

INTRODUCTION TO THE MDS 3.0 RUG-III v. 5.12 44-GROUP CLASSIFICATION TOOL

This educational tool was developed to assist providers in understanding the Resource Utilization Group (RUG) III, version 5.12 44 Group logic when used with MDS 3.0. This tool should not be used for software development; the detailed pseudocode is available on the WEB at www.cms.gov/MDS20SWSpecs/05_DataSpecificationsVersion1.asp. The Case Mix Index (CMI) set on which the PA Normalized Nursing Only CMIs are based is the federal Set B02 44 Group Nursing Only which is available on the same site. Select CMI Version 5.12A in the left-hand margin. These CMIs were normalized for Pennsylvania based on the population identified on the February 1, 2010 Latest Assessment Roster Report. The crosswalk to MDS 3.0 items can be found at www.cms.gov/NursingHomeQualityInits/30_NHQIMDS30TechnicalInformation.asp. If the resident's characteristics as identified on the MDS 3.0 qualify him for more than one Resource Utilization Group, final placement is made into the group with the highest CMI (Index Maximization).

On the worksheet, enter the resident's identification information at the top, and the MDS item responses to the RUG elements listed at the bottom. Working through all ten steps in the instructions, use these responses to arrive at the final classification for this resident. The resident must meet every criteria to place in a RUG. Record information on the worksheet as directed.

READ ALL QUALIFICATIONS CAREFULLY to be certain you are classifying the resident properly.

- < When MDS data is submitted electronically, for a section with instructions to "Check all that apply" (entry box contains a small letter), the blank boxes are submitted as "0"; the checked box is submitted as "1".
- < "AND" and "OR" are very powerful words typed in capitals to draw attention to the special classification requirements.
- < If there is no number in parentheses beside a RUG element listed in classification STEPS TWO through EIGHT, a checkmark ("1") in that square on the MDS is all that is required to satisfy the classification process. For example, in STEP THREE, five treatments are listed: Parenteral/IV (K0500A), Suctioning (O0100D1,2), Tracheostomy care (O0100E1,2), Ventilator/respirator (O0100F1,2) and IV medications (O0100H1,2). No numbers are listed in parentheses, so a checkmark in K0500A or in either Column 1 or Column 2 for any of the remaining items qualifies the resident for placement in the Extensive Services category.
- < If there is a number in parentheses beside a RUG element, that item response must be present to classify the resident. For example, under STEP FOUR, Pressure ulcer (M0300C1, D1, F1) is followed by "(3 or 4)". A single Stage 3 or 4 pressure ulcer (with supporting information) qualifies the resident for placement in Special Care; otherwise, there must be multiple ulcers to qualify.
- < Some RUG elements do not stand alone but must have supporting data to justify the resident's placement in a category. For example, under STEP FIVE, not only must Coma (B0100) be checked but four additional RUG elements must also be indicated. Feeding tube (K0500B) is not a qualifier unless it is supported by the appropriate responses from Parenteral/enteral intake (K0700). Several diagnoses, e.g., Hemiplegia (I4900) in STEP FIVE, must have a RUG ADL Score ≥ 10 ; a lower ADL Score eliminates this condition as a qualifier for Clinically Complex.
- < The RUG ADL Score may eliminate the resident from placement in some categories. To be placed in the Extensive Services category, the resident's RUG ADL Score must be 7 or above. To be placed in the Impaired Cognition or Behavior Problems categories, the RUG ADL Score must be 10 or below.
- < Placement in the Extensive Services category is a complex process. First, the resident must have a qualifying condition (K0500A; O0100D1,2; E1,2; F1,2; H1,2) and a RUG ADL Score of 7 or higher. Then, points are assigned for Parenteral IV (K0500A), IV medications (O0100H1,2), and qualifying for Special Care, Clinically Complex and Impaired Cognition categories. Final placement is determined by point count.

