

Measuring frailty in clinical practice: Notes from the Nova Scotia Health Authority experience



3rd Annual TVN Conference

Sept 27-29, 2015

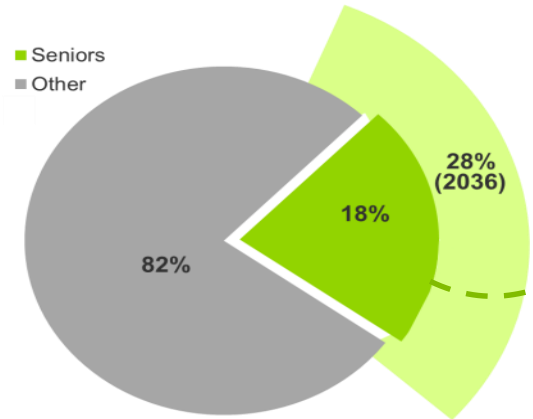
Paige Moorhouse MD, MPH, FRCPC (Geriatric Medicine)

Outline

- Nova Scotia statistics
- Frailty Portal overview
 - Phase I findings
 - Phase II overview
 - TVN Implementation grant
- Palliative and Therapeutic Harmonization Program (PATH) screening initiatives

Caring for the frail elderly in Nova Scotia

Population in Nova Scotia
(by age demographic)



1/2 OF THE ANNUAL
HEALTH BUDGET
50% occurring in the final 6 months of life

WHY?

! Frailty

THE SINGLE LARGEST
CONTRIBUTOR TO
SENIORS'
DISPROPORTIONATE USE
OF HEALTH DOLLARS

- The prevalence of frailty in Nova Scotia's senior population is **32%**, the highest value among the provinces – we estimate there to be **55,000** frail seniors in the province today
- Overall, spending on seniors is four times higher than spending those under 65

NSHA – CENTRAL ZONE FRAILTY STRATEGY

ENABLING PERSONS EXPERIENCING FRAILTY** TO LIVE AS OPTIMALLY AS POSSIBLE

*** Persons experiencing frailty encompasses patients, clients, families and caregivers*

Draft 3.0 September 2015

UNDERSTANDING

Build a culture in which frailty is recognized and understood as a key determinant of health

Working Group/Task Force

ENGAGEMENT

Involve patients, family, caregivers, providers and community organizations in open and ongoing dialogue to ensure persons experiencing frailty are supported

Working Group/Task Force

CARE EXPERIENCE

Ensure that the care experience provided to persons experiencing frailty is coordinated, sustainable and responsive to changing frailty status and/or circumstance

Working Group/Task Force

EVALUATION/ RESEARCH/KT

Seek and use leading practices, evidence and experiential learning to understand, respond and adapt to emerging issues related to frailty and ensure knowledge is translated into care practices

Working Group/Task Force

INFORMATION TECHNOLOGY

Use information technology (IT) to identify and understand frailty, its contributors and outcomes, to improve care delivery and inform health system planning

Working Group/Task Force

Aligning frailty-focused initiatives across organizational, community and public sectors

GOVERNANCE

Establish a leadership structure to guide the Strategy, support aligned activities, establish shared measurement practices, build momentum, advance care practices, advocate for policy and mobilize administrative resources across sectors

*Nova Scotia Health Authority - Central Zone- Frailty Strategy Committee
(Primary Health Care/Department of Family Practice and Department of Medicine; Citizens)*

Project Coordination Working Group

Frailty occurs when an accumulation of health issues start to result in declining function, impaired mobility, cognitive impairment or unmanageable symptoms.



Frailty Portal

The Frailty Portal is a web-based tool supporting primary care providers to:

- Routinely identify potentially frail patients
 - Screen using the Frailty Assessment for Care planning Tool (**FACT**)
- Respond to frailty:
 - Support patient/caregiver self management and crisis planning
 - Enhance appropriate referrals
 - Aid in transitions of care (ER, Continuing Care, Acute Care)
 - Apply evidence based clinical practice guidelines for frailty


Frailty Portal

Mozilla Firefox Start Page x Home Page - Frailty Portal x +

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Frailty Portal


A web tool to support screening, scoring and care-planning



Search for a Patient


- Introduction
- Principles
- Background
- CFS Scale
- Collateral Report on Overall Health
- Training Guide
- Resources

 nova scotia health authority
Primary Health Care | Department of Family Practice

In Partnership with
 path clinic
PALLIATIVE AND THERAPEUTIC HARMONIZATION

Strengthening Primary Health Care for Frail Persons
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IT Support: 902-473-6401 (office) 902-471-4780 (cell)
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1:09 PM 2015/05/19



Portal Tools

Validated assessment of cognition, frailty and guidelines:

