



Frailty in Older Adults – Early Identification and Management

Effective Date: October 25th, 2017

Scope

This guideline addresses the early identification and management of older adults with frailty or vulnerable to frailty. The guideline facilitates individualized assessment and provides a framework and tools to promote patient-centred strategies to manage frailty and prevent further functional decline. The primary focus of the guideline is the community-based primary care setting, although the tools and strategies included may be useful in other care contexts.*

Major topics addressed in the guideline:

- Definition
- Risk Factors
- Epidemiology
- Identification of Patients with Frailty or Vulnerable to Frailty
- Comprehensive Assessment of Patients with Frailty
- Management
- Medication Review
- Advance Care Planning
- Indications for Referral
- Appendices and Associated Documents

Key Recommendations

- See [Appendix A: Frailty Assessment and Management Pathway](#).
- Early identification and management of patients with frailty or vulnerable to frailty provides an opportunity to suggest appropriate preventive and rehabilitative actions (e.g. exercise program, review of diet and nutrition, medication review) to be taken to slow, prevent, or even reverse decline associated with frailty.
- Use a diligent case finding approach to identify patients with frailty, particularly among older adults who regularly or increasingly require health and social services. However, routine frailty screening of the general population of older adults is not recommended.
- Many patients with frailty can be assessed and managed in the primary care setting through a network of support, which may include family, caregivers, and community care providers. Coordinate care with other care providers and ensure patients and caregivers are referred to or connected with local health care and social services.
- For patients with frailty who have multiple health concerns, consider using “rolling” assessments over multiple visits, targeting at least one area of concern at each visit.
- Polypharmacy is common in patients with frailty. Consider the benefits and harms of medications by conducting a medication review in all patients with frailty.
- Develop a care plan using the areas of geriatric assessment outlined in [Appendix B: Sample Care Plan Template](#) as a guide. Share the care plan with the patient and/or family/caregivers/representatives, and with other key care providers.
- Initiate advance care planning discussions for patients with frailty or vulnerable to frailty.

* For guidance on assessing older adults in the inpatient hospital setting, see *Hospital Care for Seniors Clinical Care Management Guideline: 48/6 Model of Care*, available at the BC Patient Safety and Quality Council website at: bcpsc.ca/clinical-improvement/48-6/practice-statements

Definition

Frailty is broadly seen as a state of increased vulnerability and functional impairment caused by cumulative declines across multiple systems.¹⁻⁴ Frailty has multiple causes and contributors⁵ and may be physical, psychological, social, or a combination of these. Frailty may include loss of muscle mass and strength, reduced energy and exercise tolerance, cognitive impairment, and decreased physiological reserve, leading to poor health outcomes and a reduced ability to recover from acute stress.⁶ Overall, frailty exists on a spectrum.⁷ While frailty is often chronic and progressive, it is also dynamic and some patients may be able to improve their frail status.⁸

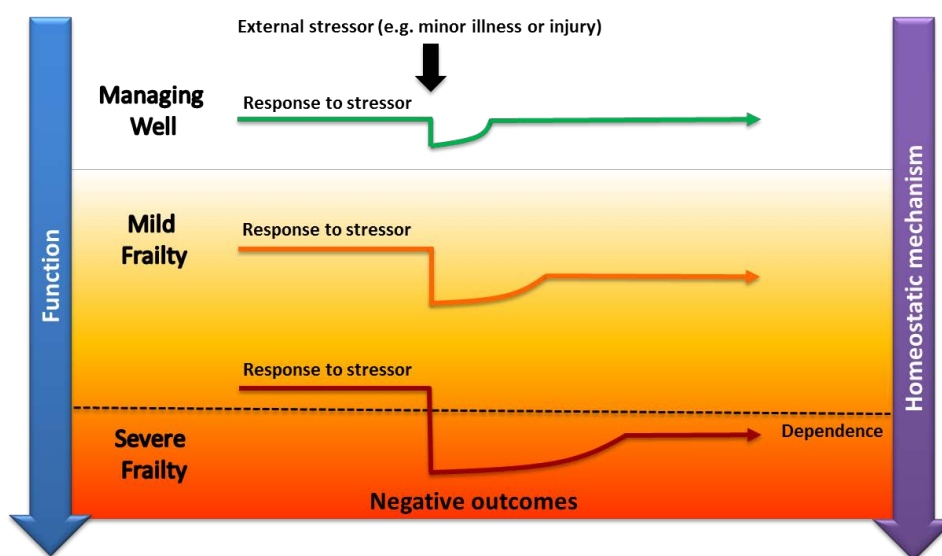
Risk Factors

With aging, there is a gradual decline in physiological reserve. However, aging is a complex process; evaluation of frailty and its severity is a better indicator of health status than chronological age. Risk factors for frailty include:

- advanced age
- functional decline
- poor nutrition and/or weight loss
- polypharmacy
- poverty and/or isolation
- medical and/or psychiatric comorbidity

Frailty risk and its severity increases with deficit accumulation.⁹ Physiological reserve may be further decreased by factors such as exacerbation of chronic disease, acute illness, injury, hospitalization, or a change in social supports, leading to increased vulnerability. Consequently, minor stressors may cause a disproportionate change in health status and function.¹⁰

Figure 1: Vulnerability of frail older adults to external stressors



Managing well: A fit older adult who, following a minor stressor, experiences a minor deterioration in function and then returns to homeostasis.

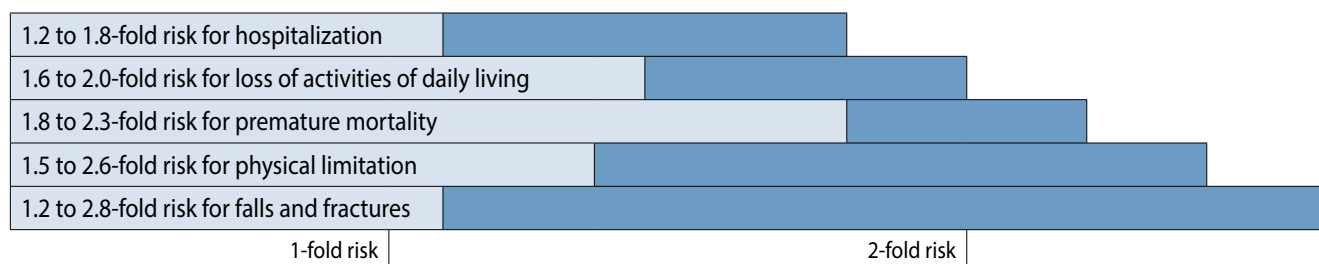
Frailty: A frail older adult who, following a similar stressor, experiences more significant deterioration and does not return to baseline homeostasis. With more severe frailty, this may lead to functional dependency or death.

Adapted from Clegg A, Young J, Iliffe S, Rikkert MO, Rockwood K. Frailty in elderly people. *The Lancet*. 2013 Mar;381(9868):752-62 & Lang P-O, Michel J-P, Zekry D. Frailty Syndrome: A Transitional State in a Dynamic Process. *Gerontology*. 2009;55(5):539-49.

Epidemiology

While many adults living in BC remain robust and active as they age, some older adults develop frailty or are vulnerable to frailty. In 2009/10, an estimated 20.4% of British Columbians aged ≥ 65 years living in the community (128,000 people) were frail.⁴ The prevalence of frailty increases with advanced age (from 16% at ages 65 to 74, to 52% at age 85 and older) and more often affects women than men.⁴ However, frailty may also be prevalent in younger adults.¹¹ The number of frail older adults in BC will continue to climb as the population ages. Frailty is associated with an increased risk of adverse outcomes and higher utilization of health care services.^{4,12} A recent meta-analysis found that frailty was associated with increased risk for several negative health outcomes, which are listed in Figure 2.¹³

Figure 2: Increased risk of negative outcomes associated with frailty¹³



Early identification of patients with frailty or vulnerable to frailty provides an opportunity to suggest appropriate preventive and rehabilitative actions (e.g. exercise program, review of diet and nutrition, medication review) to be taken to slow, prevent, or even reverse decline associated with frailty⁸ Although women are generally at higher risk of frailty, they have a better chance of frailty improvement and lower mortality than men.⁸

Identification of Patients with Frailty or Vulnerable to Frailty

Routine frailty screening of the general population of older adults is not recommended.⁷ Instead, use a case finding approach to identify patients with frailty, particularly in older adults who regularly or increasingly require health and social services (e.g. emergency room visits, ambulance crew attendance, adult day clinics, hospitalization, home support, referral to residential care).⁷ Encounters with health and social care professionals present an opportunity to identify older adults with frailty or vulnerable to frailty and take steps to reduce or manage associated risks.^{7,14-18}

► Signs and Symptoms

Use a diligent case finding approach to identify warning signs of frailty. Older adults may have a number of non-specific concerns that may suggest frailty or vulnerability to frailty. In addition to the review of chronic conditions, some other areas to assess are noted in Table 1 below. Observed changes or concerns expressed in these areas may be early warning signs of frailty, while a combination of impairments may signal progression towards frailty.