RUG Element Worksheet Using MDS 3.0, RUG-III version 5.12 44 Group and PA Normalized Nursing Only CMIs

RESIDENT NAME _____

DATE _____

SSN _____

CALCULATING THE RUG ADL SCORE (STEP 1):

Bed Mobility ADL Score _____
 Transfer ADL Score + _____
 Toilet Use ADL Score + _____
 Eating ADL Score + _____

RUG ADL SCORE _____

NUMBER OF NURSING REHABILITATION ACTIVITIES (STEP 2) _____

REHABILITATION (SPECIAL) (STEP 2):
 Total Minutes _____ Days _____

SUB-CATEGORIES	RUG	CMI
Low Intensity		
Medium Intensity		
High Intensity		
Very High Intensity		
Ultra High Intensity		

CATEGORIES	RUG	CMI
Extensive Services (STEP 3)		
Special Care (STEP 4)		

CLINICALLY COMPLEX: DEPRESSED? (STEP 6):

YES _____ NO _____

CATEGORY	RUG	CMI
Clinically Complex (STEPS 5/6)		

CATEGORIES	RUG	CMI
Impaired Cognition (STEP 7)		
Behavior Problems (STEP 8)		
Physical Functions (Reduced) (STEP 9)		

Select the RUG group from the above tables which has the highest CMI (STEP 10):

FINAL RUG: _____ **FINAL CMI:** _____

RUG ELEMENTS

Comatose	B0100	_____	Parenteral/IV	K0500A	_____	Vent/resp. – not a resident	O0100F1	_____
Makes self understood	B0700	_____	Feeding tube	K0500B	_____	Vent/resp – while a resident	O0100F2	_____
BIMS Score	C0500	_____	Total calories	K0700A	_____	IV med – not a resident	O0100H1	_____
Short term memory – staff	C0700	_____	Fluid intake	K0700B	_____	IV med – while a resident	O0100H2	_____
Decision making – staff	C1000	_____	Stage 1 pressure ulcers	M0300A	_____	Transfusions – not a resident	O0100I1	_____
PHQ© score – resident	D0300	_____	Stage 2 pressure ulcers	M0300B1	_____	Transfusions – while a res	O0100I2	_____
PHQ© score – staff	D0600	_____	Stage 3 pressure ulcers	M0300C1	_____	Dialysis – not a resident	O0100J1	_____
Hallucinations	E0100A	_____	Stage 4 pressure ulcers	M0300D1	_____	Dialysis – while a resident	O0100J2	_____
Delusions	E0100B	_____	Pres. ulcer – slough/eschar	M0300F1	_____	ST – individual minutes	O0400A1	_____
Physical behavioral symp	E0200A	_____	Venous/arterial ulcers	M1030	_____	ST – concurrent minutes	O0400A2	_____
Verbal behavioral symptoms	E0200B	_____	Infection of the foot	M1040A	_____	ST – group minutes	O0400A3	_____
Other behavioral symptoms	E0200C	_____	Diabetic foot ulcer(s)	M1040B	_____	Speech therapy – days	O0400A4	_____
Rejection of care	E0800	_____	Other open lesion of foot	M1040C	_____	OT – individual minutes	O0400B1	_____
Wandering	E0900	_____	Open lesions (not feet)	M1040D	_____	OT – concurrent minutes	O0400B2	_____
Bed mobility – self-perf.	G0110A1	_____	Surgical wound(s)	M1040E	_____	OT – group minutes	O0400B3	_____
Bed mobility – support	G0110A2	_____	Burns	M1040F	_____	Occupational therapy – days	O0400B4	_____
Transfer – self-perf.	G0110B1	_____	Pres. Red. Device – chair	M1200A	_____	PT – individual minutes	O0400C1	_____
Transfer – support	G0110B2	_____	Pres. Red. Device – bed	M1200B	_____	PT – concurrent minutes	O0400C2	_____
Eating – self-perf.	G0110H1	_____	Turn/reposition program	M1200C	_____	PT – group minutes	O0400C3	_____
Toileting – self-perf.	G0110I1	_____	Nutrition/hydration program	M1200D	_____	Physical therapy – days	O0400C4	_____
Toileting – support	G0110I2	_____	Ulcer care	M1200E	_____	Respiratory therapy – days	O0400D2	_____
Current toileting program	H0200C	_____	Surgical wound care	M1200F	_____	ROM (passive)	O0500A	_____
Bowel training program	H0500	_____	Dressings (not to feet)	M1200G	_____	ROM (active)	O0500B	_____
Pneumonia	I2000	_____	Ointment/med (not to feet)	M1200H	_____	Splint/brace assistance	O0500C	_____
Septicemia	I2100	_____	Dressings to feet	M1200I	_____	Bed mobility training	O0500D	_____
Diabetes mellitus	I2900	_____	Injections	N0300	_____	Transfer training	O0500E	_____
Aphasia	I4300	_____	Chemotherapy – not a res.	O0100A1	_____	Walking training	O0500F	_____
Cerebral palsy	I4400	_____	Chemotherapy – while a res	O0100A2	_____	Dressing/grooming tng.	O0500G	_____
Hemiplegia/Hemiparesis	I4900	_____	Radiation – not a resident	O0100B1	_____	Eating/swallowing tng.	O0500H	_____
Quadriplegia	I5100	_____	Radiation – while a resident	O0100B2	_____	Amputation/prosth. tng.	O0500I	_____
Multiple sclerosis	I5200	_____	Oxygen ther – not a resident	O0100C1	_____	Communication training	O0500J	_____
Fever	J1550A	_____	Oxygen ther – while a res	O0100C2	_____	Physician Examinations	O0600	_____
Vomiting	J1550B	_____	Suctioning – not a resident	O0100D1	_____	Physician Orders	O0700	_____
Dehydrated	J1550C	_____	Suctioning – while a resident	O0100D2	_____			
Internal bleeding	J1550D	_____	Trach care – not a resident	O0100E1	_____			
Weight loss	K0300	_____	Trach care – while a resident	O0100E1	_____			