- The Mini-Cog¹
- The Brief Cognitive Rating Scale (BCRS)²
- Frailty Assessment for Care Planning Tool (FACT)³ (adapted from the *Clinical Frailty Scale*)
- Clinical practice guidelines for frailty:
 - Hypertension¹, Diabetes², Statins

1. Borson IJGP 2000

2. Resiberg, 1977

3. Accreditation Canada: <https://www.accreditation.ca/frailty-assessment-care-planning-tool-fact>

4. Mallery et al., JAMDA 2013;801-13. Evidence informed guidelines for treating frail older adults with type II DM.

5. Mallery et al., JAMDA 2014;81:427-37.

FACT¹ and the Clinical Frailty Scale²

Modification	Rationale
Separates the original ordinal scale into four domains	<ul style="list-style-type: none">- Allows for easier determination of scale score when one domain is driving frailty- Suggests areas of focus for further assessment
Adds validated screening tools for cognitive assessment	<ul style="list-style-type: none">-Improves objectivity/reliability of score
Relies on collateral history instead of self-report	<ul style="list-style-type: none">-Improves objectivity/reliability of score-Helps to identify poor patient insight
Combines frailty scores 2 and 3 (“fit” and “managing well”)	<ul style="list-style-type: none">-Easier to administer, without losing information that is instrumental to decision making

1. Mallery et al. Cleveland Clinic Journal of Medicine 07/2014; 81(7):427-437

2. Rockwood et al. CMAJ 2005;173:489-95.

Frailty Assessment for Care planning Tool (FACT)