There are certain signs and symptoms (e.g. falls, delirium, immobility) may raise a higher level of suspicion that the patient has frailty⁷ – see Table 1. However, these problems may have causes other than frailty, so it is important to conduct a further review.

Table 1: Possible warning signs of frailty^{1, 7, 15, 19, 20}

Signs indicated with **bold** * may raise a higher level of suspicion of frailty

<p>Medical:</p> <ul style="list-style-type: none"> • unintentional weight loss* (esp. if ≥ 10lbs/4.5kg over past year) • incontinence* • loss of appetite • loss of muscle/strength (sarcopenia) • osteoporosis • impaired vision/hearing • chronic pain • repeated ER visits/hospitalization <p>Psychological:</p> <ul style="list-style-type: none"> • delirium* • cognitive impairment/dementia* • depression • irrational fears/concerns • inappropriate behaviour • irregular sleep patterns 	<p>Functional:</p> <ul style="list-style-type: none"> • declining functional status* • immobility* • recent fall(s)*, fear of falling • impaired balance • fatigue or loss of energy • reduced physical activity/endurance <p>Medications and alcohol:</p> <ul style="list-style-type: none"> • susceptibility to medication side effects* • polypharmacy related issues • increased alcohol consumption <p>Social and environmental:</p> <ul style="list-style-type: none"> • social isolation • transition in living circumstances • change in family/caregiver support • caregiver stress
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► Frailty Scoring Tools

Patients with more severe frailty or certain geriatric syndromes may be easily identified. **However, identifying mild or early stage frailty may require a formal assessment – consider confirming clinical suspicion of frailty with a scoring tool.**

Dozens of different frailty measures have been developed over the years, but there is no single measure that is viewed as the gold standard²¹ and many are not well adapted for the busy primary care setting.²² The tools in Table 2 are recommended for community-based primary care.²³

Table 2: Recommended frailty scoring tools for community-based primary care

	Tool	Frailty suggested by:	
General	PRISMA-7 Questionnaire	Score ≥ 3 ⁷	
Mobility	Gait Speed Test	Time > 5 seconds over 4m ⁷	These tests, including scoring information, are available in the Associated Documents section below.
	Timed Up and Go Test (TUG)	Time > 10 seconds ⁷	
Cognitive Impairment	Standardized Mini Mental State Exam (SMMSE)	See BCGuidelines.ca: Cognitive Impairment - Recognition, Diagnosis and Management in Primary Care	
	Montreal Cognitive Assessment (MoCA)		
	Other tests, as appropriate		

Any one of the above tools may suggest frailty. Cognition and mobility tests are best done in the outpatient setting when patients are at their clinical baseline.

Comprehensive Assessment of Patients with Frailty

Patients with identified frailty require additional assessment to support the development or refinement of a care plan. The gold standard for assessing and managing frailty in older adults is comprehensive geriatric assessment:⁷ an interdisciplinary process that evaluates medical, psychological, social and functional domains of older adults with frailty to develop a detailed care plan for treatment, support and follow-up.²⁴ However, comprehensive geriatric assessment by medical specialists in geriatric care is resource intensive – see [Indications for Referral](#) below.

Many patients with frailty can be assessed and managed in the primary care setting through a network of support, which may include family, caregivers, and community care providers. Ensure patients and caregivers are referred to or connected with local health care and social services, such as those available to eligible patients through Home and Community Care within local health authorities.

► Areas of Assessment

There are number of common problems associated with frailty such as falls, weight loss, poor nutrition, physical inactivity, cognitive impairment and polypharmacy—many of which may be reversible or preventable—that should be addressed to improve outcomes.

Conduct a review of the medical, functional, psychological and social/environmental needs of the patient.^{P7P} The areas of geriatric assessment outlined in Table 3 in the Management section below and the [Appendix B: Sample Care Plan Template](#) may help guide assessment.

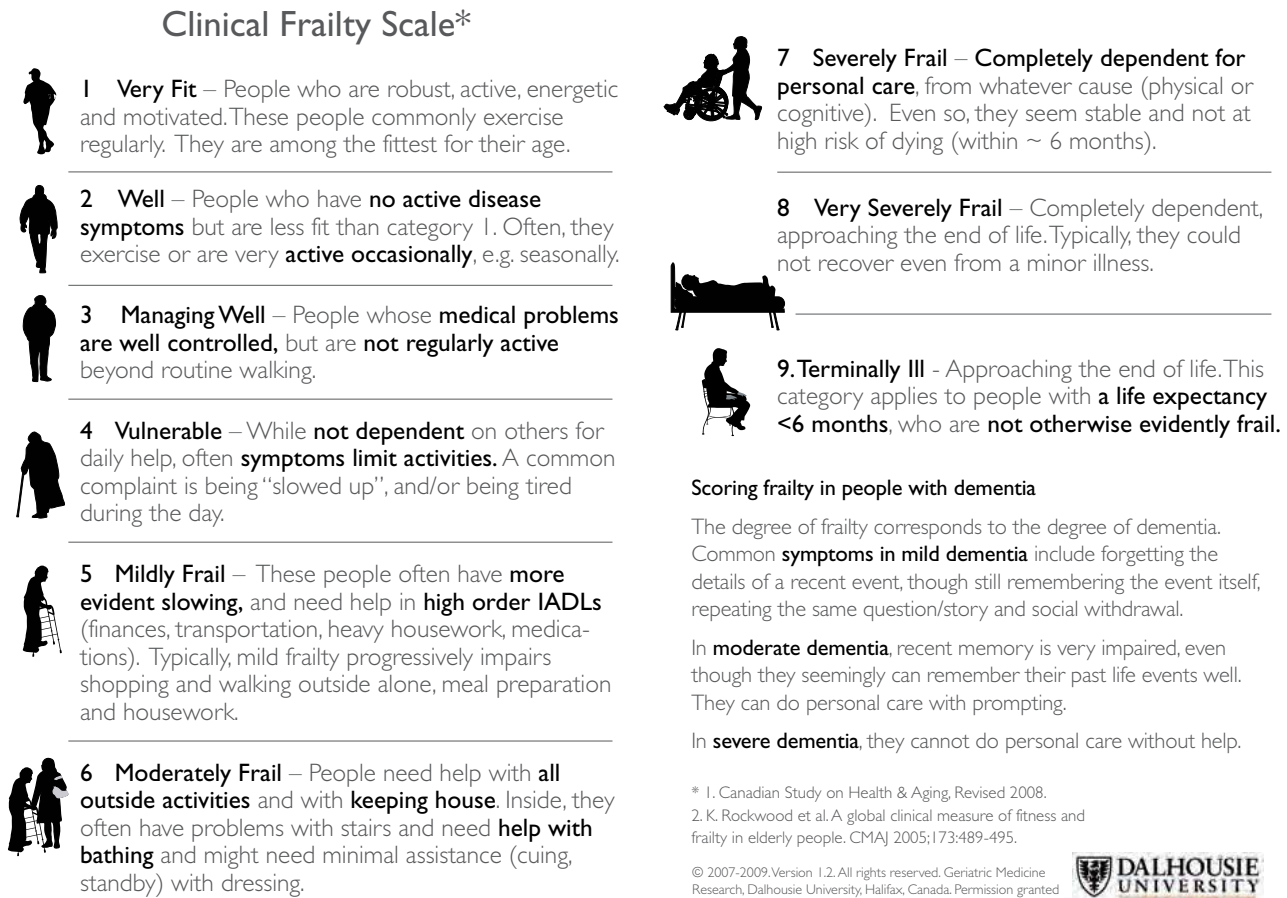
For patients with frailty who have multiple health concerns, consider using “rolling” assessments over multiple visits, targeting at least one area of concern at each visit.²⁵

Family physicians may be eligible for **Complex Care incentive fees**, which offer additional compensation to family physicians for the management of patients with complex conditions, including moderate or severe frailty, or for **Chronic Disease Management incentive fees**. See [www.gpsc.bc.ca: Billing Guides](http://www.gpsc.bc.ca/Billing-Guides).