RUG-III Classification Instructions Using MDS 3.0, RUG-III version 5.12 44 Group and PA Normalized Nursing Only CMI

STEP ONE: CALCULATE THE RUG ADL SCORE

A. To find the ADL scores for Bed mobility (G0110A), Transfer (G0110B), and Toilet use (G0110I), compare the MDS item responses to CHART A.

	<u>Self-perf.</u>		<u>Support</u>
Bed Mobility	G0110A1 _____	G0110A2 _____	
Transfer	G0110B1 _____	G0110B2 _____	
Toilet Use	G0110I1 _____	G0110I2 _____	

CHART A

IF	AND	
Self-perf. (G0110-1) =	Support (G0110-2) =	ADL Score =
'—', 0, 1 or 7	* (any number)	1
2	* (any number)	3
3 or 4	'—', 0, 1 or 2	4
3, 4 or 8	3 or 8	5

Enter the three ADL scores (one each for Bed mobility, Transfer, and Toilet use) on the RUG Element Worksheet.

B. To find the Eating ADL score, check the MDS item response to Parenteral/IV (K0500A) and Feeding tube (K0500B).

Parenteral/IV	K0500A _____	
Feeding tube	K0500B _____	*
	* (K0700A must = 51% or more OR K0700A = 26 – 50% AND K0700B >= 501cc)	

If either is checked ('1'), or K0500B is checked and the supporting data is present for Feeding tube, the Eating ADL score is 3. If neither is checked or Feeding tube is not supported, note the number from Eating self-performance (G0110H1) and find the ADL score from CHART B.

Eating	G0110H1 _____
--------	---------------

CHART B

IF	ADL
G0110H1 =	Score =
'—', 0, 1 or 7	1
2	2
3, 4 or 8	3

Enter this score on the worksheet. Add the four scores; the total is the RUG ADL Score.

Proceed to STEP TWO.

STEP TWO: SPECIAL REHABILITATION

- For all assessments, add the number of therapy minutes in O0400A1-3, O0400B1-3 and O0400C1-3. Note the total on the worksheet. If the total is less than 45 minutes, skip to STEP THREE.
- If the total is more than 45 minutes, also count the number of therapy days from O0400A4, O0400B4 and O0400C4. Note this on the worksheet.
- Count the number of Nursing Rehabilitation Activities from H0200C/H0500 and O0500.
 - Either Current toileting plan H0200C OR Bowel training program H0500 may be counted as one activity.
 - Each item (O0500C, E, G, H, I, J) with an entry of 6 or more days counts as one activity.
 - ROM (O0500A OR O0500B 6+ days) may be counted.
 - Bed Mobility O0500D OR Walking O0500F (6+ days) may be counted.

