Recognition of dementia, delirium, depression and frailty in the community

Dr Duncan Robertson FRCP FRCPC
Specialist in Geriatric Medicine
Supported Well, Living Well
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PHC IGSI: College of Family Physicians Canada Conflict of Interest slide

Faculty/Presenter Disclosure

- **Faculty:** Duncan Robertson

- **Relationships with commercial interests:**
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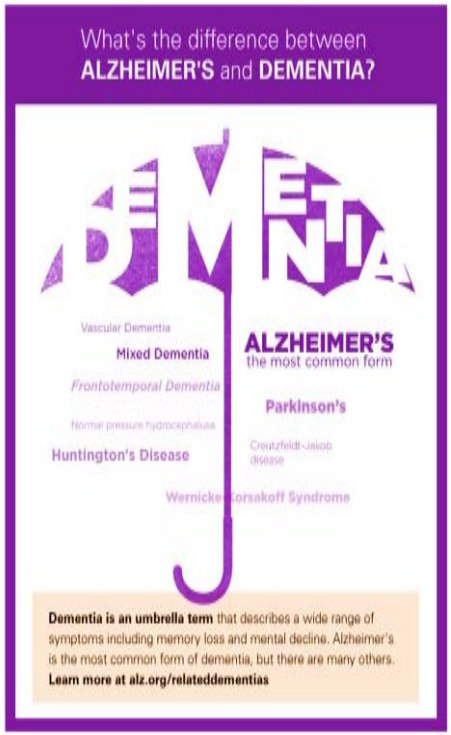
  - **Other:** None

Recognition and Care in Primary Health Care
Objectives and Overview



- Appreciate the evolving role of primary health care in recognition and pro-active care of dementia (MNC) and other geriatric syndromes.
- Understand why timely recognition of dementia is challenging but necessary.
- Identify some best-practice tools to recognize dementia, delirium, depression, frailty and co-morbid conditions

James Lind Alliance Dementia PSP 3 of the top 10 priorities

- What are the most effective components of care that keep a person with dementia as independent as they can be at all stages of disease in all care settings?
- What is the impact of an early diagnosis of dementia and how can primary care support a more effective route of diagnosis?
- What is the best way to care for people with dementia in a hospital setting when they have acute healthcare needs?

Reference: Kelly S, LaFortune L, Hart N et al., Dementia priority setting partnership with the James Lind Alliance: using patient and public involvement and evidence base to inform the research agenda, Age and Ageing 2015; 44: 985-993 doi: 10.1093/ageing/afv 143

ADSAP Feedback on key questions from >40 AB PHC respondents 2015

The **top 3 best practices** with respect to recognizing, diagnosing and managing dementia care in primary health care in Alberta:

- AUA Project
- **Primary Care Networks (PCNs)** in Alberta with programs for geriatric assessment including dementia.
- Geriatric services in regional centres with outreach to smaller communities

ADSAP Feedback on key questions from >40 AB PHC respondents 2015

The **top 3 promising practices in other jurisdictions** related to recognizing, diagnosing and managing dementia care in primary health care are:

- Memory clinics
- Community based geriatric assessment programs
- Home based respite care to those who are at high risk for institutionalization

Areas for Improvement in Dementia Care
Recommendations From Those Impacted AB 2015

- Strengthen public communications
  - Ensure public understands dementia
  - Reduce stigma
- Enhance supports for caregivers
- Support acute care's ability to care for those with dementia
- **Boost the capacity within primary care**
- Augment the workforces' knowledge, understanding and expertise related to care and support
- Develop a comprehensive dementia research plan
- Implement a measurement, monitoring and reporting framework to guide implementation of the strategy

Why so difficult to get a diagnosis ?

Why so difficult to get a diagnosis ? (UK)

- One third (31%) of people with dementia in UK said that they struggled to get a diagnosis.
- 68% had a gap of longer than a year between noticing their symptoms and getting a diagnosis.
- 8% had to wait five years or more for a diagnosis.
- Other data show that only 43% of people with dementia had been formally identified. UK.(2012)

Survey of people with dementia via Alzheimer's Society dementia support workers and dementia advisers in England, Wales and Northern Ireland 2012

Why so difficult to get a diagnosis?

Delay seeking advice from Primary Care (Canada)

- 50% wait 1 year
- 16% wait 2 years

Why from the person's perspective ?

- 53% "Just old age"
- 39% "Symptoms episodic/not serious"
- 25% "Refusal to see MD"

Perspective of Caregiver

- 75% wish they had sought diagnosis earlier

"Let's face it" Survey Alzheimer Society Canada (fall 2011)

Why so difficult to get a diagnosis ?

Barriers in Primary Care (US)

- Concern about risk of misdiagnosis
- Lack of training or skills specific to dementia care
- Concern about possible burden or stigmatization of patients with diagnosis
- Difficulty discussing or explaining diagnosis with patients or caregivers
- Doubting usefulness or desirability of early diagnosis

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2787842

Why so difficult to get a diagnosis? (US)
"System" Issues (US Review)

- Limited time with patients (7)
- Insufficient community services available to patients with dementia (7)
- Lack of specialists available for consultation (3)
- Low financial incentives/reimbursement (2)
- Limitations on diagnostic tests imposed by managed care/state health system guidelines (2)
- Dementia not prioritized in public health planning

Why so difficult to get a diagnosis ? (US)
Patient Characteristics (US Review)

- **Denial and refusal of assessment or treatment (8)**
- **Cognitive impairment not considered a priority for discussion with physician - forgetting to mention it (2)**
- Residence in a rural area
- Lower level of education
- Age younger and older
- Lower severity of dementia
- Perception of limited treatment options
- Fear or other negative emotional reaction to the possibility of dementia

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2787842

Why so difficult to get a diagnosis? (US)
Caregiver Issues

- Denial/preference not to know the diagnosis (9)
- Assuming cognitive changes are part of normal aging (6)
- Lack of knowledge of dementia/symptom recognition (6)
- Doubts about the value of diagnosis and treatment (4)
- Fear of negative consequences or stigmatization for the patient (4)

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2787842

"...another thing, it's my memory doc"

Early diagnosis of Dementia: rationale and hazards of Screening *BMJ* 2013;347:f5125

Hazards of Population Screening for Dementia:

Over-diagnosis of Mild Cognitive Impairment as Dementia

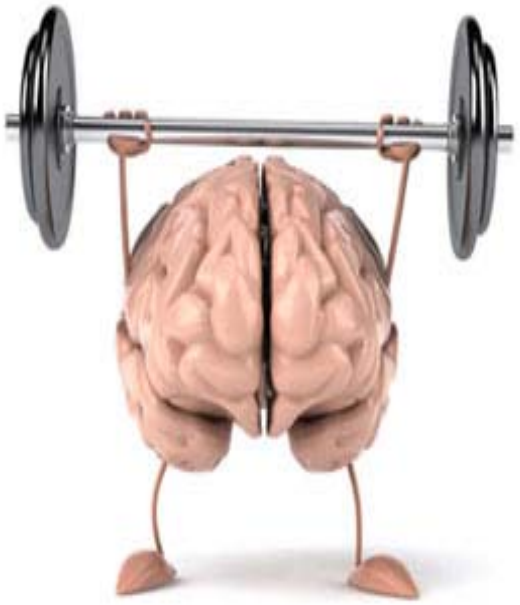
Harms from over-diagnosis

- Unnecessary tests and treatments
- Adverse psychological and social outcomes;
- Diversion of resources from those needing them

Limited evidence to support screening

- Lack of research focused on older people, in whom dementia is most prevalent

Healthy Brain Ag(e)ing



Some ideas:

- Mediterranean Diet. olive oil, limit red meat and eat more fish and chicken.
- Stay active for a half hour, five times a week.
- Don’t smoke. If you do smoke, stop now.
- Moderate use of alcohol.
- Maintain social connections in the community, volunteer work, or try a new hobby.
- Get plenty of sleep.
- Manage treatable conditions and reduce vascular risk factors.

Early Warning Signs Suggesting Cognitive Decline

Possible signs detected by patient, family/caregivers:

- ✓ Difficulty performing familiar tasks (e.g. managing financial affairs, driving) or learning to use a new device (e.g. remote) because of cognitive changes.
- ✓ Frequent memory problems, repeating things over and over again, problems with language, disorientation to time (specifically month or year) or places previously known, and/or poor judgment.
- ✓ Misplacing things.
- ✓ Changes in mood, behavior, and personality such as loss of initiative or less interest in hobbies/activities.

Early Warning Signs Suggesting Cognitive Decline

Possible signs detected by primary care provider:

- ✓ Formerly reliable but now misses or comes on wrong day for appointments.
- ✓ Vague, repetitive, forgetful, poor comprehension, and/or word-finding difficulties in conversation.
- ✓ Poor adherence with meds/ instructions.
- ✓ Changes in appearance, mood, behavior, and/or personality such as withdrawal.
- ✓ Unexplained change in function (e.g., driving) or weight loss.
- ✓ Head turning sign (turning to caregiver for help answering).

DSM-5 Diagnostic Criteria for Major Neurocognitive Disorder (Dementia)

Evidence of significant cognitive decline from a previous level of performance in one or more cognitive domains (complex attention, executive function, learning and memory, language, perceptual-motor, or social cognition) based on:

- Concern of the individual, a knowledgeable informant, or the clinician that there has been a significant decline in cognitive function, and
- A substantial impairment in cognitive performance, preferably documented by standardized neuropsychological testing or, in its absence, another quantified clinical assessment.

The cognitive deficits interfere with independence in everyday activities (i.e. at a minimum, requiring assistance with complex instrumental activities of daily living such as paying bills or managing medications).

The cognitive deficits do not occur exclusively in the context of a delirium.

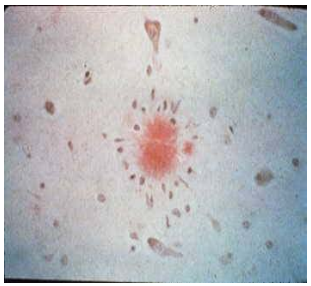
The cognitive deficits are not better explained by another mental disorder (e.g. major depressive disorder, schizophrenia).

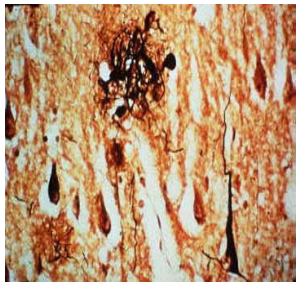
Ref: American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.).

It's more than memory……

The "A"s of Dementia

- Amnesia
- Agnosia
- Aphasia
- Apraxia
- Anosognosia
- Anosmia
- Altered perception
- Abulia/Apathy





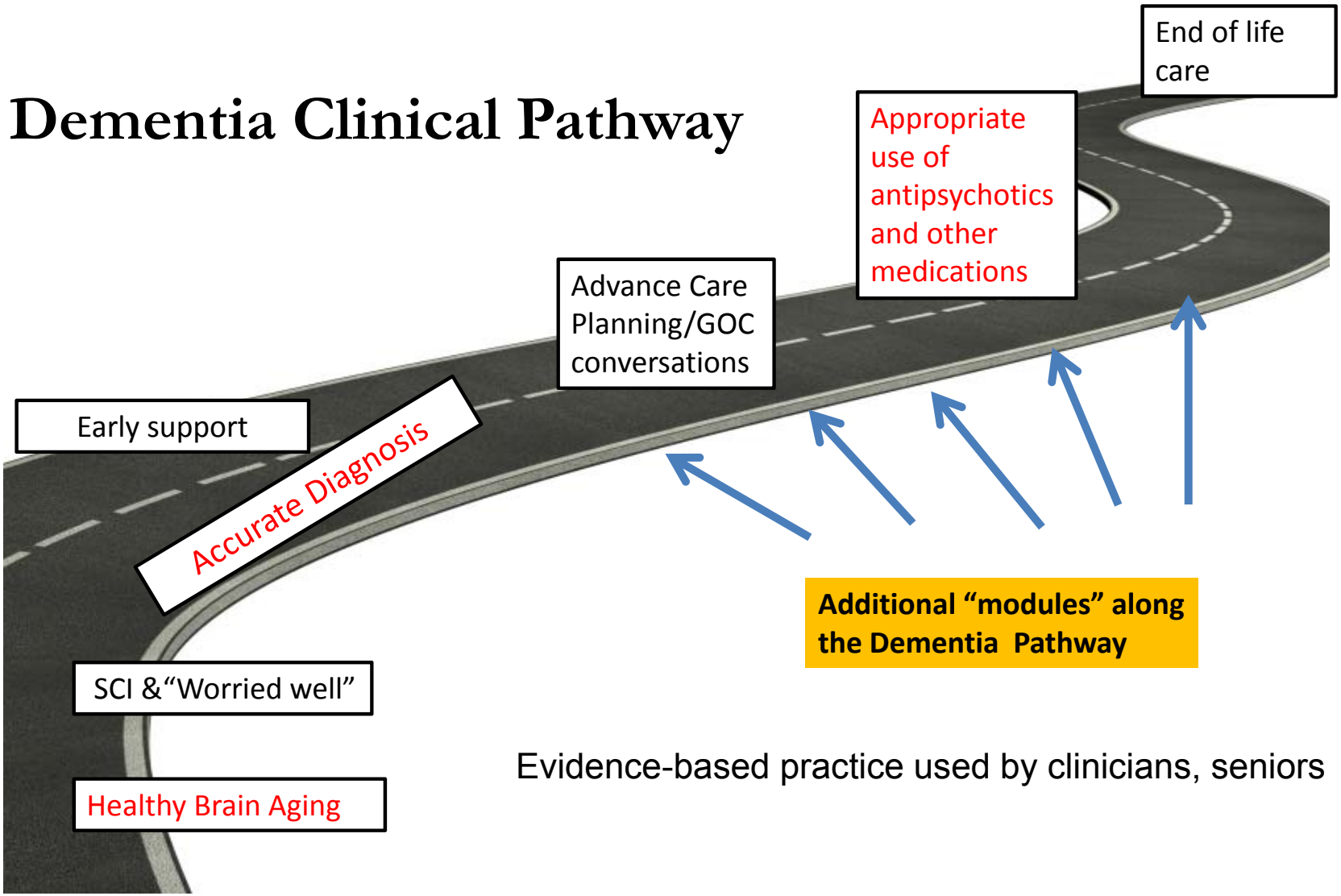
Abulia (Aboulia)