► Grading Severity of Frailty

Once a patient is identified as frail or vulnerable to frailty, it is recommended that the Clinical Frailty Scale be used to categorize the needs of the patient. The Clinical Frailty Scale is a validated tool that uses clinical information to stratify patients with frailty based on their level of vulnerability. The Clinical Frailty Scale is a strong predictor of institutionalization and mortality² and is useful for consistently communicating frailty status between care providers.

Figure 3: Clinical Frailty Scale²



A PDF of Figure 3 is available at: <https://www.dal.ca/sites/gmr/our-tools/clinical-frailty-scale.html>. See also the PATH Frailty App based on the Frailty Assessment for Care Planning Tool (FACT) - <https://pathclinic.ca/app/>.

Management

Use the areas of geriatric assessment outlined in Table 3 below and in [Appendix B: Sample Care Plan Template](#) as a guide in developing a care plan.

The care plan is intended to be developed over a series of planned office visits with one or more areas of concern addressed at each appointment.

Review and document goals and strategies to address each area of concern. Consider relevant evidence available regarding

- important outcomes;
- patient trajectory and prognosis;
- interactions within/among treatments and conditions; and
- benefits and harms of care plan components.²⁶

When possible, work with other care providers as an interdisciplinary team and establish clear roles and duties. Physicians may be eligible for Patient Conferencing fees for case conferencing with other health care providers – see [www.gpsc.bc.ca: Patient Conferencing Fee Initiative](http://www.gpsc.bc.ca/Patient-Conferencing-Fee-Initiative).

► Approach to Care Plan Development

1) Inquire about the patient's primary concerns

Also consider the concerns of family, caregivers and representatives, as appropriate.²⁶

2) Review patient goals of care, values and preferences²⁶

The care plan should be developed jointly with the patient and/or the patient representative, as appropriate, to establish a shared understanding of desired care.¹⁴

The care plan should address:

- individualized goals associated with significant health and safety risks;²⁷
- plans to manage significant comorbidities in relation to patient goals;²⁸
- appropriate prevention activities for the patient;²⁹ and
- self-management support for the patient and family/caregiver(s).

Identify patients who would benefit from palliative care early in the illness trajectory: a palliative approach addresses the need for pain and symptom management, as well as psychosocial and spiritual support.

3) Review history, current medical conditions, and interventions

Frailty can mask or mimic other illness, so it is essential to determine whether the limitation the patient is experiencing results from frailty or a comorbid condition.

- Review signs and symptoms and conduct investigations for differential diagnoses, as appropriate.
- Review weight, diet and food intake, and level of physical activity.

Consider patient adherence and comfort with past/current treatment plans.²⁶ **Note that treatment guidelines and prescribing recommendations developed for more robust adults are often inappropriate for older adults with frailty.**

4) Consider conducting a medication review

Polypharmacy is common in patients with frailty. Consider the benefits and harms of medications by conducting a medication review in patients with frailty – see [Appendix C: Medication Review](#) and the Medication Review section below. Medication reviews can decrease the number of drug-related problems and adverse drug reactions.^{30,31} The process helps prioritize the patient's goals of care, eliminate unnecessary drugs, add needed drugs, and review monitoring requirements.

5) Initiate advance care planning discussions – see the Advance Care Planning section and [Associated Document: Advance Care Planning: Resource Guide for Patients and Caregivers](#).

6) Communicate the care plan

Communication for coordination and continuity of care is particularly important for older adults with frailty.²⁸ The care plan should include the names and contact information of key care providers (e.g. community support team, case manager, specialists, allied health professionals) and should be shared with key care providers. Give a copy of the care plan to the patient and/or family/caregivers/representatives to carry as they become involved with other health care providers and as they transition across care settings.

7) Reassess the care plan at selected intervals

Identify an appropriate timeframe to re-evaluate the care plan. Consider benefit, feasibility, adherence, and alignment with patient goals, values and preferences.²⁶

Provide the patient with a copy of the [Associated Document: Resource Guide for Older Adults and Caregivers](#).

Table 3: Areas of geriatric assessment^{24,32}

This table is offered as a guide for areas of assessment to consider.

AREAS OF ASSESSMENT	RECOMMENDATIONS AND RESOURCES
Medical Review	
IMMUNIZATIONS <ul style="list-style-type: none"> • Annual influenza • Pneumococcal • Td (or Tdap) booster • Herpes zoster 	<ul style="list-style-type: none"> • Td vaccine booster recommended every 10 years. Tdap (pertussis) booster vaccine recommended for adults who were immunized in childhood. See the BC Immunization Manual and Schedules, including info on pneumococcal vaccines (PPV23 and PCV13): www.bccdc.ca/immunization
HABITS <ul style="list-style-type: none"> • Smoking • Sexual function • Alcohol use • Substance use 	<ul style="list-style-type: none"> • Consider referral to smoking cessation program and www.quitnow.ca. • See BCGuidelines.ca: Problem Drinking.
NUTRITION <ul style="list-style-type: none"> • Diet/appetite • Weight loss • Swallowing • Dentition • Obesity 	<ul style="list-style-type: none"> • Direct patient to dietitian services offered through HealthLinkBC.ca or 8-1-1. • Consider referral for a swallowing assessment or dietitian consult. • Consider nutrition supplement or vitamin D supplement. • A protein intake of between 1.2 and 1.5 g/kg/day is recommended.³³
BOWEL AND BLADDER <ul style="list-style-type: none"> • Bladder or bowel incontinence • Constipation • Diarrhea 	<ul style="list-style-type: none"> • Review medications that may contribute to bowel or bladder problems (e.g. calcium, narcotics, CCBs, TCA, etc.), or add a bowel protocol. • Consider referral to a Nurse Continence Advisor, where available.
PERCEPTION AND COMMUNICATION <ul style="list-style-type: none"> • Vision • Hearing • Speech 	<ul style="list-style-type: none"> • Consider referral to an optometrist, ophthalmologist, audiologist, or speech language pathologist.
PAIN	<ul style="list-style-type: none"> • See www.gpsc.bc.ca: Pain Management Tools and Resources
Psychological Review	
COGNITION <ul style="list-style-type: none"> • Memory • Delirium • Capacity assessment • Executive function • Behavioural issues 	<ul style="list-style-type: none"> • See BCGuidelines.ca: Cognitive Impairment. • Consider using cognitive assessment tools: see Associated Documents: <i>Standardized Mini Mental State Exam</i> and <i>Montreal Cognitive Assessment</i>. • Consider psychiatry referral for patients with complex coexisting psychiatric problems, including challenging behaviour in dementia.⁷
MOOD <ul style="list-style-type: none"> • Depression • Anxiety • Irrational fears • Sleep problems 	<ul style="list-style-type: none"> • See BCGuidelines.ca: Major Depressive Disorder in Adults - Diagnosis and Management and Primary Care Management of Sleep Complaints in Adults.
Functional Review	
MOBILITY <ul style="list-style-type: none"> • Gait and speed • Mobility aids • Balance • Foot care/footwear 	<ul style="list-style-type: none"> • Consider use of mobility assessment tools: see Associated Documents: <i>Gait Speed Test</i> and <i>Timed Up and Go Test</i>. • Consider referral to physical therapist.
FALL RISK <ul style="list-style-type: none"> • Fall history • Osteoporosis • Fall prevention • Drugs that increase fall risk 	<ul style="list-style-type: none"> • Direct patient to FindingBalanceBC.ca, including <i>SAIL Home Activity Program</i>. • Consider a medical review for factors that increase fall risk. • Consider arranging for an alert device or recommending using a hip protector. • See gov.bc.ca: Fall Prevention Guidelines and Drugs and the Risk of Falling and www.gpsc.bc.ca: Fall Prevention Resources.
PHYSICAL ACTIVITY <ul style="list-style-type: none"> • Activity level • Fatigue and energy level • Exercise program • Endurance and strength 	<ul style="list-style-type: none"> • Assess patient fitness for physical activity (fall risk, cardiac risk, etc.). • Consider referral to a community exercise program. A program that includes balance, strength, flexibility and endurance training is recommended. • Direct patient to physical activity services offered by HealthLinkBC.ca or 8-1-1. • Consider referral to physical therapist or occupational therapist.
BASIC ACTIVITIES OF DAILY LIVING <ul style="list-style-type: none"> • Bathing • Dressing • Toileting • Transfers • Feeding 	<ul style="list-style-type: none"> • Consider referral for occupational therapy, home care support, social work, etc.: available through Home and Community Care at local health authorities.
INSTRUMENTAL ACTIVITIES OF DAILY LIVING <ul style="list-style-type: none"> • Cooking • Cleaning • Shopping • Medications • Banking • Driving 	<ul style="list-style-type: none"> • Consider referral for occupational therapy, home care support, social work, etc.: available through Home and Community Care at local health authorities. • Consider a driving fitness assessment – see gov.bc.ca: Driver Medical Fitness Information for Medical Professionals.