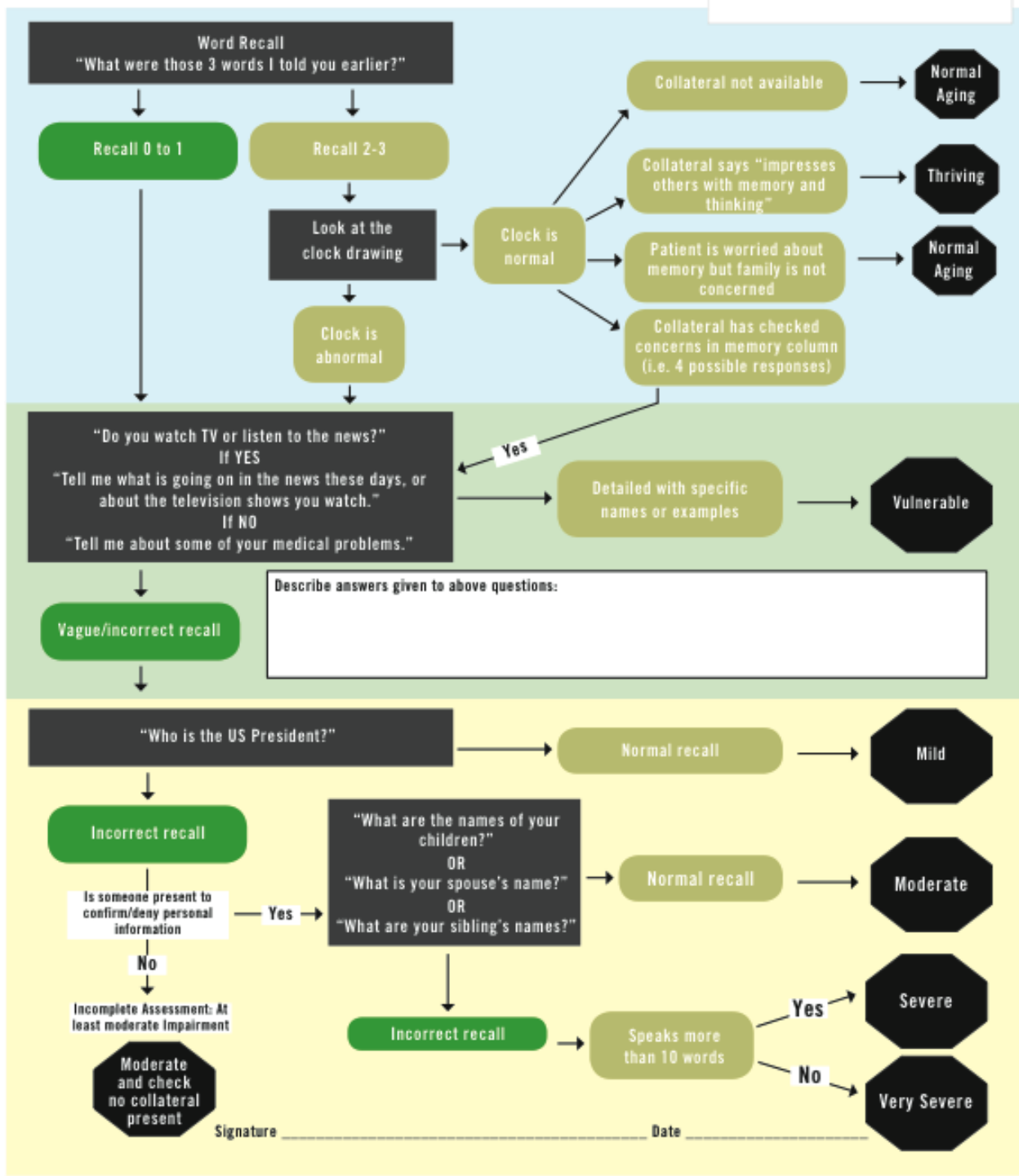
	MOBILITY IS AT BASELINE? <input type="radio"/> YES <input type="radio"/> NO		COGNITION IS AT BASELINE? <input type="radio"/> YES <input type="radio"/> NO	
	Baseline Mobility	Social	Function	Cognition
1. Thriving	<input type="radio"/> Fit, exercises regularly (among fittest for age)	<input type="radio"/> In charge of organizing social events	<input type="radio"/> Still working at job or high level hobby	<input type="radio"/> Thriving: impresses others with memory and thinking
2+3. Normal Aging	<input type="radio"/> Active/exercises occasionally	<input type="radio"/> Socializes weekly & would have a caregiver if needed	<input type="radio"/> Subjective impairment (i.e. Does everything on own but finds things more difficult)	<input type="radio"/> Normal aging: patient worried about memory but family (caregiver) is not <input type="radio"/> Normal aging: patient worried, collateral not available
4. Vulnerable	<input type="radio"/> Starting to slow down and often tired during the day	<input type="radio"/> Socializes less than weekly OR might not have a caregiver if needed	<input type="radio"/> Not dependent on others but symptoms often limit activities	<input type="radio"/> Vulnerable: minor deficits on testing (cognitive impairment, not dementia)
5. Mild	<input type="radio"/> Walking slower and regularly uses (or should use) a cane or walker	<input type="radio"/> Socializes rarely	<input type="radio"/> Needs help with some instrumental activities of daily living (IADLS) (e.g. housework, banking or medications)	<input type="radio"/> Mild stage dementia: Vague/incorrect recall of current events, can recall name of US president
6. Moderate	<input type="radio"/> Needs help of another person when using stairs, walking on uneven ground, or getting in/out of bath OR <input type="radio"/> Has fallen more than once in the past 6 months, excluding slip on ice	<input type="radio"/> Mostly house-bound	<input type="radio"/> Needs assistance or dependent for IADLS and cueing with basic activities of daily living (BADLS) (e.g. help choosing what to wear or requires reminders to bathe)	<input type="radio"/> Moderate stage dementia: Incorrect recall of US President, can recall name of children/spouse <input type="radio"/> No collateral present
7. Severe	<input type="radio"/> Always needs someone's help when walking OR Unable to propel self in manual wheelchair	<input type="radio"/> House-bound and isolated OR caregiver stress/or no available caregiver to meet care needs	<input type="radio"/> Needs hands on help with BADLS (bathing, toileting, dressing)	<input type="radio"/> Severe stage dementia: Unable to name children, spouse or siblings
8. Very Severe	<input type="radio"/> Bed bound, unable to participate in transfers	<input type="radio"/> Unable to participate in any social exchange, even when visited	<input type="radio"/> Dependent for all aspects of daily life	<input type="radio"/> Very severe stage dementia: Limited language skills with few words verbalized
9. Terminal	<input type="radio"/> Terminally ill with a life expectancy \leq 6 months regardless of function, cognition or mobility status			

Compatible with: Rockwood K. CMAJ 2005;173:389-95; Borson S. Int J Geriatr Psychiatry 2000; Nov 15(11):1021-27; and Reisberg B. Psychopharmacol Bull 1988;24:629-36.

Signature _____

Date _____





FACT:
Cognitive
Screen
Algorithm

Phase I: Objectives

- To raise awareness of frailty
- To explore usability of a web-based tool, and
- To strengthen partnerships across providers

Phase I: Methods

Pilot: April 2014- Oct 2014 N= 11 Primary Care Providers

- Pre and post surveys – PCP knowledge needs and confidence
- Educational training session, practice facilitation visits
- System Usability Scale - to understand system function and usability
- Post reflective exercise- to understand perceived improvements in assessing frailty and care planning

116 Assessments Completed

Frailty Level (CFS)	Number of Assessments
Very Fit – Well (1,2,3)	8
Vulnerable - Moderately Frail (4, 5, 6)	84
Severely Frail (7, 8)	23
Terminally ill (9)	4