- Difficulty in initiating and sustaining purposeful movements
- Lack of spontaneous movement
- Reduced spontaneous speech
- Increased response-time to queries
- Passivity
- Reduced emotional responsiveness and spontaneity
- Reduced social interactions
- Reduced interest in usual pastimes

Some causes of Abulia

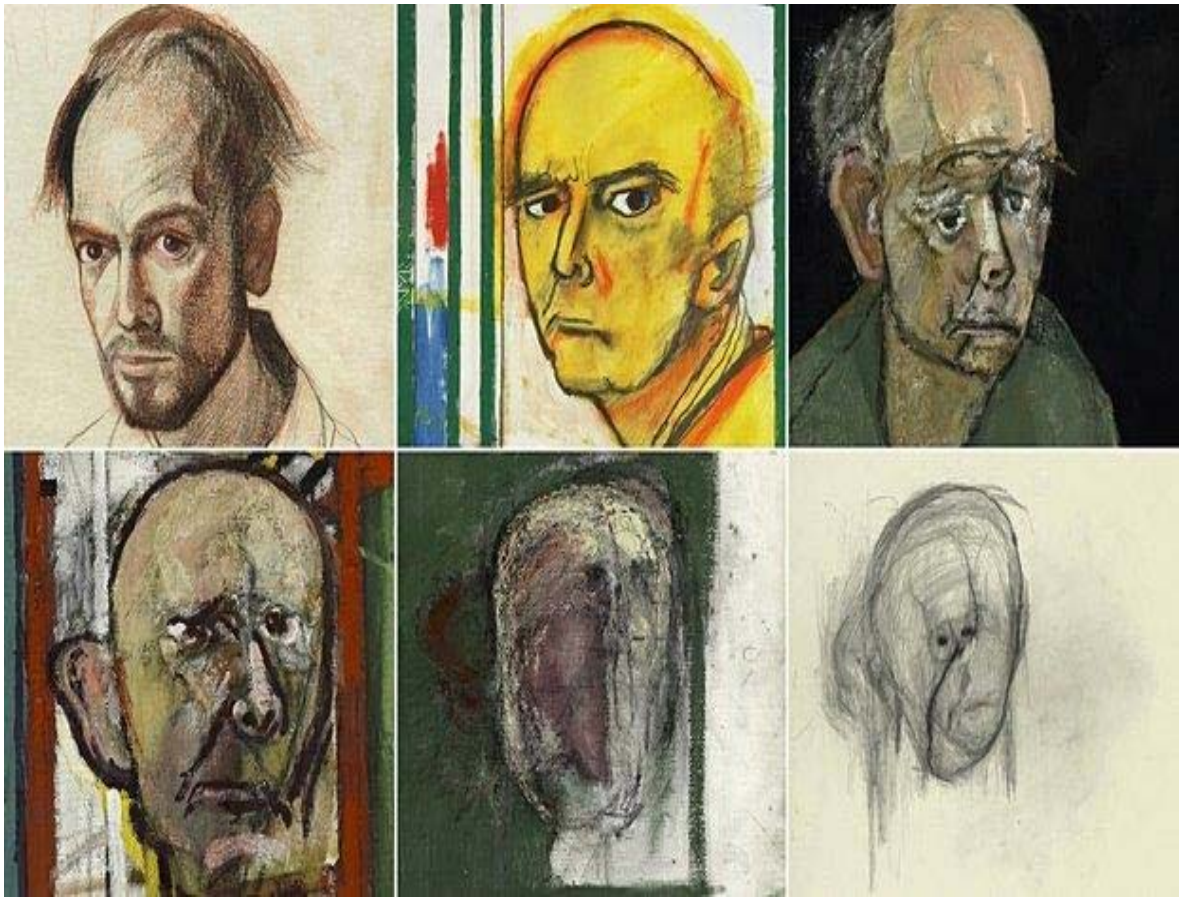
- Depression (which may coexist with other causes)
- Alzheimer's Disease
- Vascular and other Dementias
- Parkinson's Disease
- Progressive supranuclear palsy
- Stroke
- Traumatic Brain Injury
- Schizophrenia
- Frontotemporal Dementia
- Huntington's Disease