AREAS OF ASSESSMENT	RECOMMENDATIONS AND RESOURCES
Social and Environmental Review	
SOCIAL AND SPIRITUAL NEEDS <ul style="list-style-type: none"> • Hobbies/interests • Social activities • Isolation/loneliness • Spiritual needs 	<ul style="list-style-type: none"> • Consider recommending patient/family approach community spiritual leaders and organizations. • Consider referral to Spiritual Care services offered by local health authorities, where available.
CARE SUPPORT <ul style="list-style-type: none"> • Informal support from family/friends • Caregiver stress • Access to local resources/services • Eligibility for formal support 	<ul style="list-style-type: none"> • Consider directing caregivers to www.FamilyCaregiversBC.ca and the BC Family Caregiver Support Line at 1-877-520-3267. • Consider referral to home care support, caregiver respite, adult day services, social work, etc.: available through Home and Community Care at local health authorities.
MANAGING AT HOME <ul style="list-style-type: none"> • Home comfort and safety • Elder abuse • Medical equipment/supplies at home • Financial or legal concerns 	<ul style="list-style-type: none"> • Consider directing patient to access help at home through BetteratHome.ca • Consider referral for home care, medical equipment and supplies, social work, etc.: available through Home and Community Care at local health authorities. • Consider directing to SeniorsFirstBC.ca if elder abuse is suspected.

Medication Review

People aged ≥ 65 years represent the largest consumers of medications and consequently, experience the highest rate of adverse drug events. A 2012 Canadian study showed that 27% of seniors take five or more regular medications, with almost half experiencing an adverse reaction that required medical intervention.³⁴

Based on clinical judgement, review for potentially inappropriate medications and consider medication reduction and/or simplifying the medication regimen. For information and resources on conducting a medication review, see [Appendix C: Medication Review](#).

Medication reviews should be considered when a patient:

- has one or more chronic diseases;
- has a drug therapy problem or is on high risk drugs (e.g. opioids, antipsychotics);
- is on medications that are inconsistent with goals of care;
- has been recently discharged from hospital or had a significant change in health status;
- has multiple prescribers; or
- takes medications that require laboratory monitoring.

Consider requesting a medication review by a pharmacist. Community pharmacists are trained in conducting medication reviews. The patient's regular pharmacist may be able to conduct a medication review if requested. Medication reviews by a pharmacist are covered by BC Pharmacare for eligible patients – see gov.bc.ca: [PharmaCare Policy Manual](#).

Compile a complete record of drugs that the patient is taking, including any over-the-counter drugs and natural health products – see [Associated Documents: Best Possible Medication History](#). Give a dated copy of the medication record to the patient and/or family/caregivers/representatives, as appropriate.

Consider setting up your medical practice to have access to PharmaNet.[†] To learn more or to register, see gov.bc.ca: [Community Health Practice Access to PharmaNet](#).

[†] PharmaNet is an online database that captures all outpatient prescriptions for drugs and medical devices dispensed in BC. Community Health Practice Access to PharmaNet is available to all physicians and nurse practitioners licensed to practice in BC.

Advance Care Planning

Advance care planning involves conversations with the patient about their values and goals related to health care and the quality of they may be able to achieve with treatment alternatives. Advance care planning should be tailored to the needs of the patient along the disease trajectory. Advance care planning conversations should be documented in the care plan and include the identification of substitute decision makers.

- See the [Associated Document: Advance Care Planning Resource Guide for Patients and Caregivers](#) or the Ministry of Health's advance care planning guide *My Voice – Expressing My Wishes for Future Health Care Treatment*, available at gov.bc.ca/advancecare.

Depending on the patient's values and goals, health care providers should consider the need for the following documentation:

- **No Cardiopulmonary Resuscitation (No CPR) form:** Order that no CPR be provided by health care providers and first responders. For more information or to access the No CPR form, see [HealthLinkBC.ca: No CPR Form](#).
- **Medical Order for Scope of Treatment (MOST):** A patient's code status and scope of treatment can also be recorded in a MOST form. MOST forms are specific to each health authority and health care providers should refer to the policy and protocols of their health authority governing their use. Contact your local health authority for more information, or see [HealthlinkBC.ca: Advance Care Planning](#).

Indications for Referral

► Home and Community Care

Primary care practitioners play an essential role in identifying patients in need of increased supports and facilitating intake into the system of care support. Ensure patients and caregivers in need of support are referred to local health care and social services, which are available from both publicly subsidized and private pay providers.

- For help finding information on social and health resources in your local community, see BC211 at www.bc211.ca, or where available, see Fetch (For Everything That's Community Health) at www.divisionsbc.ca/provincial/fetch.
- Provide the patient with a copy of the [Associated Document: Resource Guide for Older Adults and Caregivers](#).

Case managed services available to eligible patients through Home and Community Care within local health authorities include:

- community nursing for acute, chronic, palliative or rehabilitative support;
- community rehabilitation by licensed physical and occupational therapists;
- adult day services for personal care, health care and social and recreational activities;
- home support for assistance with activities of daily living;
- caregiver respite and relief;
- assisted living and residential care; and
- end-of-life care services.

For more information, see gov.bc.ca: [Home and Community Care](#) or contact your local health authority.

► Comprehensive Geriatric Assessment

Patients with frailty who have multiple complex needs, diagnostic uncertainty or challenging symptom control may benefit from a referral to comprehensive geriatric assessment by geriatric medicine specialists or trained family physicians.⁷

- Physicians and nurse practitioners can contact the **Rapid Access to Consultative Expertise (RACE)** phone line to speak directly with a specialist, including geriatricians, or can access referral to a geriatric clinic through [PathwaysBC.ca](#). Refer to the Resources section below.

► Palliative Care

A palliative approach is needed for patients living with active, progressive, life-limiting illnesses who need pain and symptom management and support around functional or psychosocial issues, have care needs that would benefit from a coordinated or collaborative care approach, and/or have frequent emergency room visits. Assess where patients are in their illness trajectory, functional status, and symptom burden.

- Refer to BCGuidelines.ca: *Palliative Care Part 1: Approach to Care* and *SPICT™ Tool*.

Resources

RACE: Rapid Access to Consultative Expertise Program – www.raceconnect.ca

A telephone consultation line for select specialty services for physicians, nurse practitioners and medical residents.

If the relevant specialty area is available through your local RACE line, please contact them first. Contact your local RACE line for the list of available specialty areas. If your local RACE line does not cover the relevant specialty service or there is no local RACE line in your area, or to access Provincial Services, please contact the Vancouver/Providence RACE line.

- **Vancouver Coastal Health Region/Providence Health Care:** www.raceconnect.ca
☎ 604-696-2131 (Vancouver) or 1-877-696-2131 (toll free) Available Monday to Friday, 8 am to 5 pm
- **Northern RACE:** ☎ 1-877-605-7223 (toll free)
- **Kootenay Boundary RACE:** www.divisionsbc.ca/kb/race ☎ 1-844-365-7223 (toll free)
- **For Fraser Valley RACE:** www.raceapp.ca (download at Apple and Android stores)
- **South Island RACE:** www.raceapp.ca (download at Apple and Android stores) or see www.divisionsbc.ca/south-island/RACE

Pathways – PathwaysBC.ca

An online resource that allows GPs and nurse practitioners and their office staff to quickly access current and accurate referral information, including wait times and areas of expertise, for specialists and specialty clinics. In addition, Pathways makes available hundreds of patient and physician resources that are categorized and searchable.

General Practice Services Committee – www.gpsc.bc.ca

- **Practice Support Program:** offers focused, accredited training sessions for BC physicians to help them improve practice efficiency and support enhanced patient care.
- **Chronic Disease Management and Complex Care Incentives:** compensates GPs for the time and skill needed to work with patients with complex conditions or specific chronic diseases.