Record the total number of activities on the worksheet; this number will also be used in STEPS SEVEN, EIGHT and NINE.

Compare this data with the sub-categories (1 - 5) listed below. If the resident qualifies, select his RUG (Resource Utilization Group) using the RUG ADL Score. Record the RUG and CMI for each sub-category on the worksheet.

1. Low Intensity Rehabilitation Criteria:

- AND 45 minutes or more of therapy per week
 AND 3 days or more per week of therapy
 AND 2 types or more of Nursing Rehabilitation Activities (from worksheet entry)

<u>RUG ADL Score</u>	<u>RUG</u>	<u>CMI</u>
4 - 13	RLA	0.82
14 - 18	RLB	1.15

2. Medium Intensity Rehabilitation Criteria:

- AND 150 minutes or more of therapy per week
 AND 5 days or more per week of therapy

<u>RUG ADL Score</u>	<u>RUG</u>	<u>CMI</u>
4 - 7	RMA	1.00
8 - 14	RMB	1.13
15 - 18	RMC	1.39

3. High Intensity Rehabilitation Criteria:

- AND 325 minutes or more of therapy per week
 AND 5 days or more per week of one type of therapy

<u>RUG ADL Score</u>	<u>RUG</u>	<u>CMI</u>
4 - 7	RHA	0.90
8 - 12	RHB	1.09
13 - 18	RHC	1.22

(continued)

STEP TWO: SPECIAL REHABILITATION (continued)

4. Very High Intensity Multidisciplinary Rehabilitation:

AND 500 minutes or more of therapy per week
AND 5 days or more per week of one type of therapy

RUG ADL Score	RUG	CMI
4 - 8	RVA	0.84
9 - 15	RVB	1.07
16 - 18	RVC	1.16

5. Ultra High Intensity Multidisciplinary Rehabilitation:

AND 720 minutes or more of therapy per week
AND 2 therapies or more provided
AND 5 days or more per week of one type of therapy
AND 3 days or more for the second therapy

RUG ADL Score	RUG	CMI
4 - 8	RUA	0.80
9 - 15	RUB	0.99
16 - 18	RUC	1.34

Proceed to STEP THREE.

STEP THREE: EXTENSIVE SERVICES

Does the resident need one of the following treatments?
Count the treatment whether it occurred while NOT a resident or while a resident.

Parenteral/IV	K0500A
Suctioning	O0100D1, 2
Tracheostomy care	O0100E1, 2
Ventilator or respirator	O0100F1, 2
IV medications	O0100H1, 2

If no treatment is needed, skip to STEP FOUR.
If at least one treatment is needed, is the RUG ADL Score 7 or more?

- No. Skip to STEP FOUR.
- Yes. Begin the Extensive Services Point Count: Award one point for each of the following items. As Steps 4 - 6 are completed, return to this section to add points if the resident qualifies for those categories.

Parenteral/IV	_____
IV medications	_____
Special Care classifier (STEP FOUR)	_____
Clinically Complex classifier (STEP FIVE)	_____
Impaired Cognition classifier (STEP SIX)	_____
TOTAL POINTS	_____

Select the final Extensive Services group using the Total Point Count. Record this RUG group and CMI on the worksheet.

POINTS	RUG	CMI
0 - 1	SE1	1.20
2 - 3	SE2	1.43
4 - 5	SE3	1.75

Proceed to STEP FOUR.