Dementia Clinical Pathway



Evidence-based practice used by clinicians, seniors

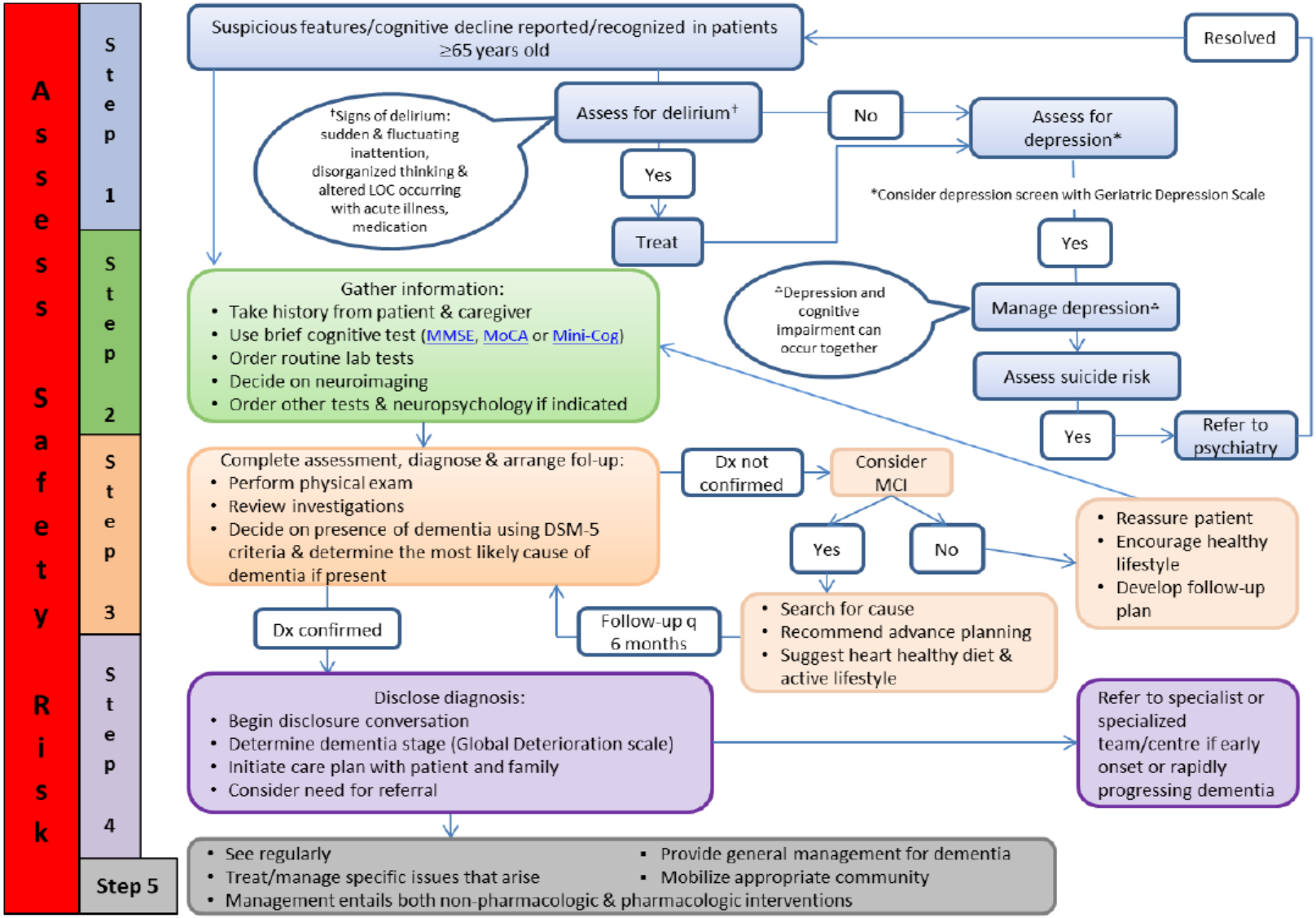
William Utermohlen 1933-2007



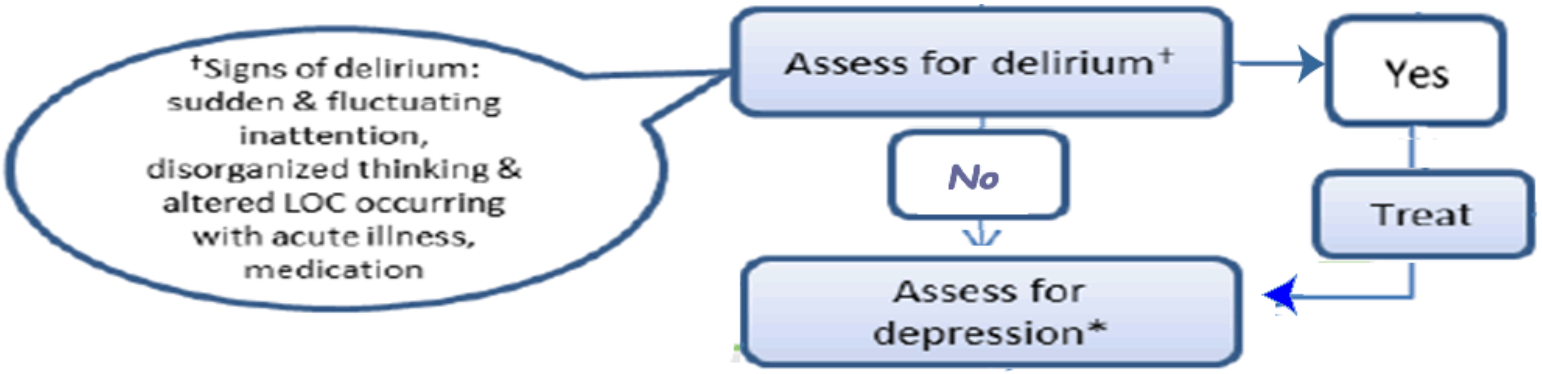
Case-finding not screening for Dementia: What about other syndromes?

- Depression
- Delirium
- Frailty

Cognitive Impairment CPG Summary Algorithm



Delirium


†Signs of delirium: sudden & fluctuating inattention, disorganized thinking & altered LOC occurring with acute illness, medication
Assess for delirium†
Yes
No
Treat
Assess for depression*

Screening for Delirium in the context of cognitive impartment

Screening for Delirium A-FACT

- **A**cute – onset
- **F**luctuation – course
- **A**ttention - ↓ concentration
- **C**onsciousness - ↓ level
- **T**houghts – disorganized

