RAI-MDS Outcome Scales Related to Palliative and End-of-Life Care

There are two RAI-MDS outcome scales that may assist long-term care providers to identify residents who may benefit from a palliative approach to care or who may be progressing towards end-of-life (EOL). These are the *Changes in health, End-stage disease and Signs and Symptoms* (CHESS) scale and the *Personal Severity Index* (PSI).

CHESS Scale:

The CHESS scale was designed to identify individuals at risk or serious health decline. It can serve as an outcome where the objective is to minimize problems related to declines in function. It uses 9 items from Sections J, K, B, and G to create a five-point scale from 0 (not at all unstable) to 5 (highly unstable) in the LTC population. In other words, a high CHESS score is predictive of adverse outcomes such as: mortality, hospitalization, pain etc.

The CHESS scale is calculated by adding sign and symptom variables up to a maximum of 2, then adding three other variables (Change in decision making, change in ADL status, and end-stage disease), giving a highest CHESS score of 5.

Score	Item
0–2, 8	Change in decision making
0–3	Change in ADL status
0–2, 8	Change in ADL status
0–4	Health condition — vomiting
0–4	Health condition — peripheral edema
0–3	Health condition — dyspnea
0,1	End-stage disease
0,1	Weight loss
0,1	Insufficient fluid
0,1	Dehydrated
0,1	Decrease in food or fluid
0,1	Fluid output exceeds input

Scoring:

0 = No health instability

1 = Minimal health instability

2 = Low health instability

3 = Moderate health instability

4 = High health instability

5 = Very high health instability

Reference: Hirdes, J.P, Frijters, D., & Teare, G. (2003). The MDS CHESS scale: a new measure to predict mortality in the institutionalized elderly. *Journal of the American Geriatric Society, 51*(1). p 96-100

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Personal Severity Index:

The PSI presents a complex view of resident status. It incorporates factors that are most relevant to residents at the end of life. This score includes measures of functional, clinical and mood status in combination with other measures such as presence of end stage disease, a recent decline in or unstable health status, and delirium. The PSI can be a useful tool to help LTC providers identify residents who may be moving towards EOL and who may require changes to their current care plans.

The PSI is rated from 0 to 18. Researchers who developed the PSI found that residents with a score of 9 or more are at a high risk of death or have a 35.7 percent death rate within 6 months.

Scale components include:

- Age 90 or older
- Cognitive decision making: severely impaired (B4=3)
- Delirium: Periods of lethargy (B5E=2)
- Ability to understand: sometimes/rarely (C6=2,3)
- Transfer …quot; extensive, total, did not occur (G1bA= 3,4,8)
- Locomotion …quot; extensive, total, did not occur (G1eA=3,4,8)
- Eating -- extensive, total, did not occur (G1hA=3,4,8)
- Personal hygiene …quot; total, did not occur (G1jA=4,8)
- Sad mood …quot; daily repetitive verbalizations (E1c=2)
- Sad mood …quot; something terrible about to happen …quot; daily (E1g=2)
- Acute episode …quot; yes (J5b=1)
- Unstable …quot; yes (J5a=1)
- Change in care needs …quot; deteriorated (Q2=2)
- End stage disease …quot; yes (J5c=1)
- Bowel …quot; occasional, frequent incontinent (H1b=2,3,4)
- Weight loss …quot; yes (K3a=1)
- Pressure ulcer …quot; stages 1 through 4 (M2a=1,2,3,4)
- Stasis ulcers …quot; yes (M2b=1,2,3,4)

The above items are on the quarterly and full MDS.

Additional items on the full MDS include:

- Shortness of breath …quot; yes (J1b =1)
- Oxygen therapy …quot; yes (P1g =1)
- Problem swallowing …quot; yes (K1b=1)
- Time awake afternoon (N1b = 0)
- Cardiac dysrhythmia …quot; yes (I1e = 1)
- Congestive heart failure …quot; yes (I1f = 1)
- Skin tears or cuts …quot; yes (M4f = 1)

Referenced from: https://www.supercoder.com/coding-newsletters/my-mds-alert/tool-personalize-a-residents-care-check-out-the-personal-severity-index-psi-117907-article