Provincial Clinical Knowledge Topic
Frailty, Seniors – Acute Care
V 1.2

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Important Information Before you Begin

The recommendations contained in this knowledge topic have been provincially adjudicated and are based on best practice and available evidence. Clinicians applying these recommendations should, in consultation with the patient, use independent medical judgment in the context of individual clinical circumstances to direct care. This knowledge topic will be reviewed periodically and updated as best practice evidence and practice change.

The information in this topic strives to adhere to the Institute for Safe Medication Practices (ISMP) safety standards and align with Quality and Safety initiatives and accreditation requirements such as the Required Organizational Practices. Some examples of these initiatives or groups are: Health Quality Council Alberta (HQCA), Choosing Wisely campaign, and the Safer Healthcare Now campaign etc.

This topic is based on the following guideline(s)[1-4]:

1. Multimorbidity: clinical assessment and management. NICE guideline [NG56]
2. Fit for Frailty - consensus best practice guidance for the care of older people living in community and outpatient settings - a report from the British Geriatrics Society 2014.
3. Regional Health Council. Frailty in elderly people. Florence (Italy): Regione Toscana, Consiglio Sanitario Regionale; 2013. 59 p.
4. Frailty in Older Adults - Early Identification and Management. British Columbia Guidelines, 2012.

Although not a guideline, a more thorough scoping review of frailty in acute care[5] strongly informed the development of this topic including the merits of various methods of frailty assessment, and its relationship to risk of hospitalization, care processes and settings, specific disease presentations, and outcomes. Because guidelines for frailty were sparse, we also surveyed the literature and found 60 systematic reviews on frailty to better characterize the quality of existing evidence.

Introduction – What is Frailty?

Frailty is at the crossroads of health-related decision making in older adults and could be the most important population health issue of our time. Frailty is not the same as getting old. Individuals living with frailty are at a higher risk for negative health outcomes and death than we would expect based on their age alone. Frailty is a health state, with biological and environmental underpinnings, manifest as a syndrome as deficits accumulate and especially under stress. While frailty may be operationalized in different ways, the central feature is increased vulnerability with reduced physical reserve and loss of function across multiple body systems. Frailty is dynamic, becoming most obvious under stress, in the form of exaggerated and rapid changes in health status.

As a ***syndrome***, frailty can be viewed narrowly as a physical phenotype of weight loss, weakness, slow walking speed, subjective exhaustion, and low levels of physical activity. More broadly, the syndrome captures geriatric syndromes such as decline and vulnerability in function, balance and mobility, cognition, mental health, and social reserve.
In a complimentary way, frailty is also a ***state*** of vulnerability that is predicted by “deficit accumulation”. Multi-morbidity alone is not frailty. With a sufficient number of deficits (adverse health conditions), there is a snowball effect whereby the accumulation of deficits accelerates and becomes self-reinforcing. This coincides with the emergence of “geriatric syndromes”.

This knowledge topic has a close linkage with other clinical knowledge topics. The extent of frailty will influence the Integrated Plan of Care, and thus should impact goals in chronic disease management, prompting care providers to be cautious in simultaneously applying more than one disease-based practice guideline. Frailty overlaps heavily with the approach to other geriatric syndromes such as falls, functional decline, dementia, and delirium. The fitness to frailty continuum influences topics in healthy aging such as prevention of decline through exercise and nutrition. Frailty is also an end-of-life theme and thus should also interface with topics in end-of-life care such as advanced care planning and palliative care.

We provide a simple backbone to the assessment and management of frailty which has very broad application in different health care settings. While we offer recommendations on case finding, assessment, and care planning that apply to all settings, some fine-tuning of approach based on setting and resources is inevitable.

The backbone document for this knowledge topic is the "Clinical Questions and Recommendations" which is provided first. Supporting this are then two decision making tools or algorithms. 1.0 Frailty Instruments in Acute Care demonstrates how frailty instruments can be used to conduct rapid case finding, define frailty components, and then address the identified components. 2.0 How to Involve Specialized Geriatric Services in the Care of Individuals with Frailty demonstrates the relationship between primary care and specialized geriatric care depending on the setting and the degree of complexity. The Clinical Decision Support section includes the three frailty tools that are recommended, and two alerts that can be employed to make front-line clinicians aware of the risk of frailty or even likelihood of moderate or severe frailty, along with suggested actions. Following that, an Order Set provides guidance to physicians (in italics) and a set of orders for care providers, derived from the frailty instruments that have been used. This Frailty Order Set is multidimensional and clinicians should use it judiciously to address the particular components of interest to their patient. A Glossary of Terms at the end is appended and linked throughout the document.

Clinical Questions & Recommendations

Key components of high quality and trustworthy clinical guidance include:

i) recommendations that are clearly stated and based on scientific evidence of benefits, harms and where possible, costs

ii) a guideline rating system that is used to communicate quality and reliability of both the evidence and the strength of its recommendations. The GRADE terminology is used to address the questions regarding Quality of Evidence and Strength of Recommendations and components are described below.

GRADE Methodology

Whenever possible answers are identified from recent high quality guidelines or high quality systematic reviews and recommendations provided are based on GRADE definitions. Where guidelines or systematic reviews are not available to answer certain questions rapid reviews are undertaken and/or a consensus approach used to try to answer clinically relevant questions. **Only where the evidence is supportive and the benefits clearly outweigh the harm is a "we recommend" strength of recommendation applied.**

Table 1. GRADE Quality of Evidence[1]

High GRADE A	We have high confidence that the true effect lies close to that of the estimate of the effect.
Moderate GRADE B	We are moderately confident in the effect estimate: The true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different.
Low GRADE C	Our confidence in the effect estimate is low: The true effect may be substantially different from the estimate of the effect.
Very low GRADE D	We have very low confidence in the effect estimate: The true effect is likely to be substantially different from the estimate of effect.

Table 2. GRADE Strength of Recommendations[1]

Strong GRADE 1	Strong recommendation, with desirable effects clearly outweighing undesirable effects/burdens (or vice versa). **Wording of Recommendation:** We recommend in favor of / We recommend against…..
Weak GRADE 2	Weak recommendation, with desirable effects closely balanced with undesirable effects. **Wording of Recommendation:** We suggest in favor of / We suggest against …..
Insufficient evidence or no consensus	**Wording of Recommendation:** There is insufficient evidence or the confidence in the effect estimates is so low that the panel is unable to make a recommendation regarding….

1. Guyatt GH, Oxman AD, Vist GE, et al; for the GRADE Working Group. GRADE: an emerging consensus on rating quality of evidence and strength of recommendations. *BMJ*. 2008; 336(7650):924-926.

Clinical Practice Guidelines (CPGs) for frailty are still evolving. While the existing guidelines from Italy[1], the United Kingdom[2,3], and British Columbia[4] are quite harmonious, only the Italian CPGs provide a rationale for their recommendations in terms of level of evidence and grade of recommendations. The level of evidence is high for recommendations pertaining to hospitalization and comprehensive multi-professional assessments (e.g. based on randomized controlled trials or systematic reviews). However, a number of recommendations based on lower levels of evidence, are still graded as very strong.

These recommendations will be focused on acute care only. However, when there has been prior case finding for frailty in the community, along with component identification and management, there is a substantial benefit to the older adult and their care providers in the setting of acute care. As such, the processes used in the community should harmonize with those used in acute care. For the purpose of these guidelines, the acute care setting will include emergency departments and pre-operative clinics as entry points to the acute care hospital itself. Please also refer to Algorithm 1.0 and Algorithm 2.0.