Screening for Delirium - CAM

Feature 1: Acute onset and fluctuating course

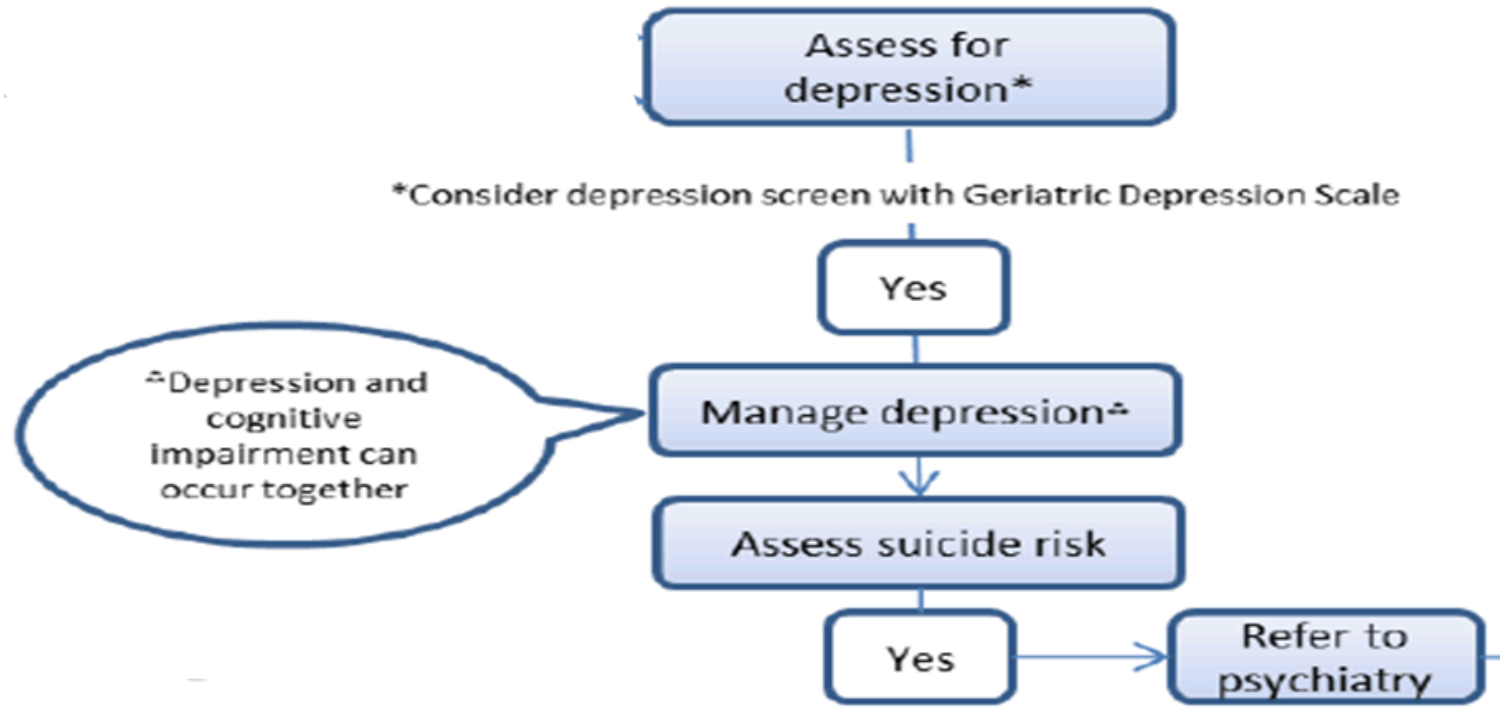
Feature 2: Inattention

Feature 3: Disorganized thinking

Feature 4: Altered level of consciousness

If features 1 and 2 and either 3 or 4 are present (CAM +/positive), a diagnosis of delirium is suggested.

Depression


Assess for depression*
*Consider depression screen with Geriatric Depression Scale
Yes
Manage depression^
^Depression and cognitive impairment can occur together
Assess suicide risk
Yes
Refer to psychiatry

Screening for Depression in the context of cognitive impartment

Choose the best answer for how you have felt over the past week:

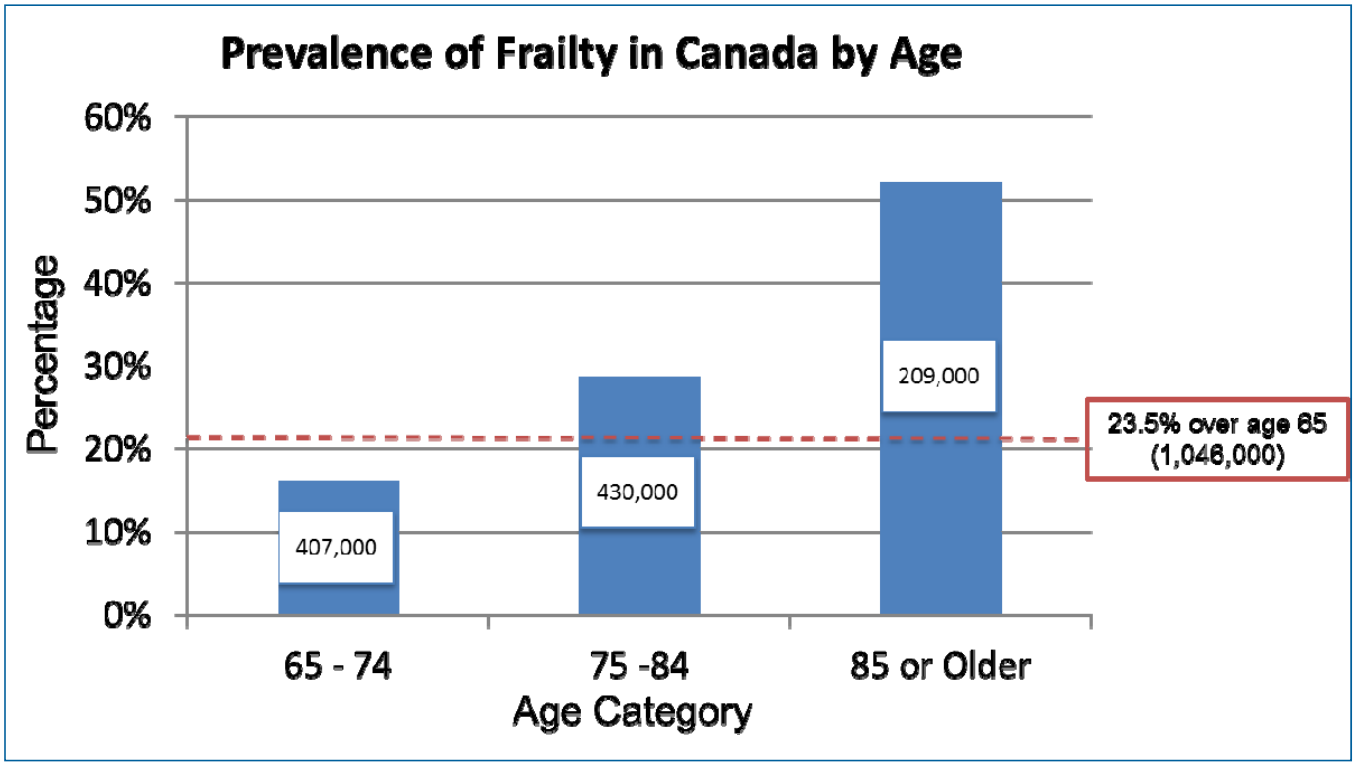
1. Are you basically satisfied with your life?
2. Have you dropped many of your activities and interests?
3. Do you feel that your life is empty?
4. Do you often get bored
5. Are you in good spirits most of the time?
6. Are you afraid that something bad is going to happen to you?
7. Do you feel happy most of the time?
8. Do you often feel helpless?
9. Do you prefer to stay at home, rather than doing new things?
10. Do you feel you have more problems with memory than most?
11. Do you think it is wonderful to be alive now?
12. Do you feel pretty worthless the way you are now?
13. Do you feel full of energy?
14. Do you feel that your situation is hopeless?
15. Do you think that most people are better off than you are?

