Frailty and the Geriatric Giants

Dr. John Puxty
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Some of the ponderables

- Are the Geriatric Giants synonymous with Geriatric Syndromes?
- What relationship does Frailty have to the Geriatrics Giants?
Defining the Geriatric Giants

- Bernard Isaacs coined the phrase “the survival of the unfittest” based on 3 years longitudinal studies in City of Glasgow 1966-69
- Noted large numbers of people live into advanced old age and are afflicted with multiple physical, mental and social disabilities.
- Common “symptoms” were Stroke, Falls, Immobility, Incontinence and Mental abnormality
- “This has created a new type of need, for which a new type of speciality is required; and the type of geriatric unit which has evolved in the United Kingdom, with specialized physicians, nurses, rehabilitation personnel and social workers, linked to community resources, seems well adapted to meet these needs. “

(Bernard Isaacs J Chron Dis 1972)
Defining Geriatric Giants

“The giants of geriatrics are immobility, instability, incontinence and intellectual impairment. They have in common: multiple causation, chronic course, deprivation of independence and no simple cure.”

Defining Geriatric Syndrome

Syndrome: “aggregate of symptoms and signs associated a particular pathological process (TBD) and constitute a particular picture of pattern of the disease”

Geriatric Syndrome: “multifactorial health conditions that occur when the accumulated effects of impairments in multiple systems render [an older] person vulnerable to situational challenges” (Tinetti et al JAMA 1995: 273(3): 1348-1353)

May include: falls, immobility, delirium, urinary incontinence, iatrogenesis, pressure ulcers, pain, syncope, frailty
Common risk factors for Geriatric Syndromes

- Literature review 1990-2005 within Pubmed looking at common risk factors for delirium, falls, functional decline, incontinence and pressure ulcers
- Identified 4 shared common risk factors
  - Older age
  - Baseline cognitive impairment
  - Baseline functional impairment
  - Impaired mobility

Inouye SK et al JAGS 2007 55(5) 780-791
Chronic Disease and Geriatric Syndromes

- Data from Ontario RAI HC and Aged in Home Care Project
- 8 Geriatric Syndromes (GS) – pain, UI, Falls, disability, dizziness, wt loss, pressure ulcers and delirium
- Mean age 82.2 and 69% female
- Participants had average 2.6 disease and 2 GS
- PD, CVA and PAD associated with highest # GS
- Number of Geriatrics Syndromes generally increased with co-morbidity (exception were OA, CVA, PD, PAD and glaucoma)

# Geriatric Giant vs Geriatric Syndrome

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Geriatric Giants</th>
<th>Geriatric Syndromes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age associated increase</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Multifactorial</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Chronic Course</td>
<td>+</td>
<td>+/-</td>
</tr>
<tr>
<td>Impact on independence</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>No simple cure</td>
<td>+</td>
<td>+/-</td>
</tr>
<tr>
<td>Includes:</td>
<td>falls, immobility, confusion, incontinence, dwindles (frailty), polypharmacy (?)</td>
<td>falls, immobility, confusion, incontinence, frailty, syncope, pain, ulcers, polypharmacy</td>
</tr>
</tbody>
</table>
Defining Frailty

“A physiologic syndrome characterized by decreased reserve and resistance to stressors, resulting from cumulative decline across multiple physiologic systems, and causing vulnerability to adverse outcomes”

(Fried et al. 2001)
How common is Frailty?

- Just under 10% of all individuals 65 years or older in the community might be considered frail (Collard et al 2012)

- Some of the factors which increase likelihood of being frail include:
  - Increasing age:
    - 4% of individuals 65-69 years old
    - 7% of 75-79 year olds
    - 26% of 85 years and older
  - gender: women are twice as likely to be frail as men
  - social vulnerability seems to increase risk
  - presence of 2 or more chronic diseases (Andrew et al 2012)
Physical Risk Factors of Frailty

- Extreme age
- Weight loss
- Fatigue/Inactivity/Poor grip strength
- Slow or unsteady gait with reduced endurance, need for assistance and possible risk of falls
Socio-Economic Risk Factors of Frailty

- **Social vulnerability** associated with increased risk of death (Andrew et al. Age and Aging 2010)
  - Isolation
  - Caregiver gaps
  - Poverty
Co-Morbidity Risk Factors of Frailty

- Nearly 2/3 of those age 70 or over with two or more chronic conditions are frail (Fried et al Journal of Gerontology 2004)
- Some Chronic Diseases are particularly likely to contribute to frailty for example impaired cognition or mood
- Older adults with Multiple Chronic Diseases are often on >8 medications (Polypharmacy) which greater increase risk of ADR
Frailty Risk Factors

- Physical
- Socio-economic
- Co-morbidities

Frailty
Frailty association with Geriatric Giants (atypical presentation)


- Physical Frailty (especially low gait speed and low physical activity) predictive of future ADL disability (Vermeulan J et al. BMC Geriatrics 2011, 11:33)
Frailty association with common Geriatric Giants (atypical presentation)

- Physical frailty is associated with increased risk of MCI and more rapid rate of decline (Boyle PA et al JAGS 58:248-255, 2010)
- Delirium associated with higher levels of frailty and combination of delirium and frailty worsens prognosis (Eeles EM et al Age and Aging 2012)
- Delirium post hospital discharge is strongly associated with presence of frailty (Verloo et al Clin Intervention in Aging 2016 11 55-63)
# Shared Risk Factors for Frailty and Geriatric Giants

<table>
<thead>
<tr>
<th></th>
<th>Frailty</th>
<th>Delirium</th>
<th>Falls</th>
<th>Incontinence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive Impairment</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>+</td>
</tr>
<tr>
<td>ADL dependency</td>
<td>++</td>
<td>+</td>
<td>++</td>
<td>+</td>
</tr>
<tr>
<td>Gait abnormality</td>
<td>++</td>
<td>+/-</td>
<td>++</td>
<td>+/-</td>
</tr>
<tr>
<td>Medications</td>
<td>+</td>
<td>++</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Multiple Chronic Disease</td>
<td>++</td>
<td>++</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>
Geriatric Giants

Frailty Risk Factors

New Stressor

Frailty

Immobility

Falls

Incontinence

Socio-economic

Co-morbidities

Physical
Presentation of acute illness in the frail elderly!