Key Evaluation Findings: Strengths

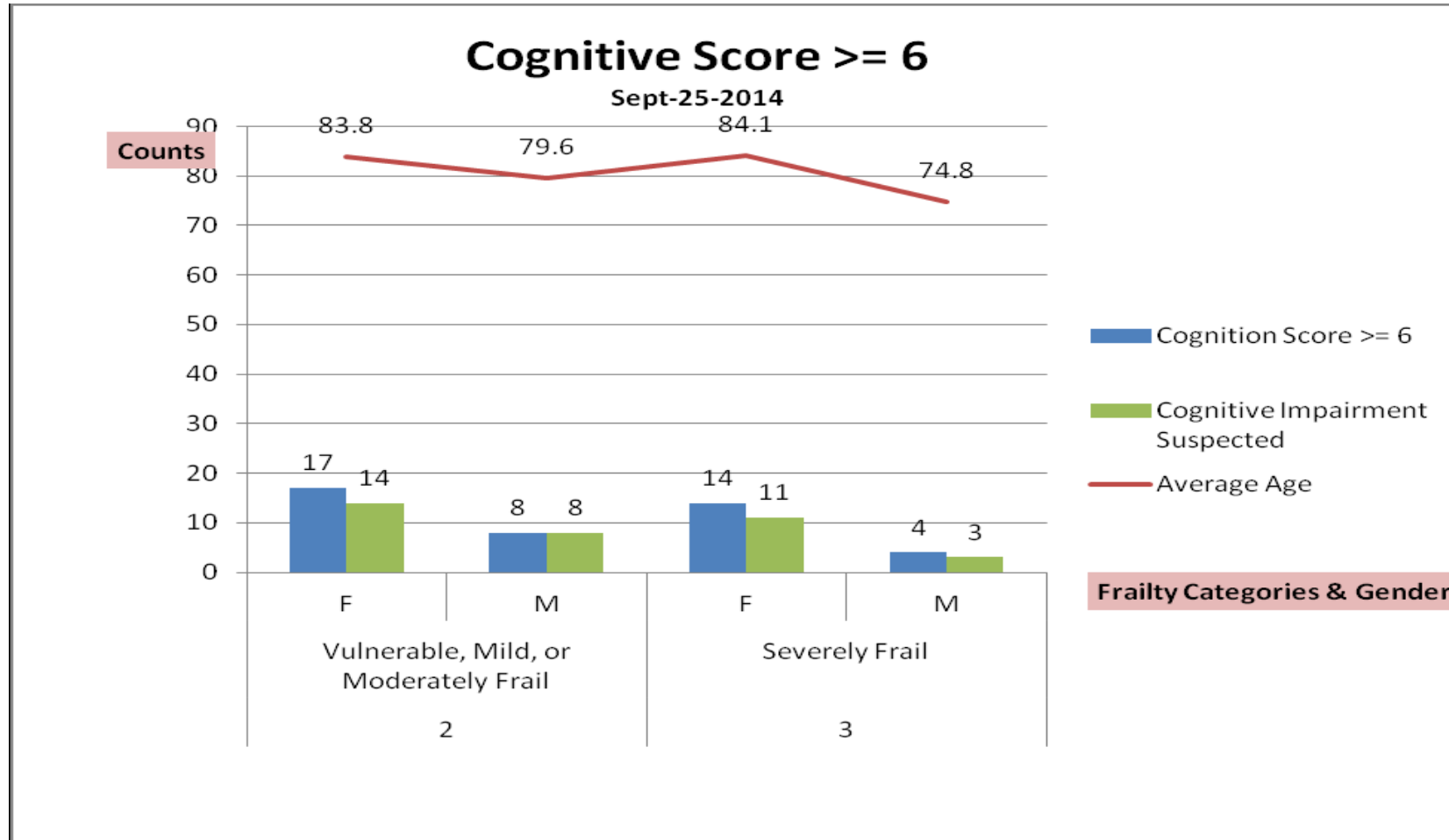
The portal helped primary care providers to:

- Identify frail patients in their practice
- Guide discussion and education with patients and families around frailty and appropriate care
- Provide information on community resources available to support care
- Make more effective use of geriatric medicine resources