► References

1. Fried LP. Frailty in older adults: evidence for a phenotype. *J Gerontol Biol Sci Med Sci* [Internet]. 2001;56. Available from: <http://dx.doi.org/10.1093/gerona/56.3.M146>
2. Rockwood K. A global clinical measure of fitness and frailty in elderly people. *Can Med Assoc J*. 2005 Aug 30;173(5):489–95.
3. Puts MTE, Toubasi S, Atkinson E, Ayala AP, Andrew M, Ashe MC, et al. Interventions to prevent or reduce the level of frailty in community-dwelling older adults: a protocol for a scoping review of the literature and international policies. *BMJ Open*. 2016 Mar 1;6(3):e010959.
4. Hoover M, Rotermann M, Sanmartin C, Bernier J. Validation of an index to estimate the prevalence of frailty among community-dwelling seniors. *Health Rep*. 2013 Sep;24(9):10–7.
5. Morley JE, Vellas B, van Kan GA, Anker SD, Bauer JM, Bernabei R, et al. Frailty consensus: a call to action. *J Am Med Dir Assoc*. 2013 Jun;14(6):392–7.
6. Espinoza SE, Fried LP. Risk Factors for Frailty in the Older Adult. *Clin Geriatr*. 2007 Jun;15(6):37–44.
7. British Geriatrics Society. Fit for Frailty Consensus best practice guidance for the care of older people living with frailty in community and outpatient settings [Internet]. 2014 Jun. Available from: http://www.bgs.org.uk/campaigns/fff/fff_full.pdf
8. Trevisan C, Veronese N, Maggi S, Baggio G, Toffanello ED, Zambon S, et al. Factors Influencing Transitions Between Frailty States in Elderly Adults: The Progetto Veneto Anziani Longitudinal Study. *J Am Geriatr Soc*. 2017 Jan;65(1):179–84.
9. Clegg A, Young J, Iliffe S, Rikkert MO, Rockwood K. Frailty in elderly people. *The Lancet*. 2013 Mar;381(9868):752–62.
10. Clegg A. Frailty in elderly people. *Lancet* [Internet]. 2013;381. Available from: [http://dx.doi.org/10.1016/S0140-6736\(12\)62167-9](http://dx.doi.org/10.1016/S0140-6736(12)62167-9)

11. Kehler DS, Ferguson T, Stammers AN, Bohm C, Arora RC, Duhamel TA, et al. Prevalence of frailty in Canadians 18–79 years old in the Canadian Health Measures Survey. *BMC Geriatr* [Internet]. 2017 Dec [cited 2017 Aug 1];17(1). Available from: <http://bmcgeriatr.biomedcentral.com/articles/10.1186/s12877-017-0423-6>
12. Cesari M, Prince M, Thiyagarajan JA, De Carvalho IA, Bernabei R, Chan P, et al. Frailty: An Emerging Public Health Priority. *J Am Med Dir Assoc*. 2016 Mar 1;17(3):188–92.
13. Vermeiren S, Vella-Azzopardi R, Beckwée D, Habbig A-K, Scafoglieri A, Jansen B, et al. Frailty and the Prediction of Negative Health Outcomes: A Meta-Analysis. *J Am Med Dir Assoc*. 2016 Dec;17(12):1163.e1-1163.e17.
14. Tinetti ME, Fried T. The end of the disease era. *Am J Med*. 2004 Feb 1;116(3):179–85.
15. Fried LP, Ferrucci L, Darer J, Williamson JD, Anderson G. Untangling the concepts of disability, frailty, and comorbidity: implications for improved targeting and care. *J Gerontol A Biol Sci Med Sci*. 2004 Mar;59(3):255–63.
16. Béland F, Bergman H, Lebel P, Dallaire L, Fletcher J, Contandriopoulos A-P, et al. Integrated services for frail elders (SIPA): a trial of a model for Canada. *Can J Aging Rev Can Vieil*. 2006;25(1):5–42.
17. Kramer BJ, Auer C. Challenges to providing end-of-life care to low-income elders with advanced chronic disease: lessons learned from a model program. *The Gerontologist*. 2005 Oct;45(5):651–60.
18. Stock RD, Reece D, Cesario L. Developing a comprehensive interdisciplinary senior healthcare practice. *J Am Geriatr Soc*. 2004 Dec;52(12):2128–33.
19. Bergman H, Béland F, Karunanathan S, Hummel S, Hogan D, Wolfson C. Développement d'un cadre de travail pour comprendre et étudier la fragilité: Pour l'initiative canadienne sur la fragilité et le vieillissement. *Gérontologie Société*. 2004;109(2):15.
20. Gill TM, Gahbauer EA, Allore HG, Han L. Transitions Between Frailty States Among Community-Living Older Persons. *Arch Intern Med*. 2006 Feb 27;166(4):418.
21. Bouillon K, Kivimaki M, Hamer M, Sabia S, Fransson EI, Singh-Manoux A, et al. Measures of frailty in population-based studies: an overview. *BMC Geriatr* [Internet]. 2013 Dec [cited 2017 Feb 1];13(1). Available from: <http://bmcgeriatr.biomedcentral.com/articles/10.1186/1471-2318-13-64>
22. Hoogendijk EO, van der Horst HE, Deeg DJH, Frijters DHM, Prins BAH, Jansen APD, et al. The identification of frail older adults in primary care: comparing the accuracy of five simple instruments. *Age Ageing*. 2013 Mar 1;42(2):262–5.
23. Turner G, Clegg A. Best practice guidelines for the management of frailty: a British Geriatrics Society, Age UK and Royal College of General Practitioners report. *Age Ageing*. 2014 Nov 1;43(6):744–7.
24. Ramani L, Furmedge DS, Reddy SP. Comprehensive geriatric assessment. *Br J Hosp Med Lond Engl* 2005. 2014 Aug;75 Suppl 8:C122-125.
25. Elsayy B, Higgins KE. The geriatric assessment. *Am Fam Physician*. 2011 Jan 1;83(1):48–56.
26. American Geriatrics Society Expert Panel on the Care of Older Adults with Multimorbidity. Patient-Centered Care for Older Adults with Multiple Chronic Conditions: A Stepwise Approach from the American Geriatrics Society. *J Am Geriatr Soc*. 2012 Oct;60(10):1957–68.
27. Durso SC. Using clinical guidelines designed for older adults with diabetes mellitus and complex health status. *JAMA*. 2006 Apr 26;295(16):1935–40.
28. Kripalani S, LeFevre F, Phillips CO, Williams MV, Basaviah P, Baker DW. Deficits in communication and information transfer between hospital-based and primary care physicians: implications for patient safety and continuity of care. *JAMA*. 2007 Feb 28;297(8):831–41.
29. Petrone K, Katz P. Approaches to appropriate drug prescribing for the older adult. *Prim Care*. 2005 Sep;32(3):755–75.
30. Huiskes VJB, Burger DM, van den Ende CHM, van den Bemt BJF. Effectiveness of medication review: a systematic review and meta-analysis of randomized controlled trials. *BMC Fam Pract* [Internet]. 2017 Dec [cited 2017 Apr 12];18(1). Available from: <http://bmcfampract.biomedcentral.com/articles/10.1186/s12875-016-0577-x>
31. Jokanovic N, Tan EC, Sudhakaran S, Kirkpatrick CM, Dooley MJ, Ryan-Atwood TE, et al. Pharmacist-led medication review in community settings: An overview of systematic reviews. *Res Soc Adm Pharm* [Internet]. 2016 Aug [cited 2017 May 11]; Available from: <http://linkinghub.elsevier.com/retrieve/pii/S155174111630362X>
32. Comprehensive Assessment of the Frail Older Patient - British Geriatrics Society [Internet]. [cited 2017 Jan 27]. Available from: <http://www.bgs.org.uk/good-practice-guides/resources/goodpractice/gpgcgassessment>
33. Bauer J, Biolo G, Cederholm T, Cesari M, Cruz-Jentoft AJ, Morley JE, et al. Evidence-Based Recommendations for Optimal Dietary Protein Intake in Older People: A Position Paper From the PROT-AGE Study Group. *J Am Med Dir Assoc*. 2013 Aug;14(8):542–59.
34. Reason B, Turner M, Moses McKeag A, Tipper B, Webster G. The impact of polypharmacy on the health of Canadian seniors. *Fam Pract*. 2012 Aug 1;29(4):427–32.

► Appendices

- [Appendix A – Frailty Assessment and Management Pathway](#)
- [Appendix B – Sample Care Plan Template](#)
- [Appendix C – Medication Review](#)

► Associated Documents

- [PRISMA-7 Questionnaire](#)
- [Timed Up and Go \(TUG\) Test](#)
- [Gait Speed Test](#)
- [Standardized Mini-Mental State Examination](#)
- [Montreal Cognitive Assessment](#)
- [Best Possible Medication History](#)
- [Resource Guide for Older Adults and Caregivers](#)
- [Advance Care Planning: Resource Guide for Patients and Caregivers](#)

This guideline is based on scientific evidence current as of the effective date.

This guideline was developed by the Family Practice Oncology Network and the Guidelines and Protocols Advisory Committee, approved by the British Columbia Medical Association, and adopted by the Medical Services Commission.