Classical
Silent
Pseudosilent
Atypical *
  Falls (15-30%)
  Confusion (25%)
  Incontinence (30-80%)
  ADR’s (11%)
  Social crisis (9%)

*Samaras et al Annals of Emergency medicine 2010 56:261-269
Significance of the “Atypical Presentation”

- Presence associated with delay in diagnosis and increased mortality (Puxty and Andrew Age and Aging 15: 174-176)
- Predictive of future functional declines in community elderly (Choo-Cho et al 1998)
- Functional decline (increases likelihood of further decline, delirium and increased mortality (Hebert et al 1997)
Common Risk Factors

- Physical
- Socio-economic
- Co-morbidities

New Stressor

Frailty

Geriatric Giants

- Immobility
- Falls
- Incontinence
- Delirium
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Not just specific diseases: Systematic review of the association of geriatric syndromes with hospitalization or nursing home admission

Fig. 2. Institutionalization-free survival in older persons in the general population and with geriatric syndromes starting from age 65 (treating mortality as a censoring event).

Frailty as predictor of outcomes post surgery

- Independent marker for worse outcomes following surgery, including postoperative complications, mortality, length of stay and discharge to care facilities

- Relationship between increased frailty and costs, not just at the time of hospitalization for surgery, but at six months post discharge (Robinson et al Am J Surg 2011, 202:511-514).
Frailty and Cardiovascular Disease

Frailty and confers increased mortality risk from cardiovascular disease

Pulignano and colleagues identified that moderately frail patients with heart failure benefited from a targeted intervention with improved clinical outcomes and improved healthcare costs (Pulignano G, J Cardiovasc Med 2010, 11:739-747).

How can we detect and measure Frailty
Measuring Frailty

- **Cumulative Physiological Dysfunctions**
  - presence of abnormalities in 3 of haematological, inflammatory, hormonal, adiposity, neuromuscular, or micronutrient systems predictive of frailty phenotype (Fried et al 2009)

- **Phenotype model**
  - Weight loss, fatigue, low energy expenditure, slow gait, weak grip (Fried et al 2001)
  - Additional components: cognitive impairment, mood, disability (Sourail et al 2010)

- **Cumulative Deficits (Frailty index)**
  - CSHA identified 92 variables (Rockwood and Mitnitski 2001)
  - 10 year outcome suggested 36 variables predictive (Song, Mitnitski and Rockwood 2010)
  - CGA 10 domains plus co-morbidities (Jones, Song and Rockwood 2004)
Operationalizing a Frailty Index from a Standardized Comprehensive Geriatric Assessment
(Jones, Song, and Rockwood 2004)

- Cognitive status
- Mood and motivation
- Communication (vision, hearing, speech)
- Mobility
- Balance
- Bowel function
- Bladder function
- IADLs and ADLs
- Nutrition
- Social resources
- Co-morbidity
Table 2. Predictive Validity of the Items That Constitute the Frailty Index from a Routine Comprehensive Geriatric Assessment (FI-CGA)

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Unadjusted</th>
<th>Adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive (n = 170)</td>
<td>1.55 (0.99–2.44)</td>
<td>1.75 (1.08–2.84)</td>
</tr>
<tr>
<td>Mood (n = 171)</td>
<td>1.18 (0.76–1.83)</td>
<td>1.30 (0.81–2.08)</td>
</tr>
<tr>
<td>Communication (n = 169)</td>
<td>1.17 (0.69–1.96)</td>
<td>1.21 (0.70–2.07)</td>
</tr>
<tr>
<td>Mobility (n = 170)</td>
<td>1.26 (0.77–2.05)</td>
<td>1.21 (0.73–2.00)</td>
</tr>
<tr>
<td>Balance (n = 169)</td>
<td>1.27 (0.82–1.98)</td>
<td>1.25 (0.80–1.95)</td>
</tr>
<tr>
<td>Bowel (n = 170)</td>
<td>1.28 (0.68–2.43)</td>
<td>1.34 (0.70–2.57)</td>
</tr>
<tr>
<td>Bladder (n = 169)</td>
<td>1.30 (0.75–2.25)</td>
<td>1.26 (0.72–2.22)</td>
</tr>
<tr>
<td>Nutrition (n = 170)</td>
<td>1.15 (0.63–2.08)</td>
<td>1.18 (0.63–2.19)</td>
</tr>
<tr>
<td>Instrumental activities of daily living/</td>
<td>1.75 (1.05–3.09)</td>
<td>1.84 (1.04–3.24)</td>
</tr>
<tr>
<td>activities of daily living (n = 171)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social (n = 170)</td>
<td>1.91 (1.05–3.47)</td>
<td>1.95 (1.07–3.55)</td>
</tr>
<tr>
<td>Comorbidity (n = 182)</td>
<td>0.94 (0.57–1.42)</td>
<td>0.90 (0.61–1.46)</td>
</tr>
<tr>
<td>FI-CGA (n = 169)</td>
<td>1.12 (1.01–1.24)</td>
<td>1.23 (1.01–1.45)</td>
</tr>
</tbody>
</table>

* Adjusted for age, sex, marriage status, and status of intervention.

