur, or activity only occurred once or twice as indicated by:
(G0110A1 >= 1 AND G0110A1 <= 4) OR
(G0110A1 = 7 OR G0110A1 = 8)
- Frequent urinary incontinence as indicated by:
H0300 = 2 OR H0300 = 3
- Frequent bowel continence as indicated by:
H0400 = 2 OR H0400 = 3
- Weight loss in the absence of physician-prescribed regimen as indicated by:
K0300 = 2
- Resident at risk for developing pressure ulcers as indicated by:

M0150 = 1

6. Resident has one or more unhealed pressure ulcer(s) at Stage 2 or higher, or one or more likely pressure ulcers that are unstageable at this time as indicated by:
(M0300B1 > 0 AND M0300B1 <= 9) OR
(M0300C1 > 0 AND M0300C1 <= 9) OR
(M0300D1 > 0 AND M0300D1 <= 9) OR
(M0300E1 > 0 AND M0300E1 <= 9) OR
(M0300F1 > 0 AND M0300F1 <= 9) OR
(M0300G1 > 0 AND M0300G1 <= 9))
7. Resident has one or more unhealed pressure ulcer(s) at Stage 1 as indicated by:
M0300A > 0 AND M0300A <= 9
8. Resident has one or more pressure ulcer(s) that has gotten worse since prior assessment as indicated by:
(M0800A > 0 AND M0800A <= 9) OR
(M0800B > 0 AND M0800B <= 9) OR
(M0800C > 0 AND M0800C <= 9)
9. Trunk restraint used in bed has value of 1 or 2 as indicated by:
P0100B = 1 OR P0100B = 2
10. Trunk restraint used in chair or out of bed has value of 1 or 2 as indicated by:
P0100E = 1 OR P0100E = 2

Pseudocode (SAS)

*CAT16 Logic;

*Initialize CAT indicator to not triggered;

V0200A16A = '0';

*Trigger on Condition 1;

IF (G0110A1 >= '1' AND G0110A1 <= '4') OR

(G0110A1 = '7' OR G0110A1 = '8')

THEN V0200A16A = '1';

*Trigger on Condition 2;

IF H0300 = '2' OR H0300 = '3' THEN V0200A16A = '1';

*Trigger on Condition 3;

IF H0400 = '2' OR H0400 = '3' THEN V0200A16A = '1';

*Trigger on Condition 4;

IF K0300 = '2' THEN V0200A16A = '1';

*Trigger on Condition 5;

IF M0150 = '1' THEN V0200A16A = '1';

*Trigger on Condition 6;

IF ((M0300B1 > '0' AND M0300B1 <= '9') OR
(M0300C1 > '0' AND M0300C1 <= '9') OR
(M0300D1 > '0' AND M0300D1 <= '9') OR
(M0300E1 > '0' AND M0300E1 <= '9') OR
(M0300F1 > '0' AND M0300F1 <= '9') OR
(M0300G1 > '0' AND M0300G1 <= '9'))
THEN V0200A16A = '1';

*Trigger on Condition 7;

IF M0300A > '0' AND M0300A <= '9'
THEN V0200A16A = '1';

*Trigger on Condition 8;

IF (M0800A > '0' AND M0800A <= '9') OR
(M0800B > '0' AND M0800B <= '9') OR
(M0800C > '0' AND M0800C <= '9')
THEN V0200A16A = '1';

*Trigger on Condition 9;

IF P0100B = '1' OR P0100B = '2' THEN V0200A16A = '1';

*Trigger on Condition 10;

IF P0100E = '1' OR P0100E = '2' THEN V0200A16A = '1';

CAT Specifications: 17 Psychotropic Drug Use

Items Used

Item	Description	Length	Values
N0400A	Medications: antipsychotic	1	0,1,-
N0400B	Medications: antianxiety	1	0,1,-
N0400C	Medications: antidepressant	1	0,1,-
N0400D	Medications: hypnotic	1	0,1,-

Triggering Conditions (any of the following):

1. Antipsychotic medication administered to resident in last 7 days or since admission as indicated by:
N0400A = 1
2. Antianxiety medication administered to resident in last 7 days or since admission as indicated by:
N0400B = 1
3. Antidepressant medication administered to resident in last 7 days or since admission as indicated by:
N0400C = 1
4. Hypnotic medication administered to resident in last 7 days or since admission as indicated by:
N0400D = 1

Pseudocode (SAS)

```
*CAT17 Logic;  
*Initialize CAT indicator to not triggered;  
V0200A17A = '0';  
  
*Trigger on Condition 1;  
IF N0400A = '1' THEN V0200A17A = '1';  
  
*Trigger on Condition 2;  
IF N0400B = '1' THEN V0200A17A = '1';  
  
*Trigger on Condition 3;  
IF N0400C = '1' THEN V0200A17A = '1';  
  
*Trigger on Condition 4;  
IF N0400D = '1' THEN V0200A17A = '1';
```

CAT Specifications: 18 Physical Restraints

Items Used

Item	Description	Length	Values
P0100A	Restraints used in bed: bed rail (any type)	1	0-2,-
P0100B	Restraints used in bed: trunk restraint	1	0-2,-
P0100C	Restraints used in bed: limb restraint	1	0-2,-
P0100D	Restraints used in bed: other	1	0-2,-
P0100E	Restraints in chair/out of bed: trunk restraint	1	0-2,-
P0100F	Restraints in chair/out of bed: limb restraint	1	0-2,-
P0100G	Restraints in chair/out of bed: chair stops rising	1	0-2,-
P0100H	Restraints in chair/out of bed: other	1	0-2,-