Clinical Question #1: Should there be rapid case-finding for frailty in acute care settings?
Clinical Recommendation #1: In acute care settings, case finding for frailty should be considered in any individual over 65 or with a pattern of age-related decline. Age-related decline is a change in overall health status characterized by common problems in older age, such as falls, immobility, cognitive impairment, unintentional weight loss, multi-morbidity and polypharmacy. See also Algorithm 1.0.
Quality of Evidence: Low, Grade C
Strength of Recommendation: Strong, Grade 1

Clinical Question #2: What is the preferred method of case-finding for frailty in acute care?
Clinical Recommendation #2: In acute care settings that employ an electronic database that can both systematically gather pre-existing health information from the start, and immediately alert care providers based on a simple summation of pre-determined conditions, the Electronic Frailty Index (eFI) (≥0.21)[6, 7] is the ideal and recommended instrument. Until an eFI is ready to be deployed as a front-line decision-aid across settings, opportunistic case-finding for frailty should include a multidimensional scale such as the Edmonton Frail Scale (EFS) (≥6)[8], or a clinical judgement-based scale such as the Clinical Frailty Scale (CFS) (≥5)[9]. While gait speed (<0.8m/s) can also be used for frailty case finding[10], it is not reliable in a person who is acutely unwell[3]. See also Algorithm 1.0.
Quality of Evidence: Moderate, Grade B
Strength of Recommendation: Strong, Grade 1

Clinical Question #3: How should the components of frailty be identified?
Clinical Recommendation #3: Having identified the presence of frailty through case-finding, prior assessments should be obtained, and a multidimensional frailty instrument, such as the Edmonton Frail Scale, should be used to define the severity and components of frailty in the individual. The components of interest include cognitive impairment, multi-morbidity, polypharmacy, functional dependence, unintentional weight loss, dehydration, urinary incontinence, depression, falls, immobility, chronic pain, constipation, and social isolation. See also Algorithm 1.0.
Quality of Evidence: Moderate, Grade B

Strength of Recommendation: Strong, Grade 1

Clinical Question #4: When should an individual with frailty have an inpatient comprehensive geriatric assessment (CGA)?
Clinical Recommendation #4: A comprehensive review of medical, functional, psychological, and social needs based on the principles of comprehensive geriatric assessment should be conducted in all individuals found to have frailty (eFI ≥0.21, EFS ≥6, CFS ≥5). If this hasn't already occurred in the primary care setting, this should be conducted by multidisciplinary teams, according to the components of interest, by the attending or consulting teams in the acute care setting. Consider referral to a specialist in geriatrics when frailty is moderate to severe (CFS ≥6, eFI≥0.30, EFS≥8), or associated with significant complexity, diagnostic uncertainty, or challenging symptom control. Any CGA conducted previously in the community should be made available and updated in the acute care record. See also Algorithm 1.0.
Quality of Evidence: Moderate, Grade B
Strength of Recommendation: Strong, Grade 1

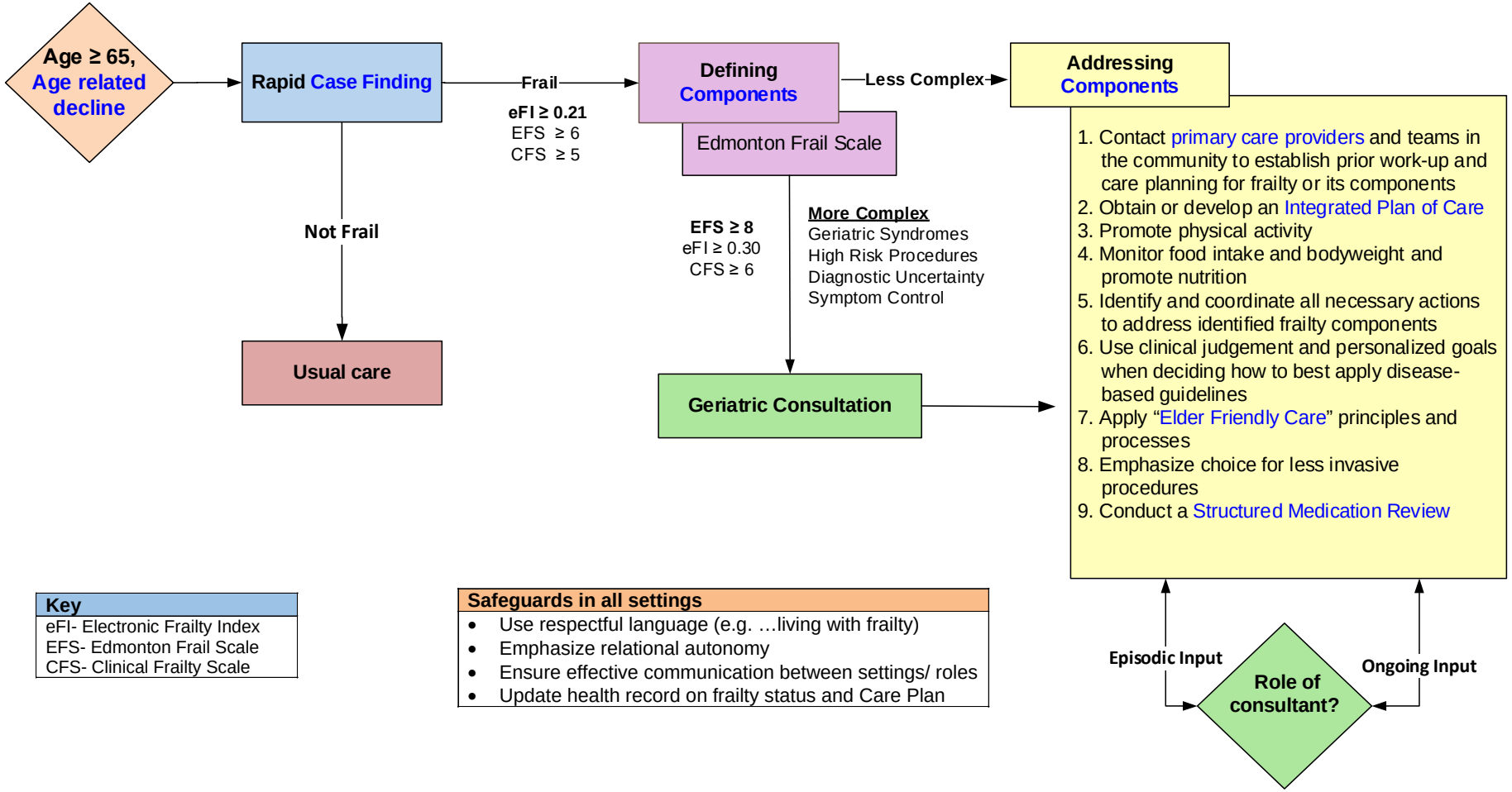
Clinical Question #5: How should the identification of frailty and its components in acute care impact the care plan?
Clinical Recommendation #5: To optimize the care of all individuals found to have frailty in acute care, attending teams should (1) contact primary care providers and teams in the community to establish prior work-up and care planning for frailty or its components, (2) obtain or develop an Integrated Plan of Care, (3) promote physical activity, (4) monitor food intake and bodyweight and promote nutrition, (5) identify and coordinate all necessary actions to address identified frailty components, and (6) use clinical judgement and personalized goals when deciding how to best apply disease-based guidelines, (7) apply "Elder Friendly Care" processes and practices, (8) emphasize choice for less invasive procedures, and (9) conduct a structured medication review. See also Algorithm 1.0.
Quality of Evidence: Moderate, Grade B
Strength of Recommendation: Strong, Grade 1

Clinical Question #6: Who should be involved in the care plan when frailty or its components are found in the acute care setting?
Clinical Recommendation #6: Frailty case-finding should be considered in all individuals age 65 years or older with a pattern of age-related decline, starting in the emergency department (ED) or pre-admission clinic (PAC). When frailty is identified as being present prior to any acute illness or procedure, (eFI ≥0.21, EFS≥6, CFS≥5), the care plan should be updated. At the time of ED or PAC assessment (regardless of whether the individual is to be admitted or discharged), the most appropriate primary care physician and team in the community should be notified of the updated frailty status. If hospital admission occurs, the attending team should be notified of the frailty status, identify component problems, and modify the care plan with input from the individual, their family, the primary care team, and the inpatient team. Consider how a specialist in geriatrics could assist when contemplating moderate to high risk procedures or surgeries, or where frailty is moderate to severe (CFS ≥6, eFI≥0.30, EFS≥8), associated with significant complexity, diagnostic uncertainty, or challenging symptom control. See also Algorithm 2.0 which illustrates how the intensity of consultative involvement can be ramped up depending on circumstances.
Quality of Evidence: Moderate, Grade B
Strength of Recommendation: Strong, Grade 1