† $P < .05$. 
Operationalizing a Frailty Index from a Standardized Comprehensive Geriatric Assessment (Jones, Song, and Rockwood 2004)

- Mild Frailty FI-CGA 0-7
- Moderate Frailty FI-CGA 7-13
- Severe Frailty FI-CGA >13
Clinical Frailty Scale

1. Very fit

2. Well

3. Well, with treated co-morbid disease

4. Apparently vulnerable (slowed up or disease symptoms)

5. Mildly frail (some dependency in IADLs)

6. Moderately frail (help with IADLs and ADLs)

7. Severely frail (dependent for ADLs)

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Probability of Institutionalization avoidance based on CSHA Frailty Scale

![Graph showing probability of avoidance of institutional care over time for different frailty scores.](image)
Probability of Survival based on CSHA Frailty Scale

Conceptual Model linking risk factors, Frailty and Geriatric Giants

- Risk Factors
  - Extreme Age
  - Functional and Gait Impairment
  - Isolation
  - Poverty
  - Co-Morbidity

- Frailty

- Geriatric Giants
  - Falls
  - Immobility
  - Delirium
  - Incontinence

- Adverse Outcomes
  - Functional Decline
  - Hospitalization
  - LTC
Unifying Frailty and Geriatric Giants

“multifactorial health conditions that occur when the accumulated effects of impairments in multiple systems render an older person increasingly vulnerable to situational challenges and adverse outcomes which are potentially ameliorated by holistic multidisciplinary interventions”

Includes: falls, immobility, delirium, urinary incontinence, and frailty
Clinician’s approach to the Frailty and the Geriatric Giants

- Appreciate presence of frailty as a “risk factor”
- Consider recent change in function a result of disease or drugs until proven otherwise
- Appreciate that longitudinal multiple assessments often necessary and collateral informants often invaluable
- Appropriate screening investigations have a role
- Multiple pathologies are often the rule
- Value of an inter-professional team approach
- Strategy should include restoration and prevention of secondary loss of function
Frailty

- Intellectual Impairment
- Impaired Immunity
- Impaired Homeostasis
- Impairment of Hearing/Vision
- Inactivity
- Immobility
- Instability and Falls
- Incontinence
- Impaction
- Isolation
- Infection
- Iatrogenesis
- Insolvency and poverty
- Impaired Immunity
Driving and Dementia – What Every Practicing Clinician Should Know

- Dr. Frank Molnar
  - Medical Director, Regional Geriatric Program of eastern Ontario (www.rgpeo.com)
  - Associate Professor of Medicine, Division of Geriatric Medicine, University of Ottawa
  - Member of CCNA, CanDRIVE and DADIO Driving research groups
  - Editor-in-chief, Canadian Geriatrics Society CME Journal
  - Vice-President, Canadian Geriatrics Society
  - Scientific Editorial Board, Canadian Medical Association Fitness-to-Drive guidelines
Disclosure

- No Known actual, potential or perceived Conflict of Interest

- Relationships with commercial interests: None
  - No Pharmaceutical Industry support
  - More relevant to driving
    - no Automotive Insurance Industry support
Acknowledgements

- Slides and ideas openly shared by practice partners at the University of Ottawa and The Ottawa Hospital Division of Geriatric Medicine:
  - Dr. Bill Dalziel
  - Dr. Anna Byszewski
Objectives

- To understand the factors that affect fitness-to-drive
- To review practical approaches to assessing fitness-to-drive in dementia
- To understand reporting requirements
Projections

Projected Change in Collisions by Driver Age (2006-2026)

Projected Increase in Casualty Crashes by Age (2006-2026)

Source: L’Écuyer et al. (2006). Transport Canada
A Major Public Health Concern

- When involved in a crash, seniors are over 4 times more likely to be seriously injured and hospitalized than are drivers 16-24 years of age.

- Treatment of injuries to seniors is more costly, recovery slower, less complete.

- Majority of crash-injured seniors were driving the vehicle.

- Most (3 of 4) crashes involving older drivers are multiple vehicle crashes (e.g. merging into traffic, left hand turns across oncoming traffic).
Estimated Numbers of Drivers with Dementia in Ontario\textsuperscript{1}

\textsuperscript{1} from Hopkins, et al., (2004)
The Scope of the Problem

2.5% of the elderly are DDs (Drivers with Dementia)

<table>
<thead>
<tr>
<th>Location</th>
<th>Population</th>
<th>DDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>3,500,000 elderly</td>
<td>87,500 DDs</td>
</tr>
<tr>
<td>Kingston</td>
<td>18,000 elderly</td>
<td>450 DDs</td>
</tr>
<tr>
<td>Toronto</td>
<td>500,000 elderly</td>
<td>12,500 DDs</td>
</tr>
<tr>
<td>Montreal</td>
<td>350,000 elderly</td>
<td>8,700 DDs</td>
</tr>
<tr>
<td>Ottawa</td>
<td>100,000 elderly</td>
<td>2,500 DDs</td>
</tr>
</tbody>
</table>
BUT

- The diagnosis of dementia does not automatically mean no driving
  - some people with mild dementia can drive albeit for a limited period of time before they must hang up the keys