Frailty Facts

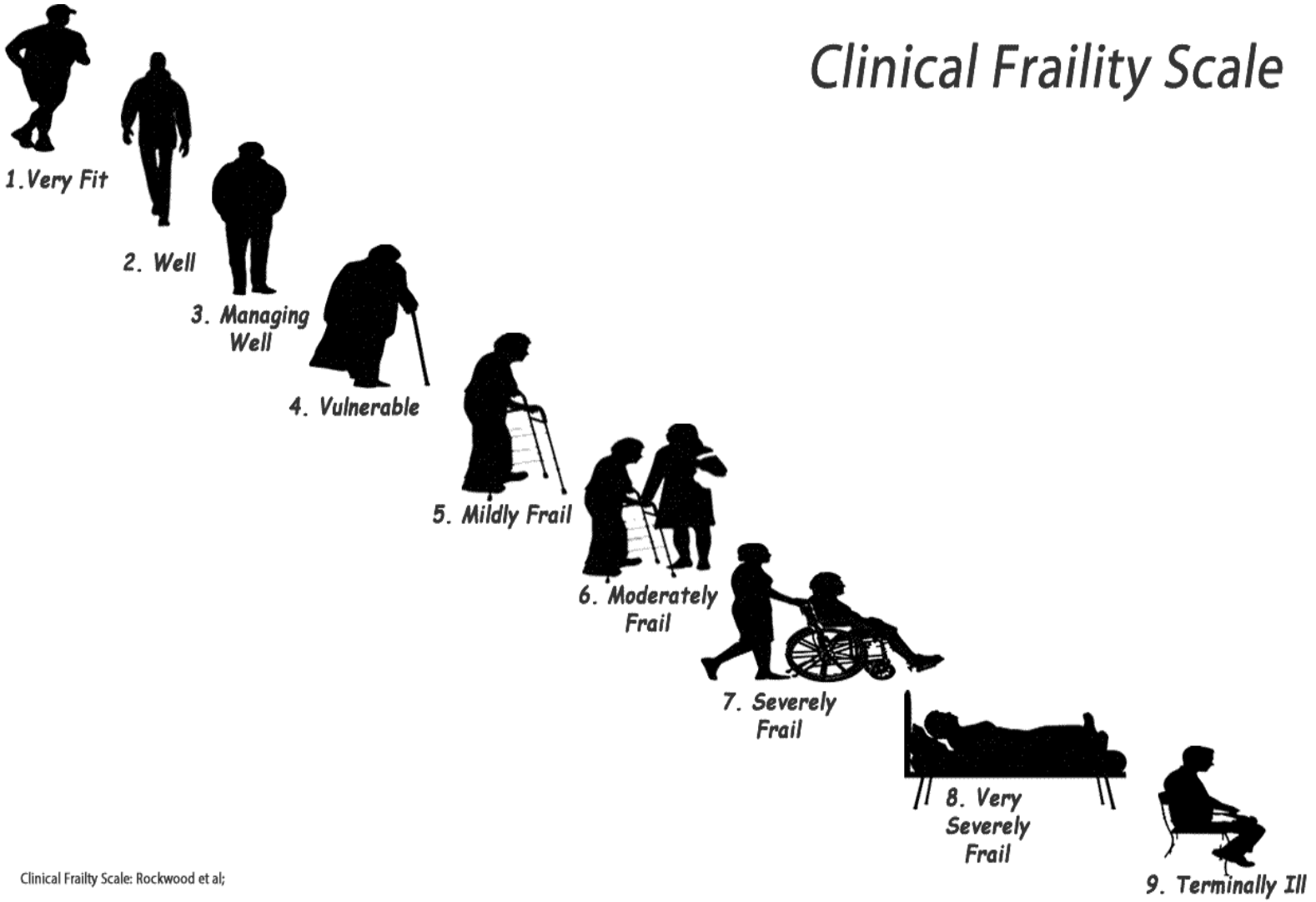
- Frailty is under-recognised and its' impact is under-appreciated
- Age alone does not mean frailty
- There is no single cause for frailty
- Multiple Co-morbidities may occur without frailty
- Complex interaction between cognitive decline, polypharmacy and frailty
- Frailty predicts decline in function and mortality better than diagnoses
- Frailty predicts advisability/prognosis of emergent & elective procedures
- Frailty results in frequent, prolonged hospitalizations & functional decline
- Frailty is present in most LTC residents
- Some degree of frailty is present in around 25% of persons >75

How common is Frailty in the Canadian Population?

Sources: Rockwood et al, Journal of Gerontology: 2004; 59: 1310; Statcan.gc.ca/pub/82-003-x/2013009/article/11864-eng.htm



Clinical Frailty Scale



Clinical Frailty Scale: Rockwood et al;

Screening for Frailty in Primary Care

Three studies investigated seven simple methods for identifying frailty; these were:

- **PRISMA 7 Questionnaire** - a seven item questionnaire
- **Walking speed (gait speed)**
- **Timed up and go test**
- **Self-Reported Health** - A cut-off of < 6/10 was used to identify frailty.
- **GP assessment** - GP assessed on the basis of a clinical assessment.
- **Multiple medications (polypharmacy)** - frailty is deemed present if the person takes five or more medications.
- **The Groningen Frailty Indicator questionnaire** - 15 item frailty questionnaire that is suitable for postal completion.

The identification of frail older adults in primary care: comparing the accuracy of five simple instruments
Emiel O. Hoogendijk1,2⇓, Henriëtte E. van der Horst1,2, Dorly J. H. Deeg2,3, Dinnus H. M. Frijters1,2, Bernard A. H. Prins4, Aaltje P. D. Jansen1,2, Giel Nijpels1,2 and Hein P. J. van Hout1,2 *Age Ageing (2012) doi: 10.1093/ageing/afs163* First published online: October 28, 2012