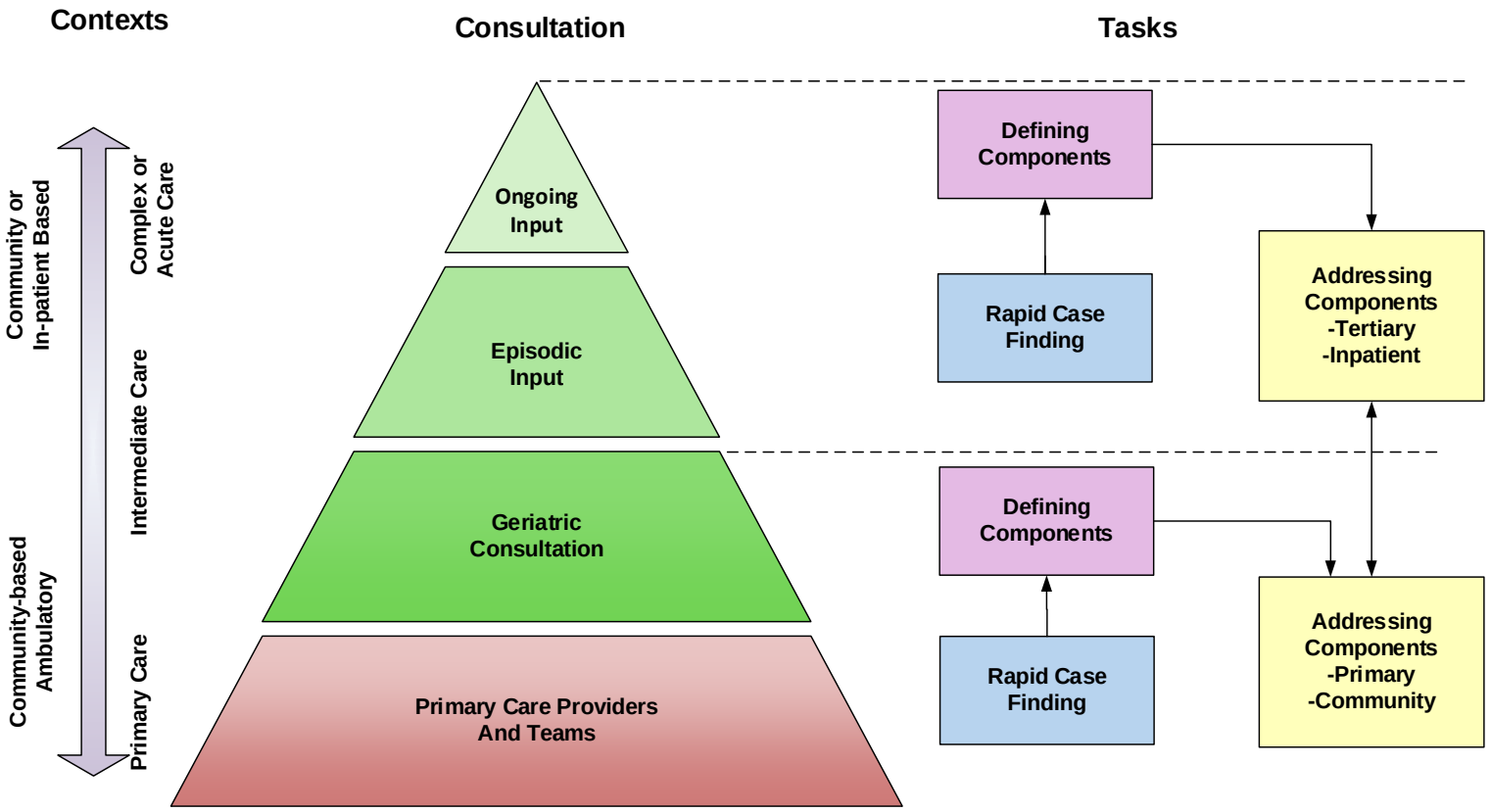
Clinical Question #7: What safeguards should be employed to ensure patient privacy regarding their frailty status, and to avoid the potential for labelling and unintended consequences of identifying frailty?
Clinical Recommendation #7: When frailty is identified, the most responsible physician (MRP) or their delegate should communicate the frailty status to the most appropriate individuals as they would with any other health information. Relational autonomy should be emphasized to encourage supported and shared decision-making. In communications with all involved, frailty should be framed as an aspect of risk or health status rather than personal identity. For example, the phrase "living with frailty" is preferred to "being frail". A continuum from fitness to frailty helps emphasize the multidimensional nature of frailty at any age. Frailty should be understood as an important aspect of the care plan. Health Information systems, available to all relevant care partners, should include updated and reliable information on frailty status and individualized care planning. At the time of care transitions and discharge, information regarding frailty, its components, and relevant actions should be communicated to other care teams that will assume responsibility. See also Algorithm 1.0.
Quality of Evidence: Moderate, Grade B
Strength of Recommendation: Strong, Grade 1

Clinical Question #8: In patients with established frailty, which interventions are proven to delay or reverse its progression?
Clinical Recommendation #8: Exercise will delay and reverse frailty, especially the physical domains. There is also evidence that interventions aimed to improve nutrition, polypharmacy, and social interactions can be helpful.
Quality of Evidence: High, Grade A (Exercise) Moderate, Grade B (other)
Strength of Recommendation: Strong, Grade 1

Algorithm 1.0 Frailty Instruments in Acute Care



Algorithm 2.0 How to Involve Specialized Geriatric Services in the Care of Individuals with Frailty



Description: Consultation by specialized Geriatric Services are built on a foundation of Primary Care. In remote settings, in-person geriatric consultation may not be possible at all. In other settings, primary care may have access to single geriatric consultations, including by telehealth. However to meet the complex and ongoing needs of older adults living with frailty, additional layers on the consultation pyramid may include more proactive models with episodic and even ongoing input. To optimize the care of these individuals, community-based teams and tertiary or inpatient teams must ensure effective two-way communication.

Source: Adapted from Palliative Care Partnership Model, Gov't of Western Australia, 2008 Note ©

Clinical Decision Support

Clinical Judgement-based Frailty Scale

- **Description of Assist**: The **Clinical Frailty Scale (CFS), Figure 1** is based on the impression of an experienced clinician and requires prior assessment. The clinician then forms a judgement of frailty status based on the anchors provided for each grade. It is a quick and accurate way to case-find for frailty.
  - Trigger for Assist: Patients over the age of 65
  - Requirements: (1) Operators must be clinicians with sufficient experience to make judgements on frailty status; (2) A standard clinical assessment must precede the formulation of CFS score.
- **Interpretation**: The CFS measures the severity of frailty, with each grade anchoring points on a continuum from fitness to frailty. A CFS score ≥ 5 (mild) warrants further definition of frailty components, and a CFS score ≥ 6 (moderate) may warrant geriatric consultation. The CFS does not identify components of frailty.