STEP FOUR: SPECIAL CARE

1. Does the resident meet one of the following criteria?

Qualified for Extensive Services with ADL <7 #
Cerebral palsy (ADL >=10) I4400
Quadriplegia (ADL >=10) I5100
Multiple sclerosis (ADL >=10) I5200
Ulcers 2 or more sites M0300A, B1, C1, D1, F1, M1030 AND
2 or more treatments: M1200A or B, C, D, E, G, H
Pressure ulcer M0300C1, D1, F1 (3 or 4) AND
2 or more treatments: M1200A or B, C, D, E, G, H
Radiation treatment O0100B1, 2
Respiratory therapy O0400D2 (7)

OR

2. Does the resident meet one of the following criteria for Fever, Feeding tube or Open lesions/Surgical wounds?

+ Fever + J1550A AND
Pneumonia I2000 OR
Vomiting J1550B OR
Dehydration J1550C OR
Weight loss K0300 OR
Feeding tube * K0500B
* (K0700A must = 51% or more OR K0700A = 26 - 50% AND K0700B >= 501cc)

+ Feeding tube + * K0500B AND
Aphasia I4300
* (K0700A must = 51% or more OR K0700A = 26 - 50% AND K0700B >= 501cc)

+ Open lesions + M1040D OR
+ Surgical wounds + M1040E AND
Surgical wound care M1200F OR
Dressings (not to feet) M1200G OR
Ointments (not to feet) M1200H

If the resident does not meet a criteria in 1 or 2, skip to STEP FIVE.

If the resident meets a criteria in 1 or 2 AND has qualified for the Extensive Services category, add one point for Special Care qualifier in STEP THREE. Move to STEP FIVE.

If the resident meets a criteria in 1 or 2 but does not qualify for Extensive Services, is the RUG ADL Score 7 or more?

- No. Skip to STEP FIVE. **# NOTE:** The resident who qualified for Extensive Services with ADL <7 is placed in SSA despite the low ADL Score.
- Yes. Select the final Special Care group using the RUG ADL Score. Record this RUG group and CMI on the worksheet.

RUG ADL Score	RUG	CMI
7 - 14	SSA	1.04
15 - 16	SSB	1.08
17 - 18	SSC	1.16

Proceed to STEP FIVE.

STEP FIVE: CLINICALLY COMPLEX

1. Does the resident meet one of the following criteria?

- Qualified for Special Care with ADL <7
- Pneumonia I2000
- Septicemia I2100
- Hemiplegia (ADL >=10) I4900
- Dehydration J1550C
- Internal bleeding J1550D
- Feeding tube * K0500B
 - * (K0700A must = 51% or more OR K0700A = 26 – 50% AND K0700B >= 501cc)
- Burns M1040F
- Chemotherapy O0100A1, 2
- Oxygen therapy O0100C1, 2
- Transfusions O0100I1, 2
- Dialysis O0100J1, 2

OR

2. The resident meets one of the following criteria for Coma, Diabetes, Foot infection or Physician visits/order changes:

- + Coma + B0100 AND
 - Bed mobility self-perf. G0110A1 (4 or 8) AND
 - Transfer self-perf. G0110B1 (4 or 8) AND
 - Eating self-perf. G0110H1 (4 or 8) AND
 - Toilet use self-perf. G0110I1 (4 or 8)
- + Diabetes + I2900 AND
 - Injections N0300 (7) AND
 - Physician Orders O0700 (2 or more)
- + Foot infection + M1040A OR
- + Open lesions + M1040B or C AND
 - Foot dressings M1200I
- + Physician Examinations + O0600 AND
- + Physician Orders + O0700
 - Examinations >= 1 day and Orders >= 4 days OR
 - Examinations >= 2 days and Orders >= 2 days

If the resident does not meet one of the above (1 - 2), skip to STEP SEVEN.

If the resident meets a criteria in 1 or 2 AND has qualified for the Extensive Services category, add one point for Clinically Complex qualifier in STEP THREE. Move to STEP SEVEN.

If the resident meets one of the above criteria in 1 or 2 and has not qualified for Extensive Services, move to STEP SIX to evaluate for Depression.

STEP SIX: DEPRESSION

The resident is considered to be depressed if either of the following is >=10:

- PHQ-9© Resident assessment D0300
- PHQ-9-OV© Staff assessment D0600

Record the presence or absence of Depression on the worksheet. Check the RUG ADL Score.

Select the final Clinically Complex group for which the resident qualifies. Record this RUG group and CMI on the worksheet.

RUG ADL Score	Depressed?	RUG	CMI
4 – 11	No	CA1	0.77
4 – 11	Yes	CA2	0.85
12 – 16	No	CB1	0.86
12 – 16	Yes	CB2	0.94
17 – 18	No	CC1	1.01
17 – 18	Yes	CC2	1.15

Proceed to STEP SEVEN.