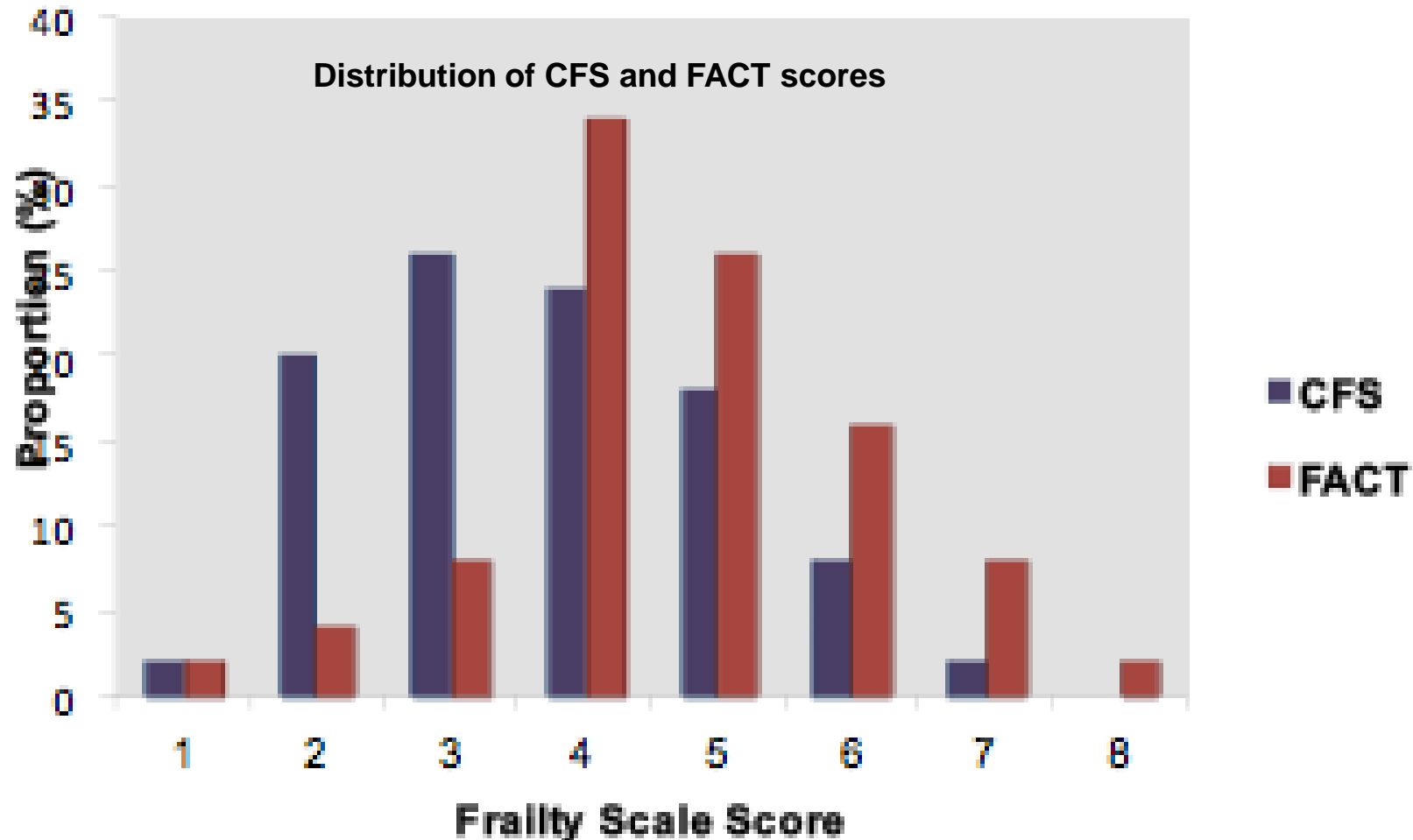
Key Evaluation Findings: Challenges

- Had to go outside EMR to access portal
- Fee codes
- Challenging to get collateral history from family
- Frailty “bins” too broad
- Goals associated with each frailty level too detailed, redundant