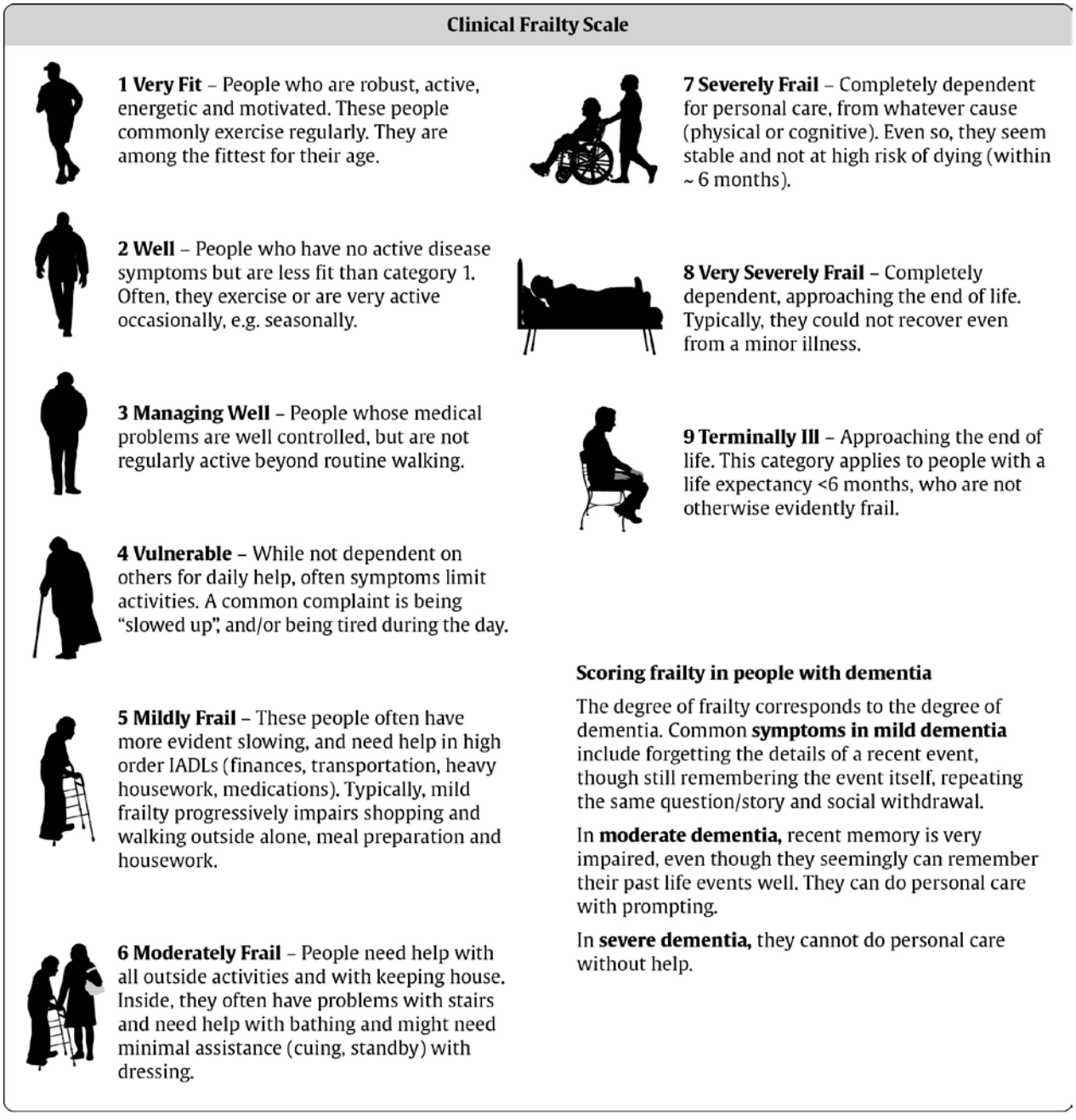
Syndrome-based Frailty Scale

- **Description of Assist**: The **Edmonton Frail Scale (EFS), Table 1** is a multi-dimensional scale and does not require expert judgment or prior assessment. It is a quick and accurate way to case-find for frailty, and define its components.
  - Trigger for Assist: Patients over the age of 65
  - Requirements: Operators should be familiar with the EFS Tool Kit.
- **Interpretation**: The EFS measures the severity of frailty, with EFS ≥ 6 (mild) warranting further definition of components and EFS ≥ 8 (moderate) warranting possible geriatric consultation. Abnormal items within the EFS identify possible components of frailty.

Deficit-based Frailty Scale

- **Description of Assist:** In any individual, the **Electronic Frailty Index (eFI), Table 2** captures the presence or absence of preselected health status items that accumulate with age and threaten independence. Thus, in a prepopulated database, the eFI can automatically case-find for frailty and alert clinicians.
  - Trigger for Assist: Patients over the age of 65
  - Requirements: Calculation of the eFI requires an electronic database of 36 items reflecting the patient's current health status (Table 2.0). These items are coded as present (abnormal) or absent (normal). The eFI is calculated by counting the number of items which are present (1 point per item) and divide this by 36.
- **Interpretation:** The eFI measures the severity of frailty, with eFI ≥ 0.21 (mild) warranting further definition of components and eFI ≥ 0.30 (moderate) warranting possible geriatric consultation. The eFI does not identify components of frailty.

Figure 1: Clinical Frailty Scale[5,6]



Canadian Study of Health & Aging, Revised 2008
Rockwood K, Song X, MacKnight C, Bergman H, Hogan D, McDowell I, Mitnitski A. A Global Clinical Measure of Fitness and Frailty in Elderly People. *CMAJ* 2005; 173 (5): 489-494.
2007-2009 Version 1.2. All rights reserved. Geriatric Medicine Research, Dalhousie University, Halifax, Canada.

Table 1 Edmonton Frail Scale – Abbreviated Version[7]

Frailty Domain	Item	0 point	1 point	2 points
Cognition	Please imagine that this pre-drawn circle is a clock. I would like you to place the numbers in the correct positions then place the hands to indicate a time of 'ten after eleven'	No errors	Minor spacing errors	Other errors
General health status	In the past year, how many times have you been admitted to a hospital?	0	1–2	≥2
	In general, how would you describe your health?	'Excellent', 'Very good', 'Good'	'Fair'	'Poor'
Functional independence	With how many of the following activities do you require help? (meal preparation, shopping, transportation, telephone, housekeeping, laundry, managing money, taking medications)	0–1	2–4	5–8
Social support	When you need help, can you count on someone who is willing and able to meet your needs?	Always	Sometimes	Never
Medication use	Do you use five or more different prescription medications on a regular basis?	No	Yes	
	At times, do you forget to take your prescription medications?	No	Yes	
Nutrition	Have you recently lost weight such that your clothing has become looser?	No	Yes	
Mood	Do you often feel sad or depressed?	No	Yes	
Continence	Do you have a problem with losing control of urine when you don't want to?	No	Yes	
Functional performance	I would like you to sit in this chair with your back and arms resting. Then, when I say 'GO', please stand up and walk at a safe and comfortable pace to the mark on the floor (approximately 3 m away), return to the chair and sit down'	0–10 s	11–20 s	One of >20 s, patient unwilling, requires assistance
Totals	Final score is the sum of column totals			
Interpretation	Mild Frailty 6-7	Moderate Frailty 8-9	Severe Frailty 10 or more	

Rolfson DB, et al, Validity and reliability of the Edmonton Frail Scale, *Age and Ageing* 2006; 35 (5): 526–529 doi:10.1093/ageing/afl041: The Edmonton Frail Scale – Abbreviated Version. By mutual agreement of the author and Oxford University Press, the Abbreviated Version of the EFS is available under the Creative Commons license CC BY-NC-ND.
© The Author 2006.

Table 2 Electronic Frailty Index (eFI)[8]

The eFI is normally derived from read codes available in an electronic medical record. The following list of items comprising a frailty index that estimates an eFI score, requires clinical judgement and manual completion rather than read codes. The score is based on the number of deficits present, and is calculated from the number of deficits present divided by the total number of deficits possible.

Instructions for use:

Step 1. Check the boxes of all the following conditions present.

Disease states		**Symptoms or signs**		**Lab**		**Impairments/ Disabilities**	
Arthritis		Dizziness		Anemia with B12 deficiency / ferritin		Activity limitation	
COPD		Dyspnea		Any abnormal value		Housebound	
Atrial Fibrillation		Falls				Hearing impairment	
Cerebrovascular disease		Memory/ cognitive problems				Mobility / transfer problems	
Chronic Kidney Disease		Polypharmacy				Requirement for care	
Diabetes		Sleep disturbances				Social vulnerability	
Foot Problems		Urinary incontinence				Visual impairment	
Fragility fractures		Weight loss / anorexia					
Heart Failure							
Hypertension							
Hypotension / syncope							
Ischemic heart disease							
Osteoporosis							
Parkinson's and tremor							
Peptic Ulcer disease							
Peripheral vascular disease							
Respiratory disease							
Skin ulcers							
Thyroid disease							

Step 2. Count up the number of checked boxes, and divide the total by 36 to obtain the EFI.

EFI Scoring: 0 – 0.12 = fit; 0.13 – 0.20 = vulnerable; 0.21 – 0.29 = mild; ≥ 0.30 = moderateto severe.