THE GUIDELINES AND PROTOCOLS ADVISORY COMMITTEE

The principles of the Guidelines and Protocols Advisory Committee are to:

- encourage appropriate responses to common medical situations
- recommend actions that are sufficient and efficient, neither excessive nor deficient
- permit exceptions when justified by clinical circumstances

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Disclaimer

The Clinical Practice Guidelines (the “Guidelines”) have been developed by the Guidelines and Protocols Advisory Committee on behalf of the Medical Services Commission. The Guidelines are intended to give an understanding of a clinical problem, and outline one or more preferred approaches to the investigation and management of the problem. The Guidelines are not intended as a substitute for the advice or professional judgment of a health care professional, nor are they intended to be the only approach to the management of clinical problem. **We cannot respond to patients or patient advocates requesting advice on issues related to medical conditions. If you need medical advice, please contact a health care professional.**



Appendix A: Frailty Assessment and Management Pathway

A) USE A CASE FINDING APPROACH TO IDENTIFY WARNING SIGNS OF FRAILTY (SCREENING NOT RECOMMENDED)

Particularly among older adults who regularly or increasingly require health and social services (e.g. emergency room visits, ambulance crew attendance, adult day clinics, home support, etc.).

See [Table 1: Possible early warning signs of frailty](#)

FRAILTY SUSPECTED

**Tools not appropriate for all patients*

B) CONFIRM CLINICAL SUSPICION OF FRAILTY WITH A SCORING TOOL

Tool	Frailty suggested by:
General PRISMA-7 Questionnaire	Score ≥ 3
Mobility* Gait Speed Test Timed Up and Go Test	Time > 5 seconds over 4m Time > 10 seconds
Cognitive Impairment Standardized Mini Mental State Exam Montreal Cognitive Assessment	See BCGuidelines.ca: Cognitive Impairment

FRAILTY IDENTIFIED

C) CONDUCT COMPREHENSIVE ASSESSMENT OF PATIENT WITH FRAILTY
May be conducted as a [rolling assessment](#) over multiple office visits.

See [Table 3: Areas of geriatric assessment](#)

D) USE CLINICAL FRAILTY SCALE TO GRADE SEVERITY OF FRAILTY

See [Figure 3: Clinical Frailty Scale](#)

KEY ASSESSMENT AREAS

Medical: immunization, habits, nutrition, pain, bowel/bladder, vision/hearing/speech

Psychological: cognition, mood

Functional: mobility, fall risk, physical activity, basic and instrumental ADLs

Social/environmental: social/spiritual needs, need for care support/help at home

FRAILTY ASSESSED

E) DEVELOP OR REFINE THE CARE PLAN – see [Appendix B: Sample Care Plan Template](#)

Care plan may be developed during a complex care planning visit, or over a series of [planned office visits](#) with one or more areas of concern addressed at each appointment.

1. Inquire about the patient's primary concerns

Consider concerns of family/caregivers/representatives, as appropriate.

2. Review patient goals of care, values and preferences

Care plan should be developed jointly with the patient and/or representative.

3. Review history, current medical conditions, and interventions

Review signs and symptoms and conduct investigations, as appropriate. Consider adherence and comfort with past or current treatment plans.

4. Consider a medication review – see [Appendix C: Medication Review](#)

Consider requesting a medication review by a pharmacist. Compile a complete record of drugs the patient is currently taking and give a dated copy to the patient/caregiver/representative – see [Best Possible Medication History](#)

5. Initiate advance care planning discussions

See [Advance Care Planning: Resource Guide for Patients and Caregivers](#)

6. Communicate the care plan

Share with patient and family/caregiver/representative and key care providers.

7. Reassess the care plan at selected intervals

Identify an appropriate timeframe to re-evaluate the care plan.

SUPPORT AND REFERRAL

HOME AND COMMUNITY CARE

For patients who require additional support at home or in the community.

COMPREHENSIVE GERIATRIC ASSESSMENT

For patients with multiple complex needs, diagnostic uncertainty or challenging symptom control.

PALLIATIVE CARE

For patients who would benefit from a palliative approach to care. See [BCGuidelines.ca:](#)

[Palliative Care Part 1: Approach to Care](#)

See [Resource Guide for Older Adults and Caregivers](#)

		CURRENT DATE	PLANNED DATE OF NEXT CARE PLAN REVIEW		
NAME OF PATIENT		TELEPHONE NUMBER	PERSONAL HEALTH NUMBER (PHN)		
NAME OF CAREGIVER		TELEPHONE NUMBER (PRIMARY)	TELEPHONE NUMBER (SECONDARY)		
NAME OF SUBSTITUTE DECISION MAKER		TELEPHONE NUMBER (PRIMARY)	TELEPHONE NUMBER (SECONDARY)		
NAME OF PRIMARY HEALTH CARE PROVIDER (E.G. GP)		TELEPHONE NUMBER (PRIMARY)	TELEPHONE NUMBER (SECONDARY)		
NAME OF SUPPORTING HEALTH CARE PROVIDER (1)		ROLE OR RESPONSIBILITY	TELEPHONE NUMBER		
NAME OF SUPPORTING HEALTH CARE PROVIDER (2)		ROLE OR RESPONSIBILITY	TELEPHONE NUMBER		
NAME OF SUPPORTING HEALTH CARE PROVIDER (3)		ROLE OR RESPONSIBILITY	TELEPHONE NUMBER		
COMORBID CONDITIONS ENDOCRINE <input type="checkbox"/> Diabetes <input type="checkbox"/> Hypothyroid MUSCULOSKELETAL <input type="checkbox"/> Arthritis <input type="checkbox"/> Osteoporosis RESPIRATORY <input type="checkbox"/> Asthma <input type="checkbox"/> COPD RENAL <input type="checkbox"/> CKD GFR: _____ OTHER COMORBID CONDITIONS:		CARDIOVASCULAR <input type="checkbox"/> Hypertension <input type="checkbox"/> CAD <input type="checkbox"/> PVD <input type="checkbox"/> Hypercholesterolemia <input type="checkbox"/> MI NEUROLOGICAL <input type="checkbox"/> Stroke	GASTROINTESTINAL <input type="checkbox"/> GERD <input type="checkbox"/> Ulcer <input type="checkbox"/> IBS/IBD <input type="checkbox"/> Constipation PSYCHIATRIC <input type="checkbox"/> Depression <input type="checkbox"/> Anxiety <input type="checkbox"/> Bipolar	HEIGHT (in/cm) WEIGHT (lbs/kg) BMI PATIENT/FAMILY/CAREGIVER PRIMARY CONCERNS:	
FRAILTY SCORING PRISMA-7: <input type="checkbox"/> Score ≥ 3		MOBILITY TUG Test: <input type="checkbox"/> Time >10s	Gait Speed Test: <input type="checkbox"/> Time > 5s over 4m	COGNITIVE ASSESSMENT SMMSE: MoCA:	CLINICAL FRAILTY SCALE <input type="checkbox"/> 1: Very fit <input type="checkbox"/> 2: Well <input type="checkbox"/> 3: Managing well <input type="checkbox"/> 4: Vulnerable <input type="checkbox"/> 5: Mildly frail <input type="checkbox"/> 6: Moderately frail <input type="checkbox"/> 7: Severely frail <input type="checkbox"/> 8: Very severely frail <input type="checkbox"/> 9: Terminally ill
PATIENT GOALS, VALUES AND PREFERENCES		STRATEGIES (INCLUDE REFERRALS MADE)	NOTES		
CARE PLAN DOCUMENTATION		CHECKLIST	DOCUMENTS COMPLETED	DATE COMPLETED	
MEDICATION REVIEW:		<input type="checkbox"/> Medication review conducted or requested <input type="checkbox"/> Patient/caregiver/representative given copy of medication record	<input type="checkbox"/> Best Possible Medication History (see example <i>Associated Document</i>)		
ADVANCE CARE PLANNING:		<input type="checkbox"/> Discussed advance care planning <input type="checkbox"/> Provide <i>Advance Care Planning Resource Guide</i>	<input type="checkbox"/> Medical Order for Scope of Treatment (MOST) <input type="checkbox"/> No Cardiopulmonary Resuscitation form (HLTH 302.1)		
CARE PLAN COMMUNICATION:		<input type="checkbox"/> Care plan shared with patient/caregiver/representative <input type="checkbox"/> Provided <i>Patient and Caregiver Resource Guide</i>	Names/roles of persons present at care plan discussion:		