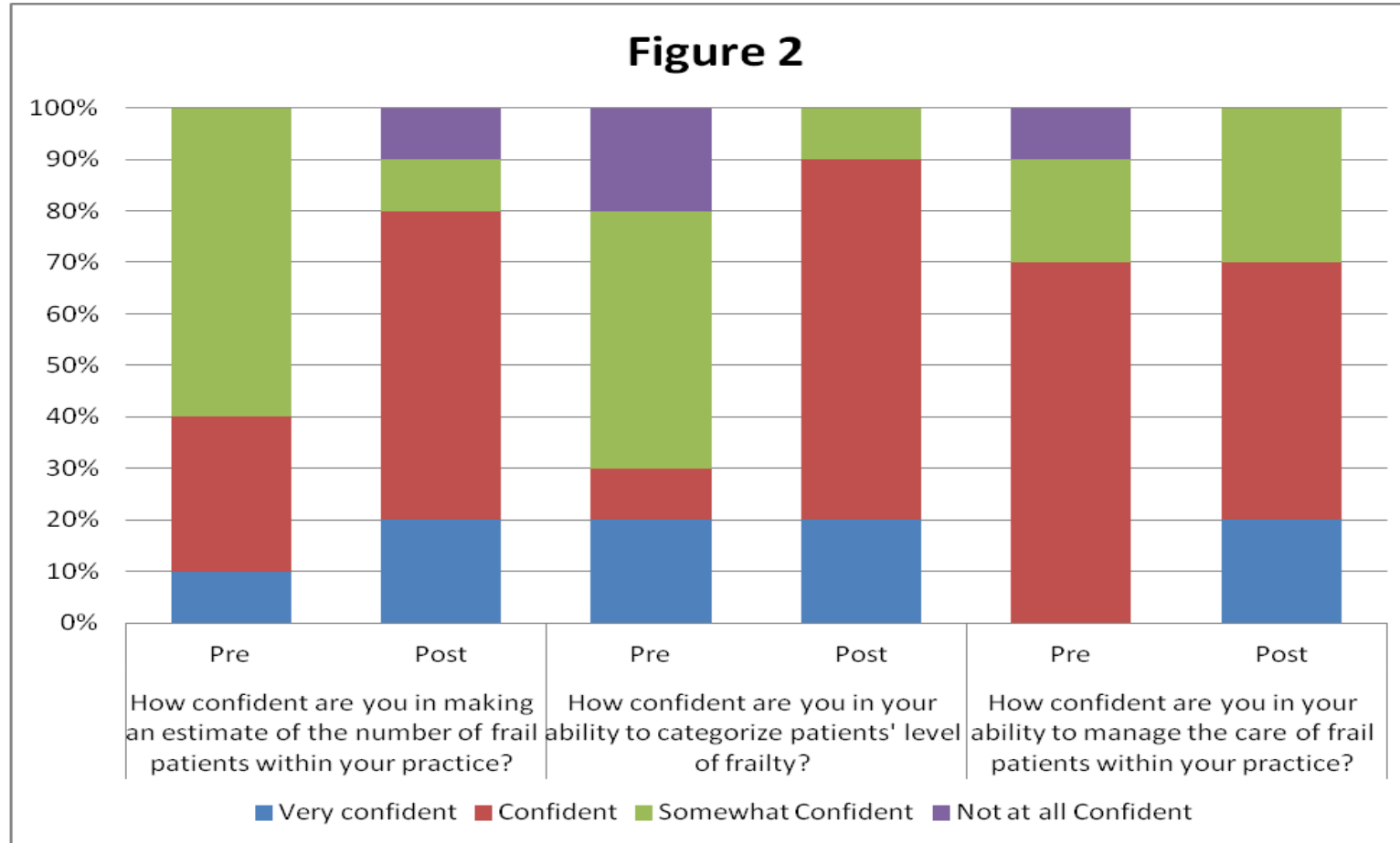
Provider Appreciation of Cognitive Impairment



Importance of collateral and cognitive testing



Provider Confidence in Identifying and Managing Frailty



Phase II

- **Enhancements to portal based on Phase I findings including:**
 - Improved connectivity to frailty portal
 - Improved precision of visit goals (no bins)
 - Scoring engine enhancements
 - Tracking of visit goals
 - Printable summaries and reports
- Phase I group of Primary Care Providers (PCPs) reengaged for Phase II enhancements
- Phase II launched in June 2015 - PCPs now using
- Iterative feedback will be gathered to inform further development; formal evaluation, plan for scalability and spread

TVN Implementation Study:

Implementing the 'Frailty Portal' in community Primary Care Practice: Evaluating feasibility, effects and expansion needs

- To identify and understand factors influencing the implementation feasibility of the 'Frailty Portal' program among providers and consumers
- To assess the impact of the 'Frailty Portal' on providers and consumers
- To identify the core components required to successfully scale-up the initiative to a broader community of PCPs within and across health jurisdictions. (Fraser Health, BC)

Phase II: Methods

Target users: n= 15 Primary Care Providers (Family Physicians, Nurse Practitioners)

Data collection

•Providers

- Pre-surveys (attributes, knowledge of frailty)
- Post-surveys (knowledge of frailty, portal use, system usability scale)
- Semi-structured interviews/online discussion

•Consumers

- Post-surveys (awareness of frailty, confidence)
- Semi-structured interviews

Measuring frailty in acute care

- Palliative and Therapeutic Harmonization (PATH) program
 - Intensive care planning for patients who are not actively dying but are at high risk of health crisis with poor outcomes
- Clinical programs and training programs for HCP
 - Acute care
 - Long term care
 - Community

The Principles of PATH

1	Frailty must be at the forefront
2	Information changes medical decision making
3	Care planning should be collaborative, guided, and rigorous
4	Not all decisions can be made in advance; guidance during transitions in health is important

PATH Principles in Action

1	Understand	Standardized processes and tools to assemble the picture of frailty and health trajectory <i>“What is this patient’s story?”</i>
2	Communicate	Standardized approach to discussion of frailty and prognosis with the decision-maker (patient or proxy) <i>“Did you know?”</i>
3	Plan/empower	Build decision-maker’s skills <i>“What information do I need to make a decision?”</i>
4	Respond	Be available during the health crisis. <i>“Who do I call and when?”</i>