Prisma 7

Herbert R et al 2003 Can Fam Physician 2003 49:992-007

*Le **P**rogramme de **R**echerche sur l'**I**ntégration des*

*S**ervices pour le **M**aintien de l'**A**utonomie*

1 Are you more than 85 years?

2 Are you Male?

3 In general do you have any health problems that require you to limit your activities?

4 Do you need someone to help you on a regular basis?

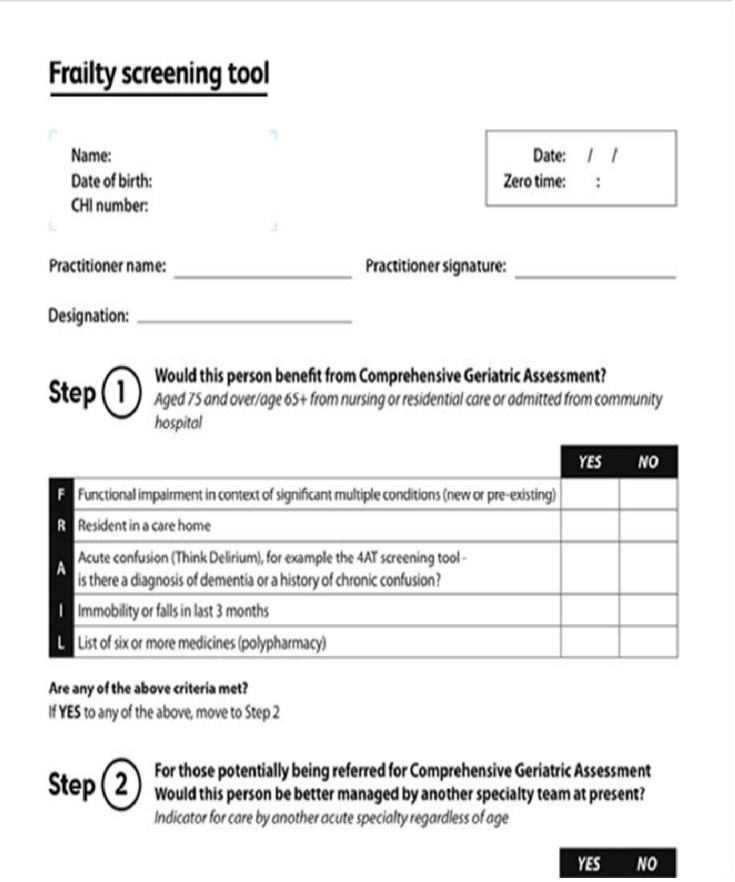
5 In general do you have any health problems that require you to stay at home?

6 In case of need can you count on someone close to you?

7 Do you regularly use a cane, walker or wheelchair to get about?

Lothian Health Care

Frailty Screening in Acute Care Admissions



Frailty screening tool

Name:
Date of birth:
CHI number:

Date: / /
Zero time: :

Practitioner name: _____ Practitioner signature: _____

Designation: _____

Step 1 **Would this person benefit from Comprehensive Geriatric Assessment?**
Aged 75 and over/age 65+ from nursing or residential care or admitted from community hospital

		YES	NO
F	Functional impairment in context of significant multiple conditions (new or pre-existing)		
R	Resident in a care home		
A	Acute confusion (Think Delirium), for example the 4AT screening tool - is there a diagnosis of dementia or a history of chronic confusion?		
I	Immobility or falls in last 3 months		
L	List of six or more medicines (polypharmacy)		

Are any of the above criteria met?
If **YES** to any of the above, move to Step 2

Step 2 **For those potentially being referred for Comprehensive Geriatric Assessment Would this person be better managed by another specialty team at present?**
Indicator for care by another acute specialty regardless of age

YES NO

Frailty as a risk factor for Delirium

- 10 - 40% of older patients in acute care develop new episodes of delirium
- 41 - 56% of patients 60 years and over develop delirium after hip fracture surgery
- 15% of patients 60 years and over develop delirium after elective hip surgery
- 32% of patients 65 years and over develop delirium after coronary artery bypass surgery
- 31% develop delirium while in the intensive care unit
- 83% develop delirium when mechanically ventilated

Co-morbidity and Multi-morbidity in persons living with Dementia and Frailty

- ¼ of adults have 2 or more chronic conditions
- ¾ >75 years have 2 or more chronic conditions
- ½ have 3 or more chronic conditions
- ¼ >85 have significant cognitive impairment (MND)
- ¼ > 75 have moderate degree of frailty

and yet……

- Health services are mostly organized for single illnesses
- Practice Guidelines (CPGs) for single conditions
- CPGs may lead to inappropriate polypharmacy
- Frailty, Dementia and Depression limit self-management abilities

Co-morbidity and Multi-morbidity in persons living with Dementia and Frailty

Recognise:

- Diminished capacity for self care
- Care-partner/caregivers availability and needs
- Limitations of “formal” care supports

Implications:

- Comprehensive assessment & care planning
- Rapid response to changing health or function
- Address care-partner health and support

Polypharmacy in persons living with Dementia and Frailty

Use each contact as an opportunity to review use of prescribed & OTC drugs & ‘de-prescribe’

Target:

- ✓ Drugs with ADE on cognition, function & mobility
- ✓ Drugs with Anti-cholinergic activity (Rx and OTC)
- ✓ FRIDs (Fall-Risk Increasing Drugs)
- ✓ Drugs for secondary prevention where their benefits are unlikely in the persons expected lifespan

Summary

- Overview of the evolving role of primary health care in recognition and pro-active care of dementia (MNC) and other geriatric syndromes.
- Considered why timely recognition of dementia is challenging but necessary.
- Reviewed some best-practice tools to recognize dementia, delirium, depression, frailty and co-morbid conditions in primary health care.
- Touched on Multi-morbidity and Polypharmacy

QUESTIONS?

Supplementary Slides for handout

Early diagnosis of Dementia: rationale and hazards of Screening *BMJ* 2013;347:f5125

- *Impact on prevalence*—The current prevalence of dementia is thought to be 10-30% in people over the age of 80, but the adoption of new diagnostic criteria will result in up to 65% of this age group having Alzheimer's disease diagnosed and up to 23% of non-demented older people being diagnosed with dementia
- *Evidence of overdiagnosis*—Screening for cognitive impairment and measurement of biomarkers and neuroimaging are increasing the diagnosis of mild cognitive impairment, which in many people will improve spontaneously
- *Harms from overdiagnosis*—Unnecessary investigation and treatments with side effects; adverse psychological and social outcomes; and distraction of resources and support from those with manifest dementia in whom need is greatest
- *Limitations*—Current case identification and screening policy relies mostly on anecdotal and observational data from potentially biased sources, including those with vested commercial interests, rather than evidence from clinical trials. There is a lack of research focused on older people, in whom dementia is most prevalent

Delirium Screening Tool: Confusion Assessment Method (CAM)

If features 1 and 2 and either 3 or 4 are present (CAM +/positive), a diagnosis of delirium is suggested.

Feature 1: Acute onset and fluctuating course

This feature is usually obtained from a family member or nurse and is shown by positive responses to the following questions:

- Is there evidence of an acute change in mental status from the patient's baseline?
- Did the (abnormal) behaviour fluctuate during the day, that is, tend to come and go, or increase and decrease in severity?