- The diagnosis of dementia does mean:
  - You must ask if the person is still driving
    - The Pandora’s Box Paradox – no protection from lawsuit if you claim you did not know the person was driving
  - You must assess and document driving safety and follow your provincial reporting requirements
<table>
<thead>
<tr>
<th>Province</th>
<th>Obligation to Report</th>
<th>Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>British Columbia</td>
<td>Mandatory</td>
<td>Yes – report is privileged. No right of action against physician for reporting</td>
</tr>
<tr>
<td>Alberta</td>
<td>Discretion</td>
<td>Yes – No liability for reporting.</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>Mandatory</td>
<td>Yes – Report is privileged. No right of action against physician for reporting</td>
</tr>
<tr>
<td>Manitoba</td>
<td>Mandatory</td>
<td>Yes – Report is privileged. No right of action against physician for reporting</td>
</tr>
<tr>
<td>Ontario</td>
<td>Mandatory</td>
<td>Yes – Report is privileged and not admissible. No action against physician for complying with reporting.</td>
</tr>
<tr>
<td>Quebec</td>
<td>Discretion</td>
<td>Yes – No action against physician for reporting.</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>Mandatory</td>
<td>Yes - No action against physician for reporting.</td>
</tr>
<tr>
<td>Prince Edward Island</td>
<td>Mandatory</td>
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<td>Nova Scotia</td>
<td>Discretion</td>
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<td>Newfoundland</td>
<td>Mandatory</td>
<td>Yes - Report is privileged and not admissible. No action against physician for complying with reporting.</td>
</tr>
<tr>
<td>Yukon Territory</td>
<td>Mandatory</td>
<td>Yes – No liability for reporting</td>
</tr>
<tr>
<td>North West Territory</td>
<td>Mandatory</td>
<td>Yes – There can be no action unless physician acted maliciously or without reasonable grounds. Report is privileged.</td>
</tr>
</tbody>
</table>
Assessing Dementia and Driving

- **Start by asking older patients if they drive!**
  - Seems simple but most MDs do not ask (too busy, fear of opening Pandora’s box... Lack of awareness does not provide legal protection)

- Keep in mind that driving capacity depends on a **GLOBAL CLINICAL PICTURE:**
  - including cognition, function, physical abilities, medical conditions, behavior, driving record ....
  - Many patients will be more comfortable with the idea of driving cessation if the decision is made for physical reasons (e.g. loss of vision, syncope etc.)
Conclusions of Consensus statements (cont)

- Recognize limitations of data
  - those with moderate to severe dementia should not drive (CMA: Moderate = 1 ADL or 2 iADLs impaired due to cognition)
  - individual assessment for those with mild dementia
  - periodic follow-up is required (every 6 - 12 months)
  - “gold standard” is comprehensive on-road assessment
Limitations of Guidelines

- Based on expert opinion recommend tests such as MMSE, Clock Drawing, Trails B

- Lack of operating instructions (i.e. guidance regarding how to interpret the results of the tests)
  - Do not provide guidance regarding HOW physicians are to apply such tests (e.g. how to respond to different scores, what cut-offs to use, which errors = automatic failure ...)

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**Expert / Consensus Guidelines**
How to assess when fitness to drive is not glaringly obvious
DEMENTIA & DRIVING

- The diagnosis of dementia does **not** automatically mean **no driving** (some people with mild dementia can drive albeit for a limited period of time before they must hang up the keys)

- The diagnosis of dementia **does mean**:
  - You **must** ask if the person is still driving
  - You **must** assess and document driving safety and follow your provincial reporting requirements
  - If safe to drive, you **must** reassess fitness-to-drive every 6 months
  - You **should** start to counsel regarding eventual ‘**driving retirement**’ as early as possible to allow the patient to process, adjust and prepare
Approach to assessing fitness to drive in patients with cardiac and cognitive conditions

Frank J. Molnar, MD, MSc, FRCPC  Christopher S. Simpson, MD

Abstract

OBJECTIVE: To help physicians become more comfortable assessing the fitness to drive of patients with complex cardiac and cognitive conditions.

QUALITY OF EVIDENCE: The approach described is based on the authors' clinical practices, recommendations from the Third Canadian Consensus Conference on Diagnosis and Treatment of Dementia, and guidelines from the 2003 Canadian Cardiovascular Society/Canadian Neurological Society Conference.

MAIN MESSAGE: When assessing fitness to drive in patients with multiple, complex health problems, physicians should divide conditions that might affect driving into acute intermittent (ie, not usually present on examination) and chronic persistent (ie, always present on examination) medical conditions. Physicians should address acute intermittent conditions first, to allow time for recovery from chronic persistent features that might be reversible. Decisions regarding fitness to drive in acute intermittent disorders are based on probability of recurrence; decisions in chronic persistent disorders are based on functional assessment.

CONCLUSION: Assessing fitness to drive is challenging at the best of times. When patients have multiple, complex conditions, assessment becomes even more difficult. This article provides clinicians with systematic approaches to work through such complex cases.

Résumé

OBJECTIF: Aider le médecin à se sentir plus à l'aise pour évaluer la capacité de conduire des patients présentant des conditions cardiaques et cognitives complexes.

QUALITÉ DES PREUVES: La méthode décrite est fondée sur l'expérience clinique de l'auteur, sur les recommandations de la troisième conférence canadienne de consensus sur le diagnostic et le traitement de la démence, et sur les directives de la Conférence canadienne de consensus 2003 de la Société canadienne de cardiologie.

MESSAGE PRINCIPAUX: Lorsqu'il évalue la capacité de conduire des patients présentant des problèmes de santé multiples et complexes, le médecin doit distinguer, parmi les conditions médicamenteuses susceptibles d'affecter la conduite, celles qui sont aiguës et intermittentes (c-à-d. généralement absentes lors de l'examen) et celles qui sont chroniques persistantes (c-à-d. toujours présentes lors de l'examen). Il doit éviter d'avoir recours des conditions aiguës intermittentes pour laisser le temps aux conditions chroniques persistantes potentiellement reversibles de guérir. Pour les problèmes aigus intermittents, la décision reposera sur la probabilité de récidive; pour les problèmes chroniques persistants, elle repose sur l'évaluation fonctionnelle.

