Minimum Data Set 3.0: A Giant Step Forward

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Over the last year, the Journal has published a series of articles on the validation of the Minimum Data Set 3.0 (MDS 3.0) and its utility.1-6 We have now had a year using the MDS 3.0 in nursing homes in the United States, and so it is an appropriate time to reflect on its functioning in real life. Historically, the Resident Assessment Instruments (RAIs) were developed out of the 1986 call by the Institute of Medicine for a need for “systematized, standardized assessments of residents’ cognitive, functional and educational needs.” The 1987 Office of Budget Reconciliation Act by the US Congress mandated such a resident assessment. The first MDS/RAI was released in 1991, proving to be a real oxymoron, as it was by no means minimum, but rather excessively extensive. This represented a great example of attempting to be kind to residents by being cruel to the nursing home industry. Thus, it predictably led to MDS 2.0, which was released in 1995–1996. Unfortunately, MDS 2.0 did little to improve on the first MDS (Table 1). It remained overlong, creating a collection burden with little interface with day-to-day care. A larger problem was it did little to help understand the residents’ quality of life. However, the death knell of the MDS 2.0 was its questionable validity at the individual person level. Studies have found poor validity for depression, behavioral symptoms, advance directives, pain, incontinence, falls, pressure ulcers, and urinary tract infection.8-21 Thus, although the MDS 2.0 has been widely used for epidemiologic studies, its use at the level of individual clinical care was highly questionable.22,23 This resulted in negative provider attitudes toward the MDS 2.0.24

For these reasons, the MDS 3.0, which was developed as a much more user-friendly tool with clinical utility, has been a breath of fresh air. It has better reliability and validity than the MDS 2.0, and it takes less than half the time to complete. Importantly, it gives a clear voice to the resident and provides highly useful information on cognition, behavior, and mood.

The incorporation of the Patient Health Questionnaire (PHQ-9) for the diagnosis of depression and the development of a separate component to be answered by the staff is a major step forward. Depression is common and has classically been poorly diagnosed in the nursing home.25-28 Thus, the PHQ-9 is of major utility to clinicians. It needs to be stressed that a PHQ-9 <15 is either dysphoria or minor depression, and the resident is unlikely to respond to antidepressant treatment.29 Those residents need either behavioral therapy or exercise therapy.30 In many cases, the lower scores indicate an adjustment reaction to moving into the nursing home; in this case, a variety of interventions to make the resident more comfortable are appropriate.31 In addition, there is little evidence that persons with severe dementia respond to antidepressants.32,33 By not giving antidepressants (which have been shown to have multiple negative side effects) inappropriately, the physician will be able to reduce polypharmacy.34,35

A major advance of the MDS 3.0 is including a version of the Confusion Assessment Methodology to diagnose delirium.36 The centerpiece of the Confusion Assessment Methodology is to recognize that mild delirium often presents with only deficits in attention. Delirium, both in acute and subacute forms, is a common problem in nursing home residents.37-40 Delirium often has multiple causes and this needs a careful assessment. It has been suggested that delirium should be considered the sixth vital sign.41

The section on cognitive dysfunction is excellent for diagnosing dementia but is not useful for recognizing mild cognitive impairment. Individuals with normal results with the MDS 3.0 cognitive screen can be screened with the St. Louis University Mental Status examination or the Montreal Cognitive Assessment.42-44 This is especially important in individuals who may be considering a transition back to home.

The screen for difficult behaviors in MDS 3.0 is comprehensive and helpful. It needs to be stressed that where these conditions are not due to a psychosis, the appropriate first-line therapy is training of the nurses in approaches to behavioral management, exercise therapy, and, where possible, the availability of Snoezelen or Namaste rooms.45-51 Antipsychotics should not be used for disruptive behaviors in the majority of cases.52,53 Centers for Medicare & Medicaid Services (CMS) approves of the use of antipsychotics in the nursing home only for schizophrenia, Huntington chorea, and Tourette syndrome. In Huntington chorea, tetrabenazine should be tried as first-line therapy.54 Most geriatric psychiatrists would include psychotic depression and bipolar disorders as being reasonable indications for antipsychotics. CMS is aggressively trying to reduce antipsychotic use to less than the 25% level, where it is at present in the United States. Obviously, physical restraints are not a legitimate indication for antipsychotics.55 Given the paucity of behavioral programs in nursing homes, reduction in antipsychotics is very likely to result in an increase in the use of anxiolytics.

Pain is a major problem in the nursing home and is often underdiagnosed and undertreated.56-58 CMS 3.0 has a reasonable approach to resident perceived pain. Pain should be treated with scheduled medications and not with “as needed” orders.

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Falls and resultant fractures are a major problem in the nursing home. The CMS 3.0 falls assessment is minimal and should be supplemented with a more focused assessment such as the St. Louis University-Toulouse Falls Assessment. Besides physical therapy and resistance exercise for persons falling, they should receive vitamin D and, where appropriate, bisphosphonates. No direct questioning of residents.

The MDS 3.0 also explores residents' preferences for a variety of day-to-day activities. This should be widely used by nurses and recreational therapists to improve quality of life in the nursing home.

After a year of the MDS 3.0 being used, it would appear to be a resounding success. The MDS 3.0 truly meets the guidelines of the World Health Organization/International Association of Gerontology and Geriatrics consensus group in both improving quality of care and being an excellent, meaningful instrument for future research. However, for the MDS 3.0 to fully achieve its potential, it will be essential for all nursing homes to fully incorporate it into the daily care processes and into its continuous quality-improvement programs.

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