Adapted from Clegg A et al[6]. Development and Validation of an electronic frailty index using routine primary care electronic health record data. Age Ageing 2016 May;45(3):353-60, and from Hoover et al[7] Validation of an Index to Estimate the Prevalence of Frailty Among Community-Dwelling Seniors. Health Reports, Vol. 24, no. 9, pp10-17. Statistics Canada Catalogue no. 82-003-X. September, 2013

Alerts

- **Risk of Frailty**.
    - **Description of alert:** The objective is to support front-line care providers in acute care settings by identifying recently admitted individuals who are at risk for frailty using information that is readily available in the inpatient health record. Conceptually, the trigger for case-finding should be age ≥ 65 or a pattern of age-related decline. However, the latter depends on clinical judgment and is not easily operationalized as a decision aid. Therefore, the alert should be generated based on a more restricted criteria: (1) age ≥ 65 AND (2) an abnormal score using a frailty case-finding tool. The best option is the eFI as an algorithm can be built into an inpatient electronic health record and generate a decision support alert directly. Alternative case-finding options involving assessors include the EFS or CFS built into a care protocol.
    - **Text to display:** "Patients over the age of 65 have a higher incidence of frailty, a condition of exaggerated vulnerability to adverse outcomes, especially when under stress. Based on case-finding criteria used in your setting, your patient is at risk of frailty. For further confirmation, please use the Edmonton Frail Scale (EFS), the Clinical Frailty Scale (CFS), or the Electronic Frailty Index (eFI). The EFS and Comprehensive Geriatric Assessment (CGA) will better define the component issues. Consider referral to a specialist in geriatrics if frailty is moderate to severe (EFS≥8, CFS≥6, eFI≥0.30), or if there is more complexity (presence of geriatric syndromes, high risk procedures, diagnostic uncertainty, challenging symptom control)."
    - **Trigger for the Alert:**
        - Age ≥ 65 and eFI ≥ 0.21
        - Age ≥ 65 and Edmonton Frailty Scale (EFS) ≥ 5
        - Age ≥ 65 and Clinical Frailty Scale (CFS) ≥ 5

- **Moderate or Severe Frailty.**
    - **Description of alert:** The objective is to support front-line care providers in acute care settings by identifying recently admitted individuals who have moderate or severe frailty using information that is readily available in the inpatient health record. These criteria should alert the care providers to consider consultative assistance from a specialist in geriatrics if frailty is moderate or severe, but especially after particular components of frailty have been defined.
    - **Text to Display:** "Based on case finding criteria used in your setting, this patient has been flagged as having moderate or severe frailty. Please consider referral to a specialist in geriatrics as appropriate to the components of interest. To assist in defining these components, please consider using the Edmonton Frail Scale if not already done."
    - **Trigger(s) for the Alert:**
        - EFS ≥ 8
        - CFS ≥ 6
        - eFI ≥ 0.30

Order Set and Guidance: Frailty

The following includes italicized guidance which could be selected in an electronic data set or printed on the back of a paper order set. The non-italicized text forms the order set itself.

Rapid Case Finding

Administer one of the following Frailty Case Finding Tools

- ☐ Clinical Frailty Scale
- ☐ Edmonton Frail Scale
- ☐ Electronic Frailty Index

- *Where possible, the eFI is the recommended instrument for case finding.*
- *If the eFI is not available, administer one of the following case finding tools in individuals age greater than 65 or living with age-related decline.*
    - *Edmonton Frailty Scale (EFS)*
    - *Clinical Frailty Scale (CFS)*

If frailty is suspected (eFI≥0.21, EFS≥6, and CFS≥5), proceed to **Defining Components**. Otherwise, do not proceed further.

Defining Components

- ☐ Administer the EFS (if not already done), to define areas of possible concern for later actions under **Addressing Components**.
- ☐ Transition services referral (assuming prior home care services)

- *Prior assessments and a syndrome-based frailty instrument, such as the EFS should be used to define the components of frailty in the individual. These are:*
    - *Cognitive Impairment*
    - *Functional Dependence*
    - *Falls and Immobility*
    - *Social Isolation, Neglect, or Abuse*
    - *Polypharmacy or Medication Non-adherence*
    - *Nutritional Risk*
    - *Depressed Mood*
    - *Urinary Incontinence*
    - *Chronic Pain*

Establishing Prior Baseline Assessment

- *Obtain assessments done previously (Geriatric consultation, family physician, Home Care, care facility, other) to establish prior work-up and care planning for frailty or its components. Review Netcare then consider referral to transition service to assist with obtaining prior community assessments.*

Defining Components of Frailty using Edmonton Frail Scale

- *A completed Edmonton Frail Scale (EFS) will be required to fully navigate this order set. The EFS helps to guide actions related to identified components of frailty and acts as a marker for moderate to severe frailty, thus triggering geriatric consultation.*
- *If not already completed, administer or order the EFS to be completed to determine which components of frailty are abnormal (any component scoring equal or greater than 1 is abnormal).*

Addressing Components

Patient Care:

If procedures or surgery are considered, offer alternatives for less invasive options. Consider admission to a unit within the same facility that minimizes harm to adults in hospital who are living with frailty.

☐ Admit to_____

Diet

☐ Regular diet

If significant weight loss, consider liberalizing diet and consult dietician

☐ High Protein High Calorie Diet

Order modifications for signs or symptoms of possible dysphagia and consider swallowing assessment by Speech Language Pathologist or other site-appropriate service

☐ Pureed Diet

☐ Thick Fluids: Honey consistency

☐ Other diet _____

Nutrition Assistance:

☐ Assist to ensure patient is out of bed for all meals

☐ If less than 50% of meals eaten over 24 hours, notify physician/nurse practitioner

☐ Offer fluids with every patient interaction. Goal 1.5-2 L/day

☐ Ensure patient is upright and fully alert during all oral intake and for 30 minutes afterwards

☐ Address sensory deficits (glasses, hearing aids) at mealtime

☐ Protected meal times (limit unnecessary interruptions during mealtimes)

Activity

☐ Weight bearing as tolerated

☐ Ambulate at least daily progressing to at least _____times daily (recommended three times per day) in hallway. Goal is to maintain pre-hospital mobility.

Physician Consults

When high risk surgery or procedures are required, frailty is moderate to severe (EFS≥8, CFS≥6, EFI≥0.30), or when frailty is associated with significant complexity, diagnostic uncertainty, or challenging symptom control, consider referral to Geriatrics.

☐ MD Consult Geriatrics. Reason for referral:_____

Avoid unnecessary duplication of services. In most cases, geriatric medicine and general internal medicine, and/or (geriatric) psychiatry are not needed simultaneously.

☐ MD Consult Psychiatry (Geriatric if available). Reason for referral:_____

☐ MD Consult General Internal Medicine. Reason for referral: _____

☐ MD Consult Neurology. Reason for referral:_____

☐ MD Consult Palliative Care/ Pain Services. Reason for referral: _____

☐ MD Consult Other service. Reason for referral:_____

Monitoring and Fall Prevention

Do no use Physical Restraints

- Fall Risk Assessment and Fall Prevention
  - ☐ Fall Prevention Risk Assessment.
  Complete ON ADMISSION, after a fall and with status change.
  - ☐ Fall Risk Monitoring every 4 hours
  - ☐ Bed in low position

☐ Minimize rail use
☐ Do Not Use Physical Restraints – use bed alarm
☐ Call bell/personal items/walking aids/footwear in reach
☐ Remind patient to call for help verbally and by writing on patient's white board if available
☐ Comfort rounds every 2-3 hours:
Comfort rounds to assist with toilet; repositioning, drink/snack. Pain? Warmth

- Weigh patient
  ☐ On admission
  ☐ Daily
  ☐ Weekly
  ☐ Notify physician/nurse practitioner/registered dietician if weight loss greater than 5% during hospital admission.

- Vital Signs
  As much as possible, avoid ordering vital signs that disrupt patient sleep at night
  ☐ TID while awake and PRN
  ☐ Daily and PRN
  ☐ Every __ hour(s) and PRN; call physician/nurse practitioner to re-evaluate after _____hours

- Intake and output
  ☐ Monitor oral intake every shift

- Bladder assessment and management
  ☐ Scheduled toileting every 2 to 3 hours to keep bladder empty.
  Toileting/ Elimination. Goal: Maintain patient's pre-hospital toileting function. Bedside commode only if necessary. Up to bathroom preferred.
  ☐ Discontinue indwelling catheter.
  Indwelling catheters are only recommended for patients with obstruction AND difficulty catheterizing, strict ins and outs, to protect serious perineal/sacral wound and for patient comfort at end of life.
  ☐ Bladder scan if no urine output in 8 hours. Notify physician/nurse practitioner of results.
  ☐ Bladder Scan-Post Void Residual until 3 consecutive scans are less than 250 mL.
  Perform within 30 minutes of voiding to determine residual volume.
  ☐ In-and-Out Catheter if PVR is greater than 250 mL and notify physician/nurse practitioner.