CONCLUSION: L'évaluation de la capacité de conduire est toujours difficile. En présence de facteurs multiples de morbidité, la difficulté est encore plus grande. Cet article suggère une approche systématique pour aborder ces cas particulièrement complexes.
Dementia and Driving Checklist

1. Functional Impact of the Dementia

- Consider ADLs and IADLs as a hierarchy with Driving being at the top as the highest level IADL (the only one where fractions of a second can result in accidental death)
- According to CMA guidelines and Canadian Consensus Guidelines on Dementia, persons with dementia are **unsafe to drive** if:
  - Impairment of >1 IADL *due to cognition* (IADL mnemonic = SHAFT):
    - *Shopping*,
    - *Housework/Hobbies*,
    - *Accounting*,
    - *Food*,
    - *Telephone / Tools / Transportation*
  - OR impairment of 1 or more personal ADLs *due to cognition* (ADL mnemonic = DEATH):
    - *Dressing*,
    - *Eating*,
    - *Ambulation*,
    - *Transfers*,
    - *Hygiene*
2. Family Concerns - ask in a room separate from the patient:

- If family feels the patient is safe/unsafe (make sure family has recently been in the car with the person driving).

- *The granddaughter* question—Would you feel it was safe if a 5-year-old granddaughter was in the car alone with the person driving? (Often different response from family’s answer to previous question)

  - Would you feel it was safe if your child or grandchild were walking in front of a car the patient was driving?

- Generally if the family feels the person is unsafe to drive, they are unsafe. If the family feels the person is safe to drive, they *may still be unsafe* as family may be unaware or may be protecting the patient.
Ask Family Specific Questions - Signs of a Potential Problem

- Collisions and/or damage to the car
- Getting lost
- Near-misses with vehicles, pedestrians
- Confusing the gas and brake
- Traffic tickets
- Missing stop signs/lights; stopping for green light
- Deferring right of way
- Not observing during lane changes/merging
- Others honking/irritated with the driver
- Needing a co-pilot (cannot compensate for emergencies)
3. Physical Inability to Operate a Car (Often a “physical” reason is better accepted).

- musculoskeletal problems, weakness/multiple medical conditions affecting
  - neck turn,
  - use of steering wheel/pedals,
  - ability to move feet rapidly
  - ability to feel the gas / brake pedals,
  - level of consciousness
    - cardiac/neurological problems (episodic “spells”).
Review all medical conditions that can impact on driving
(would you get in a car with them based on these findings?)

- **Acute Intermittent**
  - Syncope
  - Seizure

- **Chronic / progressive** (when severe, poorly controlled or changing rapidly can impact on driving)
  - 3Ds: **Dementia** / Delirium / Depression
  - Diabetes
  - Vision and hearing
  - Cardiac disease
  - Stroke
  - Parkinson’s
  - Arthritis
  - Sleep apnea etc.
Look for changes in the following domains:

- **Physical**: weakness; slow / limited movement
- **Sensory**: vision loss; limited feeling in limbs
- **Emotional**: anxiety, panic reactions
- **Cognitive/Perceptual**: upcoming slides
Dementia and Driving Checklist

4. Visuospatial Issues  - if major abnormalities, likely unsafe

- Tests
  - Intersecting pentagons/clock-drawing test on MMSE
  - Cube drawing / clock drawing on MOCA

- Significant problems including visual acuity, field of vision
Dementia and Driving Checklist

5. Drowsiness, slow reaction time, lack of focus

- Alcohol, benzodiazepines, narcotics, neuroleptics, sedatives, anticonvulsants
  - especially high doses or changing doses
- Anticholinergics—antiparkinsonian drugs, muscle relaxants, tricyclic antidepressants, antihistamine (OTC), antiemetics, antipruritics, antispasmodics, others (next slide)
<table>
<thead>
<tr>
<th>Level 3: Markedly anticholinergic (ACH)</th>
<th>Level 2: ACH adverse events, dose related</th>
<th>Level 1: Potential ACH activity, evidence by receptor binding activity</th>
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Optimizing utility of Cognitive Tests

- Visuospatial: MMSE (Pentagons), Clock Drawing
- Executive function: Trails A and B, Clock Drawing
Overlapping Cognitive Scores (Dichotomization)

- Unsafe drivers’ scores
- Safe drivers’ scores
- single cut-off

% Fail | Pass | Cognitive score
--- | --- | ---

Trichotomization

- uncertain, needs further testing

% Fail | Pass | Cognitive score
Applying Trichotomization

- Given the results of the cognitive test, would you get in the car with the patient driving (or would you want a child to walk in front of a car they are driving)?
  - Yes
  - Uncertain
  - Absolutely not
The MMSE

- The MMSE can provide a rough framework for assessing driving safety. Unless you feel a low score is due to a language barrier, low education or sensory deficits, patients scoring under 20 are likely unsafe to drive.
- Higher scores are more difficult to interpret.
  - Trichotomization (obviously unsafe, uncertain safety, obviously safe) approach may be helpful.
Clock Drawing Test

- A test of Executive Function and Visuospatial function

- Gestalt method: “The good, the bad or the ugly”
  - Once again Trichotomization (obviously unsafe, uncertain safety, obviously safe) approach may be helpful
Trails B
The Trails A + B test is a battery of memory, visuospatial, attention, and executive function tasks. Any errors or scoring below the 10th percentile in time taken raises concerns about driving safety. Although this test helps determine who should not be driving, passing Trails A+B does not necessarily mean the patient is safe to drive. The norms for Trails A and B by age (in seconds) and education are as follows:

<table>
<thead>
<tr>
<th>Age</th>
<th>Percentiles: 90th/50th/10th</th>
<th>Trails A*</th>
<th>Trails B ≤Grade 12</th>
<th>Trails B &gt;Grade 12*</th>
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<td>70-74</td>
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<td>178</td>
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<td>80-84</td>
<td>90/50/10</td>
<td>31</td>
<td>72</td>
<td>89</td>
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<td>120</td>
<td>319</td>
<td>240</td>
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</tbody>
</table>

*Trails A: performance decreases with age but is NOT affected by education.