Feature 2: Inattention

This feature is shown by a positive response to the following question:

- Did the patient have difficulty focusing attention, for example, being easily distracted, or having difficulty keeping track of what was being said?

Adapted from Inouye, S., van Dyck, C., Alessi, C., et al. Clarifying confusion: The confusion assessment method. Annals of Internal Medicine. 1990; 113(12); 941-948

Delirium Screening Tool: Confusion Assessment Method (CAM)

Feature 3: Disorganized thinking

This feature is shown by a positive response to the following question:

- Was the patient's thinking disorganized or incoherent, such as rambling or irrelevant conversation, unclear or illogical flow of ideas, or unpredictable switching from subject to subject?

Feature 4: Altered level of consciousness

This feature is shown by any answer other than "alert" to the following question:

- Overall, how would you rate this patient's level of consciousness? Alert (normal), vigilant (hyper-alert), lethargic (drowsy, easily aroused), stupor (difficult to arouse), or coma (unarousable).

http://www.albertahealthservices.ca/assets/about/scn/ahs-scn-bjh-hf-delirium-screening-tool.pdf

Clinical Frailty Scale

1 Very Fit – People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.

2 Well – People who have no active disease symptoms but are less fit than category 1. Often, they exercise or are very active occasionally, e.g. seasonally.

3 Managing Well – People whose medical problems are well controlled, but are not regularly active beyond routine walking.

4 Vulnerable – While not dependent on others for daily help, often symptoms limit activities. A common complaint is being "slowed up", and/or being tired during the day.

5 Mildly Frail – These people often have more evident slowing, and need help in high order IADLs (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.

6 Moderately Frail – People need help with all outside activities and with keeping house. Inside, they often have problems with stairs and need help with bathing and might need minimal assistance (cuing, standby) with dressing.

7 Severely Frail – Completely dependent for personal care, from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~ 6 months).

8 Very Severely Frail – Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.

9 Terminally Ill – Approaching the end of life. This category applies to people with a life expectancy <6 months, who are not otherwise evidently frail.

Scoring frailty in people with dementia

The degree of frailty corresponds to the degree of dementia. Common **symptoms in mild dementia** include forgetting the details of a recent event, though still remembering the event itself, repeating the same question/story and social withdrawal.

In **moderate dementia,** recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting.

In **severe dementia,** they cannot do personal care without help.

Screening for Frailty in Primary Care

Three studies investigated 7 simple methods for identifying frailty; these were:

- **PRISMA 7 Questionnaire** - which is a seven item questionnaire to identify disability that has been used in earlier frailty studies and is also suitable for postal completion. A score of > 3 is considered to identify frailty.
- **Walking speed (gait speed)** - Gait speed is usually measured in m/s and has been recorded over distances ranging from 2.4m to 6m in research studies. In this study, gait speed was recorded over a 4m distance.
- **Timed up and go test** - The TUGT measures, in seconds, the time taken to stand up from a standard chair, walk a distance of 3 metres, turn, walk back to the chair and sit down.
- **Self-Reported Health** - which was assessed, in the study examined, with the question 'How would you rate your health on a scale of 0-10'. A cut-off of < 6 was used to identify frailty.
- **GP assessment** - whereby a GP assessed participants as frail or not frail on the basis of a clinical assessment.
- **Multiple medications (polypharmacy)** - where frailty is deemed present if the person takes five or more medications.
- **The Groningen Frailty Indicator questionnaire** - which is a 15 item frailty questionnaire that is suitable for postal completion. A score of > 4 indicates the possible presence of moderate-severe frailty.
- **The identification of frail older adults in primary care: comparing the accuracy of five simple instruments**

Emiel O. Hoogendijk1,2⇓, Henriëtte E. van der Horst1,2, Dorly J. H. Deeg2,3, Dinnus H. M. Frijters1,2, Bernard A. H. Prins4, Aaltje P. D. Jansen1,2, Giel Nijpels1,2 and Hein P. J. van Hout1,2 ; *Age Ageing (2012) doi: 10.1093/ageing/afs163* First published online: October 28, 2012

Ann Intern Med. 2014;160(11):791-797. doi:10.7326/M14-0496

Annals of Internal Medicine

U.S. Preventive Services TASK FORCE
www.USPreventiveServicesTaskForce.org

SCREENING FOR COGNITIVE IMPAIRMENT IN OLDER ADULTS
CLINICAL SUMMARY OF U.S. PREVENTIVE SERVICES TASK FORCE RECOMMENDATION

Population	Community-dwelling adults who are older than 65 years and have no signs or symptoms of cognitive impairment
Recommendation	**No recommendation.** **Grade: I statement**
Risk Assessment	Increasing age is the strongest known risk factor for cognitive impairment. Other reported risk factors for cognitive impairment include cardiovascular risk factors (such as diabetes, tobacco use, hypercholesterolemia, and hypertension), head trauma, learning disabilities (such as the Down syndrome), depression, alcohol abuse, physical frailty, low education level, low social support, and having never been married.
Screening Tests	Screening tests for cognitive impairment in the clinical setting generally include asking patients to perform a series of tasks that assess 1 or more cognitive domains (memory, attention, language, and visuospatial or executive functioning). The most widely studied instrument is the Mini-Mental State Examination. Other instruments with more limited evidence include the Clock Drawing Test, Mini-Cog Test, Memory Impairment Screen, Abbreviated Mental Test, Short Portable Mental Status Questionnaire, Free and Cued Selective Reminding Test, 7-Minute Screen, Telephone Interview for Cognitive Status, and Informant Questionnaire on Cognitive Decline in the Elderly.
Treatment	Pharmacologic treatments approved by the U.S. Food and Drug Administration include acetylcholinesterase inhibitors and memantine. Nonpharmacologic interventions include cognitive training, lifestyle behavioral interventions, exercise, educational interventions, and multidisciplinary care interventions. Some interventions focus on the caregiver and aim to improve caregiver morbidity rates and delay institutionalization of persons with dementia.
Balance of Benefits and Harms	The evidence on screening for cognitive impairment is lacking, and the balance of benefits and harms cannot be determined.
Other Relevant USPSTF Recommendations	The USPSTF has made recommendations related to several of the risk factors for cognitive impairment, including counseling on tobacco cessation, alcohol use, healthful diet, physical activity, and falls prevention and screening for high cholesterol, hypertension, and depression. These recommendations are available at www.uspreventiveservicestaskforce.org.

For a summary of the evidence systematically reviewed in making this recommendation, the full recommendation statement, and supporting documents, please go to www.uspreventiveservicestaskforce.org.