STEP SEVEN: IMPAIRED COGNITION

The resident is cognitively impaired if:

1. Comatose B0100 (with G0110A1, B1, H1, I1 all = 4 or 8) AND Decision making C1000 blank or '—' OR
2. BIMS Summary Score C0500 (<=9) OR
3. Severely impaired decision making C1000 (3) OR
4. CPS >=3 identified by following calculation:
 - B0700, C0700, and C1000 are all assessed AND
 - Two or more impairments (a – c) are present:
 - a. Understood B0700 (>0)
 - b. Short term memory C0700 (1)
 - c. Decision making C1000 (>0) AND
 - One severe impairment indicator is present:
 - a. Understood B0700 (>=2) OR
 - b. Decision making C1000 (>=2)

If the resident meets a criteria for Impaired Cognition and has qualified for the Extensive Services category, add one point for Impaired Cognition qualifier in STEP THREE. Total the points and identify the final Extensive Services RUG and CMI. Record them on the worksheet. This resident's classification is completed.

If the resident does not meet an Impaired Cognition requirement, move to STEP EIGHT.

If the resident meets a requirement but the RUG ADL Score is >10, move to STEP NINE.

Otherwise, if a requirement is met, using the RUG ADL Score and number of Nursing Rehabilitation Activities (STEP 2), select the final Impaired Cognition group. Record this RUG group and CMI on the worksheet.

RUG ADL Score	Nsg. Rehabs.	RUG	CMI
4 - 5	0 or 1	IA1	0.54
4 - 5	2 or more	IA2	0.59
6 - 10	0 or 1	IB1	0.69
6 - 10	2 or more	IB2	0.71

Proceed to STEP EIGHT.

STEP EIGHT: BEHAVIOR PROBLEMS

If the RUG ADL Score is 10 or less, the resident may belong in this category if there are problems with one of the following:

Hallucinations	E0100A	OR
Delusions	E0100B	OR
Physical Beh. symptoms	E0200A (2 or 3)	OR
Verbal Beh. symptoms	E0200B (2 or 3)	OR
Other Beh. symptoms	E0200C (2 or 3)	OR
Rejection of care	E0800 (2 or 3)	OR
Wandering	E0900 (2 or 3)	

If the resident does not meet one of these requirements or has a RUG ADL Score >10, move to STEP NINE.

Otherwise, using the RUG ADL Score and number of Nursing Rehabilitation Activities (STEP 2), select the final Behavior Problems group. Record this RUG group and CMI on the worksheet.

RUG ADL Score	Nsg. Rehabs.	RUG	CMI
4 - 5	0 or 1	BA1	0.49
4 - 5	2 or more	BA2	0.57
6 - 10	0 or 1	BB1	0.67
6 - 10	2 or more	BB2	0.70

Proceed to STEP NINE.

STEP NINE: PHYSICAL FUNCTIONS (REDUCED)

ALL residents will qualify for one of the following groups. Using the RUG ADL Score and the number of Nursing Rehabilitation Activities (STEP 2), select the Physical Functions (Reduced) group. Record this RUG group and CMI on the worksheet.

<u>RUG ADL Score</u>	<u>Nsg. Rehabs.</u>	<u>RUG</u>	<u>CMI</u>
4 - 5	0 or 1	PA1	0.48
4 - 5	2 or more	PA2	0.50
6 - 8	0 or 1	PB1	0.52
6 - 8	2 or more	PB2	0.53
9 - 10	0 or 1	PC1	0.66
9 - 10	2 or more	PC2	0.68
11 - 15	0 or 1	PD1	0.69
11 - 15	2 or more	PD2	0.73
16 - 18	0 or 1	PE1	0.79
16 - 18	2 or more	PE2	0.81

STEP TEN: FINAL CLASSIFICATION

Review all CMIs recorded on the worksheet. Select the highest CMI; record the associated RUG and this CMI on the worksheet as the final classification group for this resident. If the resident qualifies for both RLB and CC2, record RLB as the final classification group.