*Trails B: performance decreases with age AND with education.

Although this test does help determine who should not be driving, passing Trails A+B does not necessarily mean that the patient is safe to drive.

TN Tombaugh Arch clin neuropsychol 2004;19.pg 203-14

- **Trail Making A:**
  - *Unsafe* = >2 minutes or 2 or more errors

- **Trail Making B (Trichotomization):**
  - *Safe* = <2 minutes and <2 errors (0 or 1 error)
  - *Unsure* = 2–3 minutes or 2 errors (consider qualitative dynamic information regarding *how* the test was performed—slowness, hesitation, anxiety or panic attacks, impulsive or perseverative behaviour, lack of focus, multiple corrections, forgetting instructions, inability to understand test, etc.)
  - *Unsafe* = >3 minutes or 3 or more errors (3 or 3 rule)
    - The longer the patient takes and the more errors they make, the more certain you can be that they are unsafe
    - Reference: Roy M, Molnar FJ. **Systematic review of the evidence for Trails B cut-off scores in assessing fitness-to-drive,** Canadian Geriatrics Journal (cgjonline.ca) Sept 2013; 16(3); 1 - 23
Reaction Time

- If you notice slow reactions on routine clinical interaction (history, physical examination) the patient may already be too slow to drive and merits further dynamic (i.e. timed) testing.

  - Stroke(s), delirium, depression, Parkinson’s, Sleep Apnea, resolving delirium, brain injury ...

  - Look at Trails A and B

  - May need on-road if trails A and B do not answer the question
Other RED FLAGS

- Delusions
- Disinhibition
- Hallucinations
- Impulsiveness
- Agitation
- Anxiety
- Apathy
- Depression
The Driving and Dementia Toolkit (3rd Edition)

www.rgpeo.com → Health Care Practitioners → Resources → Driving
CONTENT AREAS

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4  INTRODUCTION
5  ASSESSMENT ALGORITHM / ROAD MAP
6-7 FREQUENTLY ASKED QUESTIONS FOR HEALTH PROFESSIONALS

8  2. ASSESSMENT
9  PHYSICIAN / HEALTH PROFESSIONAL 10 MINUTE OFFICE BASED DEMENTIA AND DRIVING CHECKLIST
10 HOW TO EFFECTIVELY FILE THE REPORT TO THE PROVINCIAL REGISTRAR

11  3. AFTER THE ASSESSMENT – NEXT STEPS
12   GENERAL PRINCIPLES
13   STILL SAFE BUT NEEDS FOLLOWUP
13   PREPARATION FOR DRIVING CESSION
14   UNCERTAIN STRATEGIES
15   UNSAFE TO DRIVE
15   DISCLOSURE MEETING
16   HOW TO EMOTIONALLY SUPPORT THE PATIENT/CAREGIVER
17   SAMPLE - WRITTEN STATEMENT TO THE PATIENT

18  4. USEFUL RESOURCES
19   LIST OF RESOURCES
20   REMOVABLE FOLDER
10 Minute Office Based Dementia and Driving Checklist

- Longer 10 item checklist
INITIAL CONTACT WITH DRIVER WITH DEMENTIA

Do the 10 minute Office Dementia and Driving Checklist - page 10

CLEARLY UNSAFE

- Inform the patient to stop driving (give patient/family written notification and document in chart) (page 17)

- Notify the Provincial Registrar, if required – (page 10)

- Follow up regarding: (page 16)
  - Confirmation of driving cessation
  - Isolation
  - Depression
  - Use of alternative transportation

DRIVING RISK IS UNCERTAIN

- If there are dementia-related issues other than driving which require assessment and treatment (or if patient truly cannot afford on-road test).

- Refer to local multidisciplinary dementia assessment site (could include occupational therapy or neuropsychology evaluation)

- If still unsure re: fitness to drive

APPEARS SAFE

- Follow Up (every 6 – 12 months) (page 13)

- Refer to health professional led comprehensive driving evaluation-on/off road (see end of Toolkit)
A. STILL SAFE TO DRIVE – BUT NEEDS FOLLOW UP

Planning for driving retirement: discuss as early as possible

- That we probably all need to prepare for driving cessation at some point, especially when there is an element of early cognitive loss
- How much do you drive?
- How did you get here today?
- Can you tell me, in your own words, why driving is important to you?
- Have you ever considered stopping driving?
  - Yes- under which circumstances?
  - No – would you ever consider it given the diagnosis of dementia?
- What would it mean to you to stop driving?
- If you stopped driving, how would you get around?

- How to prepare patients to eventually stop driving
  - Our patients tell us that being told they need to stop driving is worse than being told they have cancer
  - Consider the tips on page 12 and 16
  - You may want to integrate into your own practice a script such as this:
  - *Mr. T, I know driving is very important to you. Based on the results of your tests, I am concerned that in the future you will likely need to stop driving. To protect your safety and the safety of others, you need to consider the future need to retire from driving...I am sorry...*

- Follow up:
  - Pre-schedule a follow-up appointment in 6 – 12 months (timing as per MD judgement).
    Ask family to notify you if the patient deteriorates before this appointment.
  - If the patient refuses to return for follow-up, notify the provincial registrar that follow-up is required.
IF there are dementia-related issues other than driving which require assessment and treatment (or if patient truly cannot afford on-road test)
- Refer to local multidisciplinary dementia assessment site
- could include occupational therapy or neuropsychology evaluation
- (see inserts at back of the Toolkit)).

