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What is the RAI-MDS?

The **R**esident **A**ssessment **I**nstrument-**M**inimum **D**ata **S**et is an assessment tool completed for all residents living in Calgary LTC. The assessment is done at admission, quarterly, and also for all major changes in health status. The RAI-MDS, amongst other things, provides an overview of the resident's care requirements, health status, and unmet needs.

How the Clinical Pharmacist May Use the RAI-MDS

As a clinical consultant, the pharmacist may find utility in the various outcomes described by the RAI-MDS. The RAI-MDS produces a number of reports and outcomes, of which two instances are of particular use to the clinical pharmacist:

i) RAI Outcome Scores

Outcome scores are generated by the scores that RAI-assessors input into the system. Typically, the outcome scores may be generalized to the results of a standardized assessment (e.g. the Cognitive Performance Scale is considered analogous to the MMSE). Pertinent outcome scores are detailed below:

RAI Output	Description	Scores (and Relevance)	Relations to Medications
CHESS *Changes in Health, End-Stage Disease, and Signs and Symptoms*	Detects frailty and health instability; identifies residents at risk of serious decline	**0-5** • Higher scores indicate higher likelihood of adverse outcomes, such as mortality and hospitalization	• As CHESS score increases, clinical focus may shift towards comfort measures vs. preventative measures (e.g. statins, supplements)
DRS *Depression Rating Scale*	Clinical screen for depression	**0-14** • Scores of 3 or more may indicate a potential or actual depression	• May be used to assess efficacy of psychiatric medications. • May be used to assess whether there is a potential untreated clinical indication
Pain Scale	Summarizes presence and intensity of pain	0-3 • Higher scores indicate more severe pain experience	• Scores should cue pharmacist to assess current pain regimen, as well as seeking more in-depth information from nursing staff or other, more detailed tracking tools
ADL (Activities of Daily Living) Short	Reflects self-performance of ADLs; reflects stages of loss (early, middle, and late)	0-16 • High scores indicate more impairment	• Higher levels of impairment may cue reassessment of treatment plan (e.g. osteoporosis treatment if patient not ambulatory) • Mid-lower scores may cue the pharmacist to more carefully assess risks of medication (e.g. falls, sedation risk)

CPS *Cognitive Performance Scale*	Describes cognitive status of resident. Validated against the **MMSE**	0-6 • Higher scores indicate more severe cognitive impairment	• Can be used to assess the appropriateness of dementia medications
ABS *Aggressive Behavior Scale*	Provides a measure of aggressive behavior	0-12 • Higher scores • Parameters include verbal and physical aggression, socially inappropriate/disruptive behavior, and resistiveness care	• Can be used to assess the efficacy or appropriateness of psychotropic medications • Should prompt more in-depth investigations of behaviors and whether non-drug measures may also be effective

ii) RAI Resident Assessment Protocols (RAPs)

The RAI RAPs are recommendations generated by the RAI-MDS program that require action by the primary assessor (or case manager). RAPs may be viewed as issues pending some type of activity, and must be assessed as "resolved" by the assessor/case manager before the RAI-MDS assessment is considered to be complete.

Note: Prior versions of RAI-MDS may use the terminology CAPS, which stands for Clinical Assessment Protocol. RAPs and CAPs serve the same purpose.

RAPs pertinent to the clinical pharmacist are:

RAPS	Comments	Pharmacy Relevance
Functional Performance RAPs		
ADL	The clinical pharmacist can assess whether an inappropriate medication may be causing a decrease in functionality or whether an untreated condition may result in positive change	• Pain management may improve ability to rehab or increase range of motion • Antidepressants may increase self-esteem, thereby improving ADLs • Proper utilization of COPD medications may increase functionality • Appropriate timing of diuretics to allow completion of scheduled ADLs
Physical Restraints	Physical restraints	• Reduction in number of medications • Appropriate use of psychotropics • Elimination of medication-enhanced risk for falls
Cognition/Mental Health RAPs		
Delirium	New medications should be assessed with respects to temporal relationship between the start of the medication and onset of delirium	
Cognitive Loss	Medication regimen should be assessed for either causation or for continued need	

Communication	The pharmacist should be aware of confounding medical conditions such as Alzheimer's, Parkinson's, COPD, psychiatric conditions	• Medications implicated: o Psychotropics o Narcotics o Antiparkinson medications o Aspirin toxicity (tinnitus) o Aminoglycosides (tinnitus)
Mood	Pharmacist should be mindful of changes in moods coinciding with start/stop of medications	
Behaviour	Review changes in med regimen coinciding with new or worsening behaviors	• Conditions to be cautious: • Constipation • Diabetes • Infection • Hallucinations • Falls with head trauma
Clinical Issues RAPs		
Urinary Incontinence	The pharmacist should be mindful of medications or medicine-disease states that cause or worsen incontinence	• Medications implicated • Diuretics • Sedatives, hypnotics, anxiolytics may cause slower response to need to urinate • Anticholinergic side effects may cause retention, promote infection, or cause constipation and impaction • Alpha blockers
Falls	Pharmacist must evaluate the medications administered prior to and after a fall to determine possible contributing factors	• Some medications automatically qualify a resident at being "at risk" for falls (e.g. anxiolytics, antidepressants, antipsychotics)
Under-nutrition		• Potential causes • Chemotherapy • Laxatives and antacids • Altered ability to taste or smell • Reduced ability to feed
Feeding Tube	Pharmacists should consider a) Administration of medications in PEG tube b) Consider delay of gastric emptying and aspiration risk	• Pharmacist should be: • Familiar with procedures and technique for administering medicines via tube • Medications that may delay gastric emptying o Beta blockers o Calcium channel blockers o Antispasmodics o Anticholinergics