AREAS OF ASSESSMENT

NOTES AND CONCERNS

RECOMMENDATIONS AND REFERRALS

MEDICAL REVIEW		
IMMUNIZATIONS <input type="checkbox"/> Annual influenza <input type="checkbox"/> Td (or Tdap) booster <input type="checkbox"/> Pneumococcal <input type="checkbox"/> Herpes zoster		
HABITS <input type="checkbox"/> Smoking <input type="checkbox"/> Alcohol use <input type="checkbox"/> Sexual function <input type="checkbox"/> Substance use		<input type="checkbox"/> Refer to smoking cessation program
NUTRITION <input type="checkbox"/> Diet/appetite <input type="checkbox"/> Dentition <input type="checkbox"/> Weight loss <input type="checkbox"/> Obesity <input type="checkbox"/> Swallowing		<input type="checkbox"/> Direct to HealthLinkBC dietitian services (8-1-1) <input type="checkbox"/> Provide Resource Guide section on Nutrition Referral to: <input type="checkbox"/> dietitian <input type="checkbox"/> swallowing assessment
BOWEL AND BLADDER <input type="checkbox"/> Bladder or bowel incontinence <input type="checkbox"/> Constipation <input type="checkbox"/> Diarrhea		<input type="checkbox"/> Medication review for bowel/bladder problem drugs <input type="checkbox"/> Implement bowel protocol <input type="checkbox"/> Referral to Nurse Continence Advisor, if available
PERCEPTION AND COMMUNICATION <input type="checkbox"/> Vision <input type="checkbox"/> Speech <input type="checkbox"/> Hearing		Referral to: <input type="checkbox"/> optometrist <input type="checkbox"/> ophthalmologist <input type="checkbox"/> audiologist <input type="checkbox"/> speech therapist
PAIN		<input type="checkbox"/> Direct to www.PainBC.ca
PSYCHOLOGICAL REVIEW		
COGNITION <input type="checkbox"/> Memory <input type="checkbox"/> Executive function <input type="checkbox"/> Delirium <input type="checkbox"/> Behavioural issues <input type="checkbox"/> Capacity assessment	MoCA Score: _____ SMMSE Score: _____	<input type="checkbox"/> Provide Resource Guide section on Managing Chronic Conditions
MOOD <input type="checkbox"/> Depression <input type="checkbox"/> Irrational fears <input type="checkbox"/> Anxiety <input type="checkbox"/> Sleep problems		
FUNCTIONAL REVIEW		
MOBILITY <input type="checkbox"/> Gait and speed <input type="checkbox"/> Balance <input type="checkbox"/> Mobility aids <input type="checkbox"/> Foot care/footwear	Gait Speed Test: _____ TUG Test: _____	<input type="checkbox"/> Provide Resource Guide section on Physical Activity Referral to: <input type="checkbox"/> physical therapy <input type="checkbox"/> occupational therapy
FALL RISK <input type="checkbox"/> Fall history <input type="checkbox"/> Fall prevention <input type="checkbox"/> Osteoporosis <input type="checkbox"/> Alert device		<input type="checkbox"/> Provide Resource Guide section on Fall Prevention <input type="checkbox"/> Review medications for drugs that increase fall risk
PHYSICAL ACTIVITY <input type="checkbox"/> Activity level <input type="checkbox"/> Exercise program <input type="checkbox"/> Fatigue and energy level <input type="checkbox"/> Endurance and strength		<input type="checkbox"/> Provide Resource Guide section on Physical Activity <input type="checkbox"/> Direct to HealthLinkBC Physical Activity Line (8-1-1) Referral to: <input type="checkbox"/> community balance or exercise program <input type="checkbox"/> physical therapy <input type="checkbox"/> occupational therapy
BASIC ACTIVITIES OF DAILY LIVING Bathing: <input type="checkbox"/> IND <input type="checkbox"/> ASST <input type="checkbox"/> DEP Dressing: <input type="checkbox"/> IND <input type="checkbox"/> ASST <input type="checkbox"/> DEP Toileting: <input type="checkbox"/> IND <input type="checkbox"/> ASST <input type="checkbox"/> DEP Transfers: <input type="checkbox"/> IND <input type="checkbox"/> ASST <input type="checkbox"/> DEP Feeding: <input type="checkbox"/> IND <input type="checkbox"/> ASST <input type="checkbox"/> DEP		<input type="checkbox"/> Referral to Home and Community Care
INSTRUMENTAL ACTIVITIES OF DAILY LIVING Cooking: <input type="checkbox"/> IND <input type="checkbox"/> ASST <input type="checkbox"/> DEP Medications: <input type="checkbox"/> IND <input type="checkbox"/> ASST <input type="checkbox"/> DEP Cleaning: <input type="checkbox"/> IND <input type="checkbox"/> ASST <input type="checkbox"/> DEP Banking: <input type="checkbox"/> IND <input type="checkbox"/> ASST <input type="checkbox"/> DEP Shopping: <input type="checkbox"/> IND <input type="checkbox"/> ASST <input type="checkbox"/> DEP Driving: <input type="checkbox"/> IND <input type="checkbox"/> CONCERN <input type="checkbox"/> DEP		<input type="checkbox"/> Referral to Home and Community Care <input type="checkbox"/> Consider driving fitness assessment
SOCIAL AND ENVIRONMENTAL REVIEW		
SOCIAL AND SPIRITUAL NEEDS <input type="checkbox"/> Hobbies/interests <input type="checkbox"/> Social activities <input type="checkbox"/> Isolation/loneliness <input type="checkbox"/> Spiritual needs		<input type="checkbox"/> Provide Resource Guide section on Social Support <input type="checkbox"/> Referral to Spiritual Care or community group
CARE SUPPORT <input type="checkbox"/> Informal support from family/friends <input type="checkbox"/> Caregiver stress <input type="checkbox"/> Access to local resources/services <input type="checkbox"/> Eligibility for formal support		<input type="checkbox"/> Provide Resource Guide section on Caregiver Support <input type="checkbox"/> Referral to Home and Community Care
MANAGING AT HOME <input type="checkbox"/> Home comfort and safety <input type="checkbox"/> Elder abuse <input type="checkbox"/> Medical equipment/supplies at home <input type="checkbox"/> Financial or legal concerns		<input type="checkbox"/> Provide Resource Guide section on Help at Home <input type="checkbox"/> Referral to Home and Community Care <input type="checkbox"/> Direct to SeniorsFirstBC.ca if elder abuse suspected