Triggering Conditions (any of the following):

1. Bed rail restraint used in bed has value of 1 or 2 as indicated by:
P0100A = 1 OR P0100A = 2
2. Trunk restraint used in bed has value of 1 or 2 as indicated by:
P0100B = 1 OR P0100B = 2
3. Limb restraint used in bed has value of 1 or 2 as indicated by:
P0100C = 1 OR P0100C = 2
4. Other restraint used in bed has value of 1 or 2 as indicated by:
P0100D = 1 OR P0100D = 2
5. Trunk restraint used in chair or out of bed has value of 1 or 2 as indicated by:
P0100E = 1 OR P0100E = 2
6. Limb restraint used in chair or out of bed has value of 1 or 2 as indicated by:
P0100F = 1 OR P0100F = 2
7. Chair restraint that prevents rising used in chair or out of bed has value of 1 or 2 as indicated by:
P0100G = 1 OR P0100G = 2
8. Other restraint used in chair or out of bed has value of 1 or 2 as indicated by:
P0100H = 1 OR P0100H = 2

Pseudocode (SAS)

```

*CAT18 Logic;
*Initialize CAT indicator to not triggered;
V0200A18A = '0';

*Trigger on Condition 1;
IF P0100A = '1' OR P0100A = '2' THEN V0200A18A = '1';

```

*Trigger on Condition 2;
IF P0100B = '1' OR P0100B = '2' THEN V0200A18A = '1';

*Trigger on Condition 3;
IF P0100C = '1' OR P0100C = '2' THEN V0200A18A = '1';

*Trigger on Condition 4;
IF P0100D = '1' OR P0100D = '2' THEN V0200A18A = '1';

*Trigger on Condition 5;
IF P0100E = '1' OR P0100E = '2' THEN V0200A18A = '1';

*Trigger on Condition 6;
IF P0100F = '1' OR P0100F = '2' THEN V0200A18A = '1';

*Trigger on Condition 7;
IF P0100G = '1' OR P0100G = '2' THEN V0200A18A = '1';

*Trigger on Condition 8;
IF P0100H = '1' OR P0100H = '2' THEN V0200A18A = '1';

CAT Specifications: 19 Pain

Items Used

Item	Description	Length	Values
J0400	Resident pain interview: frequency	1	1-4,9,-,^
J0500A	Resident pain interview: made it hard to sleep	1	0,1,9,-,^
J0500B	Resident pain interview: limited daily activities	1	0,1,9,-,^
J0600A	Resident pain interview: pain numeric intensity rating scale	2	00-10,99,-,^
J0600B	Resident pain interview: pain verbal descriptor scale	1	1-4,9,-,^
J0800A	Staff pain assessment: non-verbal sounds	1	0,1,-,^
J0800B	Staff pain assessment: vocal complaints of pain	1	0,1,-,^
J0800C	Staff pain assessment: facial expressions	1	0,1,-,^
J0800D	Staff pain assessment: protective movements/postures	1	0,1,-,^

Triggering Conditions (any of the following):

- Pain has made it hard for resident to sleep at night over the past 5 nights as indicated by:
J0500A = 1
- Resident has limited day-to-day activity because of pain over past 5 days as indicated by:
J0500B = 1
- Pain numeric intensity rating has a value from 7 to 10 as indicated by:
J0600A >= 07 AND J0600A <=10
- Verbal descriptor of pain is severe or very severe as indicated by a value of 3 or 4 as follows:
J0600B = 3 OR J0600B = 4
- Pain is frequent as indicated by a value of 1 or 2 and numeric pain intensity rating has a value of 4 through 10 or verbal descriptor of pain has a value of 2 through 4 as indicated by:
(J0400 = 1 OR J0400 = 2) AND
((J0600A >= 04 AND J0600A <= 10) OR
(J0600B >= 2 AND J0600B <= 4))
- Staff assessment reports resident indicates pain or possible pain in body language as indicated by:
(J0800A = 1) OR
(J0800B = 1) OR

(J0800C = 1) OR
(J0800D = 1)

Pseudocode (SAS)

*CAT19 Logic;

*Initialize CAT indicator to not triggered;
V0200A19A = '0';

*Trigger on Condition 1;
IF J0500A = '1' THEN V0200A19A = '1';

*Trigger on Condition 2;
IF J0500B = '1' THEN V0200A19A = '1';

*Trigger on Condition 3;
IF J0600A >= '07' AND J0600A <= '10' THEN V0200A19A = '1';

*Trigger on Condition 4;
IF J0600B = '3' OR J0600B = '4' THEN V0200A19A = '1';

*Trigger on Condition 5;
IF (J0400 = '1' OR J0400 = '2') AND
((J0600A >= '04' AND J0600A <= '10') OR
(J0600B >= '2' AND J0600B <= '4'))
THEN V0200A19A = '1';

*Trigger on Condition 6;
IF (J0800A = '1') OR (J0800B = '1') OR
(J0800C = '1') OR (J0800D = '1')
THEN V0200A19A = '1';

CAT Specifications: 20 Return to Community Referral

Items Used

Item	Description	Length	Values
Q0600	Referral has been made to local contact agency	1	0-2,-,^

Triggering Conditions (any of the following):

1. Referral has not been made to local contact agency as indicated by:
Q0600 = 1

Pseudocode (SAS)

```
*CAT20 Logic;  
*Initialize CAT indicator to not triggered;  
V0200A20A = '0';  
  
*Trigger on Condition 1;  
IF Q0600 = '1' THEN V0200A20A = '1';
```