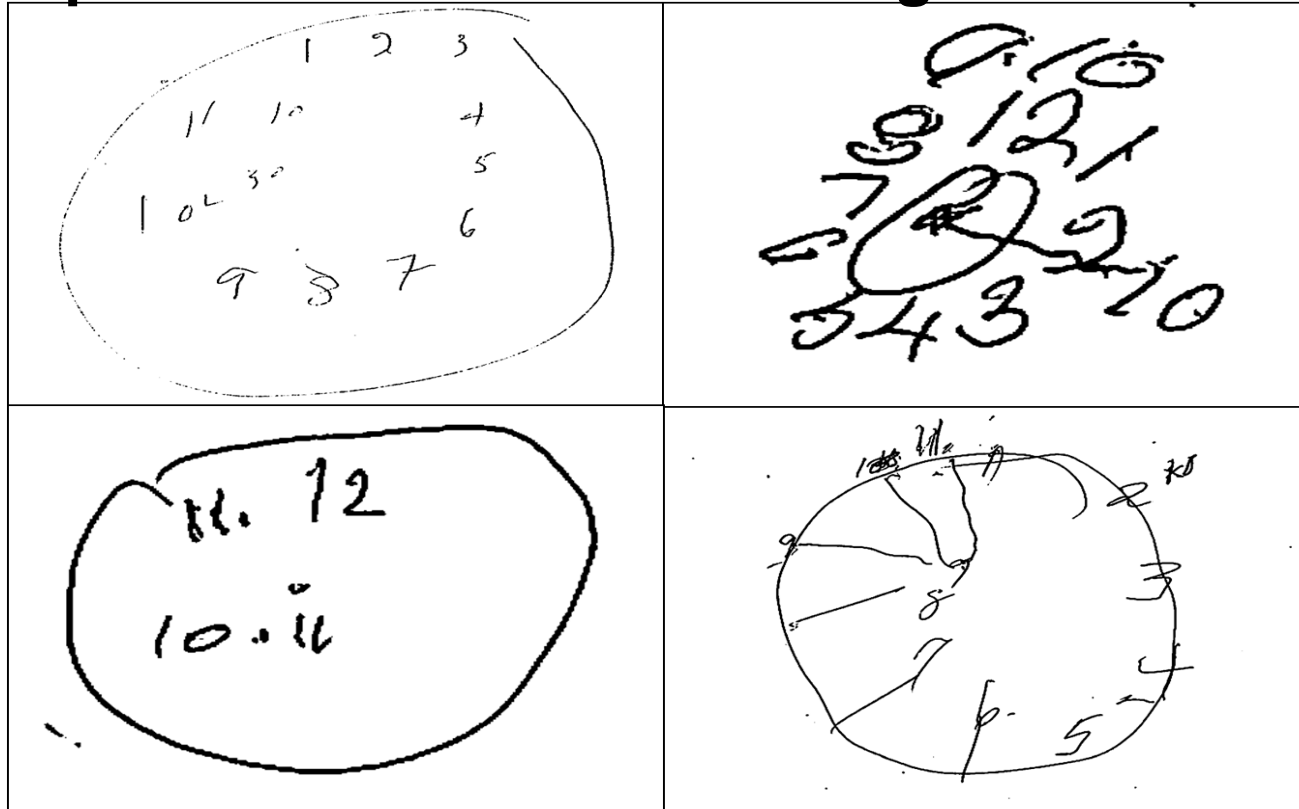
PATH evaluation

- PATH results in better patient caregiver satisfaction
 - A service not found elsewhere
 - Crisis response is key
- Economic analysis: saves 10K/pt enrolled
- Armed with an effective response to frailty...
 - We wanted to expand the process but needed a better way to identify the population
- Screening in care areas where:
 - High prevalence of frailty, high likelihood of procedures being offered