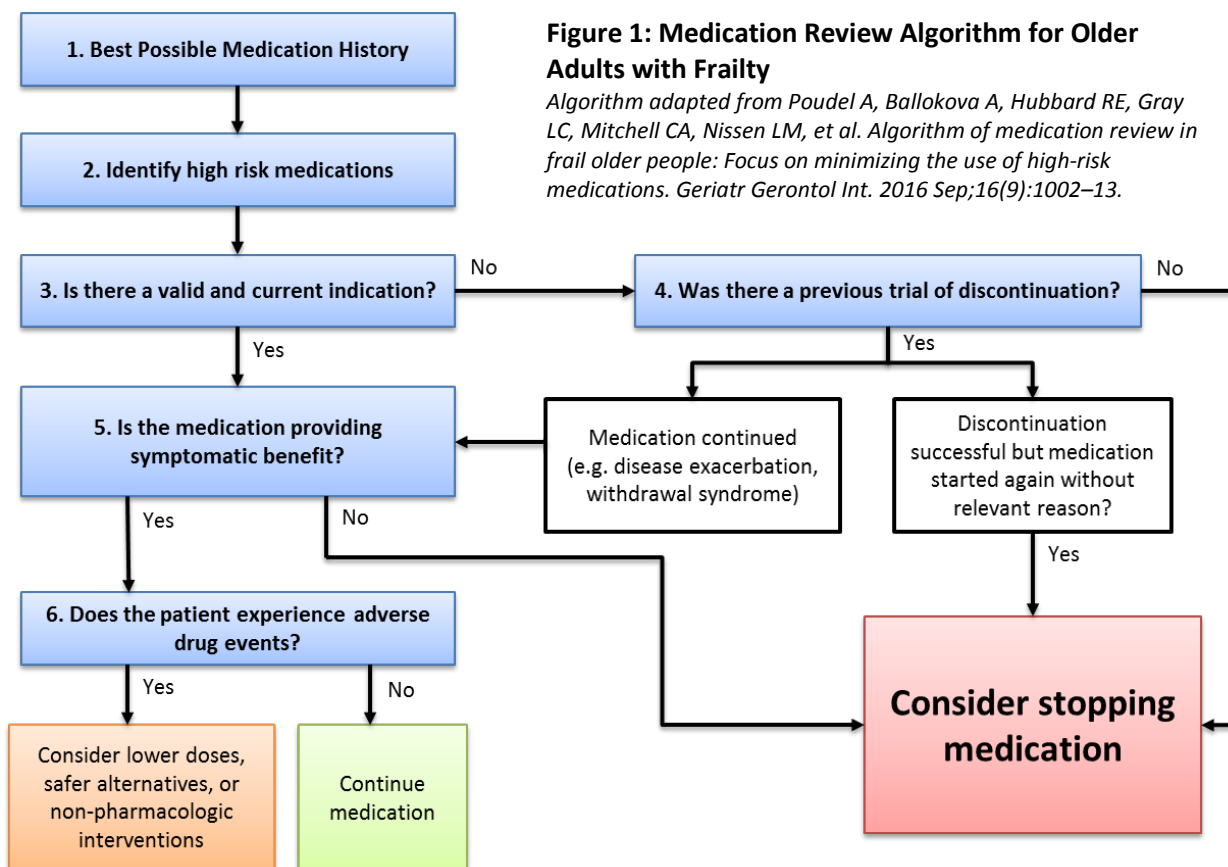


Appendix C: Medication Review

- ▶ **Be aware of inappropriate medications with potential to harm patients with frailty.** Weigh the benefits and risks of each and all medications. Not all polypharmacy is inappropriate.
- ▶ **Consider requesting a medication review by a pharmacist when a potential or existing drug-related problem has been identified.** Most community pharmacists can conduct medication reviews.
- ▶ **BC Pharmacare covers the cost of a medication review by a pharmacist for eligible BC residents.** For information on patient eligibility, see [www2.gov.bc.ca: PharmaCare Policy Manual](http://www2.gov.bc.ca:PharmaCare Policy Manual).
- ▶ **Consider a team-based phone call about medication review results.** Physicians may be eligible for conference and telephone management incentive fees – see www.gpsc.bc.ca: Billing Guides.
- ▶ **Communication between care providers is essential for effective medication management.** Prescribers must work with pharmacists, supporting health care providers, and the patient and caregivers to ensure potentially inappropriate medications are avoided; medications and doses are appropriate to goals of care, pill burden is minimized, and side effects are not treated with more medications without considering medication-related causes.

Common drug-related problems:

- Adverse drug reactions
- Drug interactions
- Dose too high or too low
- Improper drug selection
- Unnecessary drug
- Omission of necessary drug
- Inappropriate adherence



STEP 1: COMPILE BEST POSSIBLE MEDICATION HISTORY – see [Best Possible Medication History](#)

- ▶ **Get a list of drugs from the patient’s pharmacy or PharmaNet.** Physicians and nurse practitioners licensed in BC can get community access to PharmaNet – see gov.bc.ca: Community Health Practice Access to PharmaNet. Other sources of information include: product labels, medical records; hospital discharge summaries; and interviews with the patient, family or caregivers.
- ▶ **Collect and document all pertinent information about the patient’s current drug regimen and recently discontinued medications,** including prescription and non-prescription drugs and natural health products. If appropriate, have the patient bring all his/her medications into the appointment. Information to be collected includes:
 - Medication name
 - Strength and dosage form
 - Directions
 - Name of prescriber
 - Indication
 - Date started and stopped
 - How medication actually taken
 - Adverse drug events
 - Other relevant information (e.g., lipid profile, HbA1C levels, INR)
- ▶ **Assess adherence to medication regimen (prescribed vs. actual use).** Consider patient-specific factors (e.g. cognition, beliefs, vision, swallowing, manual dexterity); lack of patient adherence may be due to sensory or cognitive deficits. Encourage the use of medication organizers/packaging, including medication blister packs, dosettes and pouch strips to improve adherence.

STEP 2: IDENTIFY HIGH RISK MEDICATIONS

- ▶ **Consider if any medications are contributing to medical problems.** Potentially inappropriate medications may cause adverse drug events in patients with frailty due to pharmacological properties interacting with physiological changes of aging and/or existing medical conditions.
- ▶ **Be aware of “prescribing cascades”:** an adverse reaction interpreted as a new medical condition, and additional drug therapy ordered to treat this problem.
- ▶ **Deprescribing tools can be used to identify potentially inappropriate medications,** but are not intended to replace clinical judgement or individualization of care.

Deprescribing Tools ¹	Online Resources	
<ul style="list-style-type: none">▪ Beers Criteria²▪ STOPP/START³	<ul style="list-style-type: none">▪ www.MedStopper.com▪ Deprescribing.org▪ Ulowa.edu: Drugs with Anticholinergic Effects	<ul style="list-style-type: none">▪ Polypharmacy.ca▪ SharedCareBC.ca: Polypharmacy Risk Reduction Initiative

STEP 3: VALIDATE INDICATIONS FOR EACH HIGH RISK MEDICATION

- ▶ **Match each medication with an established medical problem.** Validation involves two steps:
 - 1) verify the diagnosis against formal diagnostic criteria; and then
 - 2) verify the evidence supporting the benefits of using the medication in patients with frailty (improvement of symptoms, function, quality of life, and risk of future adverse drug events).
- ▶ **Engage the patient in the discussion/decision-making, clarifying the patient’s health care goals and willingness to carry out the therapeutic plan.** Older patients often have different therapeutic outcomes/objectives than younger patients. Quality of life rather than therapeutic efficacy is generally more important in patients with short life expectancy.

STEP 4: CONSIDER PREVIOUS DISCONTINUATION TRIALS

- ▶ **Consider discontinuing a medication where there is either no valid diagnosis or indication of a previous discontinuation trial.** If a previously discontinued medication was restarted due to withdrawal symptoms, disease relapse, or other reasons, further assessment is needed.

STEP 5: ASSESS WHETHER THE MEDICATION IS PROVIDING ONGOING SYMPTOMATIC BENEFIT

- ▶ Medications used in patients with frailty should be prioritized according to their ability to suppress disabling or troubling symptoms or current active medical conditions, rather than the primary or secondary disease prevention (especially if unlikely to occur during remaining lifespan).
- ▶ **Medications fall under two categories:**

Medications providing immediate symptomatic benefits (e.g. analgesics) or are essential to preventing rapid symptomatic deterioration (e.g., diuretics and ACE inhibitors for severe heart failure)	Medications having no effect on symptoms and primarily used to prevent disease complications in the medium to long-term
High risk medications in this category <u>need to be assessed</u> based on a balance between the: <ul style="list-style-type: none">▪ magnitude of immediate symptomatic benefit;▪ magnitude of the risk of short-term harm; and▪ availability of equally effective non-pharmacological treatments.	High risk medications in this category <u>should be considered for discontinuation</u> unless the risk of a catastrophic disease event in very high and likely to occur within 6 to 12 months.

STEP 6: ASSESS WHETHER THE PATIENT IS EXPERIENCING ADVERSE DRUG EVENTS

- ▶ A discontinuation trial is warranted where a current high-risk medication is causing or has caused adverse drug events.

STEP 7: CONSIDER WITHDRAWING, ALTERING, OR CONTINUING MEDICATIONS

- ▶ Any decision on stopping, altering, or continuing medications must be tailored to the clinical status of individual patients – consider patient life expectancy, goals of care, values and preferences, and the medication’s likely impact on the patient’s quality of life. Consider the following:
 - changing to a **safer alternative** from the same or a pharmacologically similar medication class;
 - using a **non-pharmacological treatment**, when available and appropriate;
 - adjusting medication **dosage or frequency**;
 - **withdrawing** the medication; and
 - **continuing** the medication, as currently prescribed/used.

STEP 8: CONDUCT REGULAR, ONGOING MEDICATION REVIEWS

- ▶ Consider monitoring requirements for medications. Medication reviews should be conducted regularly based on clinical judgement, but particularly after changes in care settings, discharge from hospital, significant changes in health status, or changes in medication regimen.

Notes:

1. The STOPP/START tool has been shown to be superior to the Beers Criteria for predicting hospitalization and improving outcomes in the elderly, but is more time consuming to apply than the Beers Criteria. See Boland B, Guignard B, Dalleur O, Lang P-O. Application of STOPP/START and Beers criteria: Compared analysis on identification and relevance of potentially inappropriate prescriptions. *European Geriatric Medicine*. 2016 Sep;7(5):416–23.
2. American Geriatrics Society 2015 Beers Criteria Update Expert Panel. *American Geriatrics Society 2015 Updated Beers Criteria for Potentially Inappropriate Medication Use in Older Adults*. *J Am Geriatr Soc*. 2015 Nov;63(11):2227–46. Available at: onlinelibrary.wiley.com/doi/10.1111/jgs.13702/epdf
3. O’Mahony D, O’Sullivan D, Byrne S, O’Connor MN, Ryan C, Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. *Age Ageing*. 2015 Mar;44(2):213–8. Available at: www.ncbi.nlm.nih.gov/pmc/articles/PMC4339726/