Infusions

☐ Saline lock between medications
☐ IV Bolus: 0.9% NaCl IV _____mL over _____ hour(s)
☐ IV Bolus (other): _____ IV _____ mL over _____ hour(s)
☐ IV Maintenance: 0.9% NaCl IV _____mL/hour, to stop on _____(date) at _____(time)
☐ IV Fluids (other): _____ IV at _____ mL/hour, to stop on _____(date) at _____(time)

If IV not an option:
☐ Subcutaneous Cannula (Hypodermoclysis)- Insert
☐ Dextrose 5% in water - 0.9% sodium chloride subcutaneous infusion at 60 mL/hour, to stop on _____(date) at _____(time)
OR

☐ Other_____ subcutaneous infusion at _____mL/hour, to stop on _____(date) at _____(time)

OR

☐ 0.45% NaCl subcutaneous infusion at ___ mL/hour, to stop on _____(date) at _____(time)

Providing Focused Care based on identified components:

Cognitive Impairment

☐ Administer the Confusion Assessment Method (CAM)

Screen for Delirium if age 65 or greater or if there are other risks using the Confusion Assessment Method (CAM) (see Delirium, Senior – Inpatient Clinical Knowledge Topic for guidance).

Obtain and record observations from collateral history. If not already performed, screen for cognitive impairment (see Dementia, Seniors - Inpatient Clinical Knowledge Topic for guidance) and consider referral to occupational therapy for further cognitive testing.

☐ Consult Occupational Therapy for cognitive testing.

Consider social work referral and obtain copies of a personal directive, enduring power of attorney, guardianship and trusteeship

☐ Consult Social Work. Reason for referral:_____

Non-pharmacological (behavioral) strategies should be first line for managing agitation and aggressive behaviours in persons with dementia. (see Dementia, Seniors - Inpatient Clinical Knowledge Topic for guidance). See Delirium, Senior – Inpatient Clinical Knowledge Topic Clinical Knowledge Topic for guidance in monitoring, preventing and managing delirium.

Consider behaviour mapping in patients with dementia or delirium who have concerning behaviours.

☐ Complete Behaviour Mapping Tool

Functional Dependence, Falls or Immobility

See also Fall Risk Assessment and Fall Prevention under Monitoring and Fall Prevention. If patient has restricted mobility or is immobile/bed bound, then consider the need for range of motion and/or bed exercises.

☐ Range of motion exercises
☐ Up in a chair_____(frequency), while awake
☐ Mobilize in bed_____ (frequency), while awake
☐ Braden Scale Monitoring daily if immobile, to assess risk for pressure ulcers
☐ Implement strategies to prevent pressure ulcers if Braden score is 18 or less

Consider referral to Occupational Therapy for assessment of Activities of Daily Living and/or appropriate equipment.

☐ Consult Occupational Therapy. Reason for referral:_____

Consider referral to Physiotherapy for assessment of balance and mobility.

☐ Consult Physical Therapy. Reason for referral:_____

Social Isolation, Neglect or Abuse

If there is evidence / concern about abuse:

☐ Consult Social Work. Reason for referral:_____

☐ Consult Spiritual Care

If social isolation is present consider:

☐ Consult Recreational Therapy. Reason for referral:_____

☐ Volunteer support

Nutritional Risk

See orders for eating and weight monitoring in the Elder friendly care orders.

☐ Assess nutrition risk using the Canadian Nutrition Screening Tool within 24 hours of admission. If screen is positive, refer to Dietitian.

☐ Dietitian Referral. Reason for referral:_____

☐ Encourage oral intake.

☐ Speech Language Pathology Referral if suspecting aspiration or swallowing issues.
Consider volume assessment when there is concern about fluid and nutrition intake

☐ Monitor Intake- Oral (including amount of fluids and percentage of meals consumed)

☐ Intake and output every_____hours

☐ Calorie Counts

Consider referral for assessment of dental or oral health

☐ Consult Dentist. Reason for consult:_____

Vitamins and Minerals

Consider in patients known or suspected of micronutrient deficiencies eg. Malnutrition, unintentional weight loss, alcohol misuse

☐ vitamins multiple with minerals 1 tab PO daily

If history of B12 deficiency or measured B12 level less than 220

☐ cyanocobalamin 1000 mcg PO daily

If history of iron deficiency or measured Ferritin level less than 24 µg/L (men) and 11 µg/L (women)

☐ ferrous gluconate 300mg PO daily

For prevention and/or treatment of osteoporosis unless another dose/formulation indicated. Calcium supplementation may be needed to achieve a daily intake of 1200mg elemental calcium (all sources).

☐ vitamin D tab 2000 units PO daily

☐ calcium carbonate 1250 mg (elemental calcium 500mg) PO bid with meals

For chronically malnourished alcoholics to prevent Wernicke's

☐ thiamine 100 mg IV/PO daily *(may be given orally once patient tolerating regular diet)*

OR

☐ thiamine 200 mg IV daily

Polypharmacy, Drug Non-Adherence, or Multimorbidity

Consider referral to a Pharmacist in complex cases to complete a structured medication review, review medication risks, consider deprescribing, and / or assist with polypharmacy. Multimorbidity is defined as 2 or more chronic health conditions

☐ Pharmacist Referral. Reason for referral:_____

Depressed Mood

Consider completion of a Geriatric Depression Scale if not already done. As described in the Delirium, Senior – Inpatient Clinical Knowledge Topic, the GDS should not be done until delirium and acute illness have been ruled out.

☐ Geriatric Depression Scale Assessment

Consider referral to Psychiatry for complicated or severe cases of depression.

☐ Consult Psychiatry. Reason for referral:_____

Urinary Incontinence

See Bladder Assessment and Management under Monitoring and Fall Prevention

Chronic Pain

☐ Assess for pain or "discomfort" at rest and with activity
- o Edmonton Symptom Assessment System (ESAS)
- o PAINAD

Assess body language especially if patient confused or agitated. Use appropriate pain assessment tools (e.g. visual, numerical, Edmonton Symptom Assessment System (ESAS) or PAINAD for non-communicative/ severely cognitively impaired patients)

☐ Optimize non-pharmacologic pain management, including use of cold or heat, massage, positive distraction and repositioning.

☐ Monitor and document response to pharmacological/ non-pharmacological strategies for pain; use appropriate pain assessment tool. Notify physician/ nurse practitioner if pain control sub-optimal or adverse effects noted.

Order non-oral routes if difficulty administering orally BUT be careful to adjust for increased potency as appropriate (e.g. parenteral Hydromorphone can be up to 5 times as potent as the equivalent oral dose).
Consider scheduled dose (with parameters to hold or delay scheduled dose if sedated) if significant cognitive impairment or communication barrier may prevent patient from asking for PRN dose.

☐ acetaminophen 650 mg PO four times per day for pain (maximum dose 3 g per 24 hours for seniors over age 65, and 4 g for generally healthy individuals under age 65)

OR

☐ acetaminophen 325-650 mg PO every 4 hours PRN for pain (maximum dose 3 g per 24 hours for seniors over age 65, and 4 g for generally healthy individuals under age 65)

☐ diclofenac gel 2.32% BID PRN to affected area *specify*_____

*Caution with opioids as a potential precipitating factor of delirium, cognitive and other side effects however untreated pain is also a precipitating factor of delirium. Avoid morphine in older adults; Codeine containing products should be avoided in older adults due to risk of accumulation in renal insufficiency, constipation, and unpredictable metabolism. Use lower starting doses in older adults, particularly if opioid naïve and/or vulnerable brain***

☐ Hydromorphone 1 to 2 mg PO every 8 hours PRN for pain

☐ Other_____

Constipation

☐ Stool chart with comparison to baseline routine at home

☐ Clinical communication: Maintain usual bowel habits. If no routine, aim for bowel movement daily/every other day. If no bowel movement on Day 1 then give PRN laxative at bedtime; Day 2 escalate use of laxatives (increase frequency or add suppository)

☐ Notify physician/nurse practitioner if patient has not had a bowel movement for 48 hours

☐ polyethylene glycol 3350 powder for oral solution 17 g PO daily

☐ sennosides 8.6 mg 1-2 tab PO QHS PRN

☐ lactulose liquid 15-30 mL PO daily PRN

☐ glycerin adult 1 supp RECTALLY daily PRN

☐ Notify physician/nurse practitioner if diarrhea develops and hold bowel routine. *Consider seepage or overflow diarrhea may occur with severe constipation.*

***avoid use of mineral oil and phosphate enema (FLEET) in older adults given increased risk of adverse effects; if an enema is required, try a tap water enema as a safer alternative*

☐ tap water enema RECTALLY daily PRN until adequate elimination if glycerin suppository ineffective after 24 hours

Rapid Case Finding

Administer one of the following Frailty Case Finding Tools

- ☐ Clinical Frailty Scale
- ☐ Edmonton Frail Scale
- ☐ Electronic Frailty Index

If frailty is suspected (eFI≥0.21, EFS≥6, and CFS≥5), proceed to **Defining Components**. Otherwise, do not proceed further.