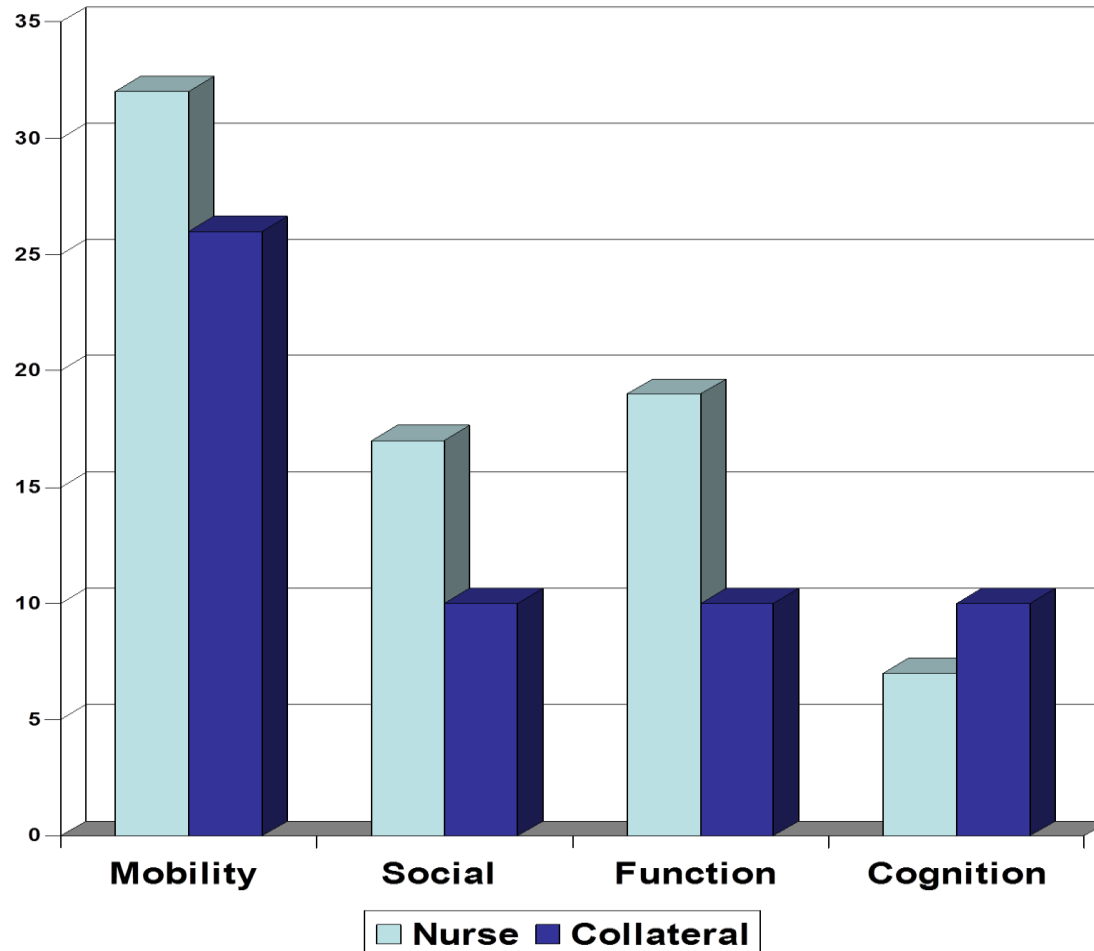
Screening for frailty in CRF Clinic

- Busy tertiary care clinic
- Training with nurses to complete FACT screen
- Over 12 months, 205 pts (≥ 75 year old) screened
 - 44% of population was at least mildly frail
- Of the patients who were found to be \geq mildly frail, 32% were frail due to impaired mobility
- 28% of patients failed the Mini-Cog

Sample Abnormal Clock Drawings from CRF Clinic patients



Percentage of patients who were \geq mildly frail according to Nurse vs. Collateral FACT Scores



7% of all patients had deficits suggestive of \geq mild dementia.

CRF Clinic Focus Group Data

Provider Focus Group Themes:

- Was challenging to integrate a new clinical initiative into an already busy clinic
- The FACT tool has proven to be extremely valuable and the knowledge of level of frailty improves care
- The results can be quite surprising and therefore it is important to use this assessment tool

CRF Clinic FACT Conclusions

- There is a previously unrecognized, high prevalence of frailty in older adults attending the CRF clinic
 - Families may be underestimating frailty
 - The screen is feasible to administer
- What are we going to do with the results?

The Renal-PATH Model

Renal PATH program started in 2012

- NP-led
- Patients identified as > moderately frail on FACT
- Second decision makers always involved
- Decisions beyond RRT are made
- 6 month follow-up phone call is standard

Renal PATH Outcomes

- Patient population: Mean age = 78, 54% female
 - Mean # of comorbidities = 9
 - Mean # of medication = 12
 - Mean MMSE = 24
 - 12% have known dementia at time of referral
 - 6% dementia diagnosis during PATH process
 - 78% are \geq mildly frail
- Outcomes
 - 97% chose conservative management
 - 3 fold increase over baseline rates
 - 40% of Renal PATH patients have died
 - Mean survival in decedent group: 3.5 months

Other FACT screening programs in NSHA

- Congestive Heart Failure clinic
- Cardiovascular Surgery outpatient clinic
- TAVI team
- Medical oncology outpatient clinic
- Pre-operative assessment clinic

Conclusions

- We can routinely identify frailty in primary and acute care
- If we're going to screen, we need validated programs to respond to frailty
 - Identification can change management
 - Appropriateness
 - Sustainability
 - Patient/caregiver satisfaction

Acknowledgements

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