IF driving is the only dementia-related issue to assess
- Refer to health professional led comprehensive driving evaluation-on/off road
- (see inserts at back of the Toolkit)

Additional Points:
- **Local multidisciplinary dementia assessment sites**
  - information enclosed at the back of the folder
  - or contact the local Ministry of transportation office or Alzheimer Society

- **Health Professional led comprehensive Driving Evaluation sites** (on/off road)
  - information enclosed at the back of the folder or contact the Provincial Registrar

- Document the discussion with the patient/caregiver in the patient chart
- Document plan of action and how you will follow up on these issues
UNSAFE TO DRIVE

DISCLOSURE MEETING:
When your patient is unfit to drive: 4 steps to driving cessation

1. Meet with family first.
   - Help them assume a positive and supportive role.
   - Explain concretely and empathically your concern for the safety of the patient and others.
   - Clearly outline your findings that the patient is not fit to drive, and explain that the law requires you to report the patient to the authorities.

2. Meet with the patient.
   - Having the family present can be helpful, but ask them to assume a supportive role.
   - Give the patient a positive role by recognizing that he or she has been a responsible driver.
   - Acknowledge that it is normal to be unhappy upon learning that one’s driving privileges are being revoked.
   - Sometimes it helps to give the patient a prescription in their name that says, “Do not drive.” Families who receive a copy may find this very helpful, too, for reminding the patient later about what you said.
   - If your patient argues with your position, remain firm and do not argue.

3. Talk about transportation options.
   - Family members could share driving responsibilities.
   - Taxi rides can cost less than maintaining (including insurance, registration etc.) a car if the patient drives <4,000 miles per year.

4. If your patient refuses to comply,
   - Meet with the family again and encourage them to remove the patient’s opportunity to drive.
   - Confiscate the keys, disable the car, or remove the car altogether.
   - Provide a written statement to the patient and family.

(ref. Pappas et al. and Molnar)
Medical Condition Report

Section 203 of the Highway Traffic Act requires that all legally qualified medical practitioners must report to the Registrar of Motor Vehicles the name, address and clinical condition of any patient sixteen years of age or older who, “is suffering from a medical condition that may make it dangerous for the person to operate a motor vehicle”. To simplify the reporting process, the Ministry of Transportation has created this form. Mail or fax to: Registrar of Motor Vehicles, Medical Review Section, Ministry of Transportation, 2960 Keele Street, Downsview, ON M3J 3E5. Tel. No.: 416-238-1773 or 1-800-286-1461. Fax No.: 416-238-3400 or 1-800-364-7860.

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<tr>
<td>City, Town or Village</td>
</tr>
<tr>
<td>Date of Birth</td>
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<th>For your convenience, the following is a list of the more common medical conditions that are reported to MTO, to be marked with an “X”. If the condition you are reporting is not listed, please indicate it in the section marked “Other”.</th>
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<td>☐ Drug Dependence</td>
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<tr>
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</tr>
<tr>
<td>☐ Seizure(s)-Alcohol related</td>
</tr>
<tr>
<td>☐ Heart disease with Fibrillation/Fungus/Fibrosis</td>
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<tr>
<td>☐ Blackout or Loss of consciousness or Awareness</td>
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<tr>
<td>☐ Stroke/TIA or head injury with significant deficits</td>
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<td>☐ Both Visual Acuity and Visual Field Impairment</td>
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<td>To expedite your patient’s file, please provide further elaboration of clinical condition (if applicable) or attach as a separate report: Diagnosis: Other Relevant Critical Information (be current dates - including dates of investigations, medication(s), treatment and prognosis) and whether or not the condition is a serious risk to road safety, threat to road safety is unknown or condition is temporary weeks/months.</td>
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</table>

| Date of examination upon which this report is based: Y M D | How long has this person been your patient? |

☐ Patient is aware of this report.

☐ I wish to be notified if my patient requests a copy of this report, as requesting this report pursuant to a request under the Freedom of Information Act may threaten the health or safety of the patient or another individual.

For MTO Use Only

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<td>Apt. No.</td>
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| City, Town or Village | Postal Code | Telephone No. |

| ☐ Family Physician | ☐ Emergency Room Physician | ☐ Specialist (specify): |

| Doctor’s Signature | Date of Report Y M D |


Date:
Name:
Address:

Dear Mr (Mrs):

I realize that this is a difficult recommendation for you, but based on the results of tests performed, I am recommending you do not drive.

You have undergone assessment for memory/cognitive problems. It has been found by comprehensive assessment that you have __________________________ dementia. The severity is ________________.

Even with **mild** dementia, compared to people your age, you have an 8 times risk of a car accident in the next year. Even with **mild** dementia, the risk of a serious car accident is 50% within 2 years of diagnosis.

Additional factors in your health assessment that raise concerns about driving safety include:

___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________

As your doctor, I have a legal responsibility to report potentially unsafe drivers to the Provincial Registrar. Even with a previous safe driving record, your risk of a car accident is too great to continue driving. Your safety and the safety of others are too important.

_________________________________________ M.D.  __________________________ Witness
Local resources

- Weblinks to relevant sites
- Alzheimer Society information
- Para Transpo brochure
- Taxi Coupon program
- List of transportation alternatives
- Volunteer drivers contact list
The Driving and Dementia Toolkit
For Patients and Caregivers
1st Edition
Canadian Geriatrics Society Journal of CME

Canadian Geriatrics Society Journal of CME publishes concise, clinically practical papers that are subject to peer review. This Journal is wholly controlled by the CGS, with our only purpose being to satisfy the educational needs of our members.

If you would like to suggest a topic for future articles, please submit this form.

MAY 1, 2014
CME Journal - Vol. 4, Issue 1, 2014

CONTENTS

- Editorial
  - Barry Goldlist, MD, FRCPC, FACP, AGSF
- Benefits of Exercise in the Elderly
  - Marisa Wan, MD, Roger Y. Wong, MD, FRCPC, FACP
- Medicine at 40,000 Feet: Implications for Older Adults

Journal Categories

- Arthritis (3)
- Cancer (1)
- Cardiovascular Diseases (1)
- Atrial Fibrillation (2)
- Heart Failure (2)
- Delirium (0)
- Dementia (13)
- Behavioural and Psychological Symptoms of Dementia (2)
- Caregiver Issues (2)
- Disclosure of Diagnosis (2)
Key Learning Points

1. If dementia is diagnosed, driving must be asked about, formally assessed, documented and findings must be reported to the Ministry of Transportation.