Defining Components

- ☐ Administer the EFS (if not already done), to define areas of possible concern for later actions under **Addressing Components**.
- ☐ Transition services referral (assuming prior home care services)

Addressing Components

Patient Care:

☐ Admit to_____

Diet

☐ Regular diet
☐ High Protein High Calorie Diet
☐ Pureed Diet
☐ Thick Fluids: Honey consistency
☐ Other diet _____

Nutrition Assistance:

☐ Assist to ensure patient is out of bed for all meals
☐ If less than 50% of meals eaten over 24 hours, notify physician/nurse practitioner
☐ Offer fluids with every patient interaction. Goal 1.5-2 L/day
☐ Ensure patient is upright and fully alert during all oral intake and for 30 minutes afterwards
☐ Address sensory deficits (glasses, hearing aids) at mealtime
☐ Protected meal times (limit unnecessary interruptions during mealtimes)

Activity

☐ Weight bearing as tolerated
☐ Ambulate at least daily progressing to at least _____times daily (recommended three times per day) in hallway. Goal is to maintain pre-hospital mobility.

Physician Consults

☐ MD Consult Geriatrics. Reason for referral:_____
☐ MD Consult Psychiatry (Geriatric if available). Reason for referral:_____
☐ MD Consult General Internal Medicine. Reason for referral: _____
☐ MD Consult Neurology. Reason for referral:_____
☐ MD Consult Palliative Care/ Pain Services. Reason for referral: _____
☐ MD Consult Other service. Reason for referral:_____

Monitoring and Fall Prevention

- Fall Risk Assessment and Fall Prevention
  - ☐ Fall Prevention Risk Assessment.
  - ☐ Fall Risk Monitoring every 4 hours
  - ☐ Bed in low position
  - ☐ Minimize rail use
  - ☐ Do not use Physical Restraints – use bed alarm
  - ☐ Call bell/personal items/walking aids/footwear in reach
  - ☐ Remind patient to call for help verbally and by writing on patient's white board if available
  - ☐ Comfort rounds every 2-3 hours:

- Weigh patient
  - ☐ On admission
  - ☐ Daily
  - ☐ Weekly
  - ☐ Notify physician/nurse practitioner/registered dietician if weight loss greater than 5% during hospital admission.

- Vital Signs
  - ☐ TID while awake and PRN
  - ☐ Daily and PRN
  - ☐ Every __ hour(s) and PRN; call physician/nurse practitioner to re-evaluate after _____hours

- Intake and output
  - ☐ Monitor oral intake every shift

- Bladder assessment and management
  - ☐ Scheduled toileting every 2 to 3 hours to keep bladder empty.
  - ☐ Discontinue indwelling catheter.
  - ☐ Bladder scan if no urine output in 8 hours. Notify physician/nurse practitioner of results.
  - ☐ Bladder Scan-Post Void Residual until 3 consecutive scans are less than 250 mL.
  - ☐ In-and-Out Catheter if PVR is greater than 250 mL and notify physician/nurse practitioner.

Infusions

☐ Saline lock between medications
☐ IV Bolus: 0.9% NaCl IV _____mL over _____ hour(s)
☐ IV Bolus (other): _____ IV _____ mL over _____ hour(s)
☐ IV Maintenance: 0.9% NaCl IV _____mL/hour, to stop on _____(date) at _____(time)
☐ IV Fluids (other): _____ IV at _____ mL/hour, to stop on _____(date) at _____(time)
☐ Subcutaneous Cannula (Hypodermoclysis)- Insert
☐ Dextrose 5% in water - 0.9% sodium chloride subcutaneous infusion at 60 mL/hour, to stop on _____(date) at _____(time)
OR
☐ Other_____subcutaneous infusion at _____mL/hour, to stop on _____(date) at _____(time)
OR

☐ 0.45% NaCl subcutaneous infusion at ___ mL/hour, to stop on _____(date) at _____(time)

Providing Focused Care based on identified components:

Cognitive Impairment
☐ Administer the Confusion Assessment Method (CAM)
☐ Consult Occupational Therapy for cognitive testing.
☐ Consult Social Work. Reason for referral:_____
☐ Complete Behaviour Mapping Tool

Functional Dependence, Falls or Immobility
☐ Range of motion exercises
☐ Up in a chair_____(frequency), while awake
☐ Mobilize in bed_____ (frequency), while awake
☐ Braden Scale Monitoring daily if immobile, to assess risk for pressure ulcers
☐ Implement strategies to prevent pressure ulcers if Braden score is 18 or less
☐ Consult Occupational Therapy. Reason for referral:_____
☐ Consult Physical Therapy. Reason for referral:_____

Social Isolation, Neglect or Abuse
☐ Consult Social Work. Reason for referral:_____
☐ Consult Spiritual Care
☐ Consult Recreational Therapy. Reason for referral:_____
☐ Volunteer support

Nutritional Risk
☐ Assess nutrition risk using the Canadian Nutrition Screening Tool within 24 hours of admission. If screen is positive, refer to Dietitian.
☐ Dietitian Referral. Reason for referral:_____
☐ Encourage oral intake.
☐ Speech Language Pathology Referral if suspecting aspiration or swallowing issues.
☐ Monitor Intake- Oral (including amount of fluids and percentage of meals consumed)
☐ Intake and output every _____ hours
☐ Calorie Counts
☐ Consult Dentist. Reason for consult:_____

Vitamins and Minerals
☐ vitamins multiple with minerals 1 tab PO daily
☐ cyanocobalamin 1000 mcg PO daily
☐ ferrous gluconate 300mg PO daily
☐ vitamin D tab 2000 units PO daily
☐ calcium carbonate 1250 mg (elemental calcium 500mg) PO bid with meals
☐ thiamine 100 mg IV/PO daily *(may be given orally once patient tolerating regular diet)*
OR
☐ thiamine 200 mg IV daily

Polypharmacy, Drug Non-Adherence, or Multimorbidity

☐ Pharmacist Referral. Reason for referral:_____

Depressed Mood

☐ Geriatric Depression Scale Assessment
☐ Consult Psychiatry. Reason for referral:_____

Urinary Incontinence

See Bladder Assessment and Management under Monitoring and Fall Prevention

Chronic Pain

☐ Assess for pain or "discomfort" at rest and with activity
  - o Edmonton Symptom Assessment System (ESAS)
  - o PAINAD

☐ Optimize non-pharmacologic pain management, including use of cold or heat, massage, positive distraction and repositioning.
☐ Monitor and document response to pharmacological/ non-pharmacological strategies for pain; use appropriate pain assessment tool. Notify physician/ nurse practitioner if pain control sub-optimal or adverse effects noted.
☐ acetaminophen 650 mg PO four times per day for pain (maximum dose 3 g per 24 hours for seniors over age 65, and 4 g for generally healthy individuals under age 65)

OR

☐ acetaminophen 325-650 mg PO every 4 hours PRN for pain (maximum dose 3 g per 24 hours for seniors over age 65, and 4 g for generally healthy individuals under age 65)
☐ diclofenac gel 2.32% BID PRN to affected area *specify*_____
☐ Hydromorphone 1 to 2 mg PO every 8 hours PRN for pain
☐ Other_____

Constipation

☐ Stool chart with comparison to baseline routine at home
☐ Clinical communication: Maintain usual bowel habits. If no routine, aim for bowel movement daily/every other day. If no bowel movement on Day 1 then give PRN laxative at bedtime; Day 2 escalate use of laxatives (increase frequency or add suppository)
☐ Notify physician/nurse practitioner if patient has not had a bowel movement for 48 hours
☐ polyethylene glycol 3350 powder for oral solution 17 g PO daily
☐ sennosides 8.6 mg 1-2 tab PO QHS PRN
☐ lactulose liquid 15-30 mL PO daily PRN
☐ glycerin adult 1 supp RECTALLY daily PRN
☐ Notify physician/nurse practitioner if diarrhea develops and hold bowel routine.
☐ tap water enema RECTALLY daily PRN until adequate elimination if glycerin suppository ineffective after 24 hours

Relevant Guidelines, Procedures, Protocols and Clinical Knowledge Topics

Clinical Knowledge Topics

- Dementia, Seniors – Inpatient
- Delirium, Seniors – Inpatient

Analytics

Baseline Analytic- Outcome Measure # 1

Name of **Measure**	Order Set Usage for topic: Frailty, Seniors – Acute Care
Definition	For all admitted seniors (65 and older) identified as living with frailty (defined by Electronic Frailty Index [≥0.21], Edmonton Frail Scale [≥6], or Clinical Frailty Scale [≥5]), number of times order set is being used. Overall, by region, sites, and by units.
Rationale	Intended to measure if the order set cited in the knowledge topic is being used and what % of time. May indicate areas with adoption issues or gaps in topic
Notes for Interpretation	Site capacity, rural considerations, roll out of provincial CIS

Clinical Analytics – Outcome Measure # 2

Name of Measure	Documentation of Frailty Case-finding: Electronic Frailty Index (eFI)[6], Edmonton Frail Scale (EFS)[8] or Clinical Frailty Scale (CFS)[9] in Acute Care Settings
Definition	Documentation of the frailty status for patients age ≥65 admitted to acute care settings stratified by frailty measure, location, setting type (ED, Pre-op clinic, Medical, Surgical, Other) and age group (65-74, 75-84, 85+) using the eFI, EFS or CFS during hospitalization.
Rationale	Explicit frailty case finding in acute care is the first step to the defining and addressing its components. It empowers acute care teams to initiate the multi-component assessments, and informs individuals as they make important health care decisions. This in turn allows for the promotion of physical activity, nutrition, and medication reviews. Problematic components can be addressed early and a personalized care plan can be developed and communicated at the time of discharge. Care teams may employ criteria to inform them on when to refer patients with a more complex health status for geriatric consultation or ongoing involvement.
Notes for Interpretation	Electronic Frailty Index (eFI)[6]: Where possible, this is the preferred method for case finding. We employ the 36 item scale used by Clegg et al[6]. These items are coded as present (abnormal) or absent (normal) in the individual patient. The eFI is calculated by counting the number of items which are present (abnormal) in the patient and divide this by 36. Frailty Groups can be further categorized as Fit (0-0.12), Vulnerable (0.13-0.20), Mild Frailty (0.21-0.29) and Moderate/Severe Frailty (≥0.30) Edmonton Frailty Scale (EFS)[8]: Use the original 17 item scale to categorize as Fit (0-3), Vulnerable (4,5), Mild Frailty (6-7), Moderate Frailty (8-9) and Severe Frailty (10-17).

	Clinical Frailty Scale (CFS)[9]: Use the modified nine point scale. A pictogram is needed for proper administration of this tool. Categorize as Fit (1-3), Vulnerable (4), Mild Frailty (5), Moderate Frailty (6), and Severe Frailty (7-9)

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Appendix A: Glossary of Terms

Age-related decline. A change in overall health status characterized by chronic problems commonly seen in older age, such as falls, immobility, cognitive impairment, unintentional weight loss, multi-morbidity, and polypharmacy. Though less common, this pattern may also be seen in individuals younger than age 65.

Acute Care Setting. A setting, such as a hospital, designed primarily to provide formal care to individuals experiencing acute illness. This includes emergency departments and pre-operative clinics, as entry points to the acute care hospital itself. This does not include primary or intermediate care settings where active, acute care is provided.

Advanced Care Planning. The process of helping patients to plan for the future, which involves discussing and documenting the patient wishes for future healthcare decisions in the event that they later become incapable of making such decisions.

Case Finding for Frailty. Case finding involves the discovery of frailty amongst individuals suspected to be at risk. Individuals at risk are over age 65 and/or have experienced age-related decline. By comparison, screening involves the discovery of frailty amongst otherwise apparently healthy individuals.

Clinical Judgement-based Frailty Scale. A Clinical Judgement-based Frailty Scale requires a previously prepared database employed by an experienced or expert clinician who forms an impression on functional status. Example: Clinical Frailty Scale.

Components of Frailty. Based on frailty as a multidimensional syndrome, components include common problems that develop in older age, or geriatric syndromes. These include falls, immobility, cognitive impairment, unintentional weight loss, dehydration, multi-morbidity, functional decline, urinary incontinence, depression, chronic pain, constipation, social isolation, and polypharmacy.

Comprehensive Geriatric Assessment (CGA). A multidisciplinary diagnostic and treatment process that defines medical, functional, and psychological and social capabilities of an older adult, resulting in a coordinated plan of action. CGA's may include the involvement of specialists in the care of the older adults, and may occur by the primary team providing care, or by a consulting team.

Deficit-based Frailty Scale. A deficit-based frailty scale employs a critical number of potential items (or deficits if present), which accumulate with age, have a negative health impact, and collectively cover multiple body systems. Examples include: Frailty Index and the Electronic Frailty Index.

Elder Friendly Care. To establish common province-wide terminology, "Elder friendly care" will be synonymous with "Senior friendly care". It "provides an environment, culture, and care practices that adapt to senior's physical and cognitive needs, promote good health, maximize safety, and involve patients and their caregivers as partners in their care. It enables seniors to regain their health and transition smoothly from hospital to the level of care that best suits their needs." (Covenant Health Senior Friendly Facility/Centre Environmental Scan, 2016)

Geriatric Consultation. At any point during the trajectory of acute illness and its resolution, the team that is most responsible for the care of a patient may request assistance in the form of assessment, recommendations, or active ongoing participation in care provision from an individual consultant or consultation team. Where available, this may include physicians with special qualifications in geriatrics (Geriatric Medicine, Care of the Elderly, Geriatric Psychiatry) or with other qualifications relevant to the component of frailty (Palliative Care, Neurology, Psychiatry). Depending upon the case complexity and the setting, the intensity of involvement may range from a one-time visit, to episodic input, to ongoing input.

Integrated Plan of Care. A single care plan for a patient based on inter-professional assessments. The Integrated Plan of Care becomes a single source of truth for documenting

and communicating within and amongst care teams. (CoACT Glossary – available at http://insite.albertahealthservices.ca/assets/coact/tms-coact-glossary.pdf.)

Intermediate Care Setting. This is a setting designed for individuals whose care is in transition between an acute or complex care setting and a primary care setting. Examples include rehabilitation hospitals, subacute care, hospice, and restorative care.

Multimorbidity. Two or more chronic health conditions

Polypharmacy. The practice of taking more medications than are clinically indicated.

Primary Care Setting. The Primary Care setting is outside of Acute Care where an individual primarily resides. It may be independent living, supportive living or long-term care. In these settings, there may be a primary care physician and team most responsible for their care.

Rapid Case Finding. As it is not practical to screen all hospital admissions for frailty, case-finding (targeting individuals or groups suspected to be at risk) is employed. In acute care, this case-finding must be rapid to be practical. The ideal is to employ a decision aid such as the eFI built into an electronic medical record which would proactively alert clinicians to possible cases. Failing this, bedside tools such as the CFS and EFS are recommended.

Structured Medication Review. A process by which all medications are listed and systematically examined to determine medication appropriateness in comparison to current medical problems and frailty status, any drug-drug interactions, and planned actions to reduce harm and align with patient goals.

Syndrome-based Frailty Scale. A syndrome-based frailty scale employs a multidimensional capture of patterns of age-related decline, also known as geriatric syndromes. These scales do not require a prior database of information and can be administered by non-experts. Example: Edmonton Frail Scale.

Teams.

(1) **The primary care team.** This refers to the health care providers who take a primary and ideally coordinated role in the ongoing care of an individual outside of acute care.

(2) **The attending team.** The attending team represents the most responsible physician (MRP) and the multidisciplinary team that take on daily responsibility during an acute care stay.

(3) **The consulting team.** Individual health care professionals or consultation-liaison services that provide additional guidance to the attending team during the hospital stay.

Appendix B – Canadian Nutrition Screening Tool (CNST)

Canadian Nutrition Screening Tool (CNST)
http://nutritioncareincanada.ca/sites/default/uploads/files/CNST.pdf

Identify patients who are at risk for malnutrition

	Admission		Rescreening	
Ask the patient the following questions*	Yes	No	Yes	No
Have you lost weight in the past 6 months WITHOUT TRYING to lose this weight?				
Have you been eating less than usual FOR MORE THAN A WEEK?				
Two "YES" answers indicate nutrition risk**				

*If the patient is unable to answer the questions, a knowledgeable informant can be used to obtain the information. If the patient is uncertain regarding weight loss, ask if the clothing is now fitting more loosely.
**If a patient is not at risk, rescreen within a week. Only consider weight change in the past week.