2. If you are unsure of safety, refer to specialized assessment or specialized on-road testing.

3. In dementia, driving safety must be reassessed every 6 to 9 months.
Risky Scenarios
Clinical Scenario

- You have found a patient unfit to drive and have informed them and their family. The patient says you are not permitted to send their medical information to the Ministry of Transportation or they will sue you and call the college.
  - What do you do?
Clinical Scenario

- A patient is in your office who is clearly unfit to drive home. MMSE 6/30. You tell them they should not drive home but they refuse to comply. You feel they are an imminent threat to public safety.
  - What do you do?
Clinical Scenario

- A patient has been reported to MOT as unfit to drive but the patient continues to drive. What are our obligations if
  - (i) the patient tells you he is continuing to drive;
  - (ii) family or office staff tell you they have seen this person driving;
  - (iii) you witness this person driving on the road recklessly.
Your Thorny Clinical Scenarios

- What driving related situations create challenges (headaches) for you in clinical practice?
- The whole audience represents the experts
Health TAPESTRY
A Novel Platform for Community Engaged Team Based Primary Care

Lisa Dolovich, Doug Oliver, Larkin Lamarche, Gina Agarwal, Tracey Carr, David Chan, Laura Cleghorn, Lauren Griffith, Dena Javadi, Monika Kastner, Jennifer Longaphy, Dee Mangin, Alexandra Papaioannou, Jenny Ploeg, Parminder Raina, Julie Richardson, Cathy Risdon, P. Lina Santaguida, Sharon Straus, Lehana Thabane, Ruta Valaitis, David Price and the Health TAPESTRY team
Supported by

Health Canada
Government of Ontario (INSPIREphc)
The Labarge Optimal Aging Initiative
The McMaster Family Health Organization
AIM
To foster **optimal aging** for individuals where they live using an interprofessional primary health and social care delivery approach that **centres on meeting a person’s health goals and needs.**
## TAPESTRY CANADA PARTNER SITES

### Vancouver, BC
- Drs John Sloan, Margaret McGregor, Jay Slater, Melody Monro, Johanna Trimble
- **Population:** Inner city, home-bound frail elderly

### Montreal, QC
- Drs Gillian Bartlett, Ellen Rosenberg, Mark Roper, Doaa Farid from McGill University
- **Population:** New immigrant patient population

### Saskatoon / Sturgeon Lake First Nation, SK
- Dr Vivian Ramsden, Ms Shirley Bighead, Ms Norma Rabbitskin
- **Population:** Aboriginal health with diabetes focus

### Newfoundland/Albera
- Drs Kris Aubrey-Bassler (Memorial University), and Donna Manca (University of Alberta)
- **Population:** Community-based, rural
Health TAPESTRY: The approach

- Trained *volunteer pairs* visit people where they live.
- In these visits, they learn about *what matters most* to that person and their health.
- They also learn more about a person’s health needs and set people up with a *Personal Health Record*. 

![Image of people interacting]

---

*McMaster University Family Medicine*
Health TAPESTRY: The approach

• The *data* clients provide to our volunteers about health goals and health needs are recorded using a tablet computer in the *clients home*.

• The *Tap APP* is a web-based application that is adaptable to the needs of any community or care setting.

• This information is prepared into a *summary report* and sent to the primary healthcare team.
Health TAPESTRY:  
the approach continued

• The *Tap Reports* are reviewed at an interprofessional team huddle weekly

  ![Image](image)

• The huddle has focused *care planning discussions* and follow up actions are directed to health team members (including volunteers, community organizations)

• Follow up actions occur including clinic visits, home visits (including volunteer return visits), and PHR messages..
Health TAPESTRY: the approach continued

• The healthcare team reviews reports of aggregate information on patient reported goals and health risks to identify and address care gaps at the population level

• Healthy Aging Group Education Series has been developed based on these trends
  • Nutrition & Aging
  • Physical Activity & Function
  • Advance Care Planning
TAPESTRY Older Adult Randomized Controlled Trial

Overarching Hypothesis

Better integration of the health and social care systems into a person’s life that centres on meeting a person’s health goals will result in enhanced function & quality of life.
Primary Research Question
TAPESTRY Older Adult RCT

What is the effectiveness of the TAPESTRY approach on the attainment of a person’s health goals in older adult participants compared to people not receiving the TAPESTRY approach?

Hypothesis: goal attainment more likely in TAPESTRY intervention group
Secondary Research Questions

What is the effect of the TAPESTRY approach on:

- Optimal aging
- Patient-centredness
- Patient empowerment
- Access
- Comprehensiveness
- Satisfaction with healthcare
- Self-efficacy for managing chronic disease
- Physical activity
- Quality of life
- Social support
- Caregiver burden
- Healthcare utilization

Hypothesis: all outcomes will improve in TAPESTRY intervention group

PLUS: many questions related to implementation research (including fidelity)
Overview of Design

• Delayed intervention pragmatic randomized controlled trial
• Embedded qualitative, descriptive studies
• Sample size estimation = 316
Control

• **Usual care**
  - No volunteer visits
  - Not discussed at an intake meeting
  - They may or may not have had a previous PHR account

• At the conclusion of the 6-month trial, the control group has option of receiving the intervention.
Sample (n=312)

Setting:
• McMaster Family Health Team (2 sites)

Inclusion criteria:
• Rostered
• 70+
• Geography accessible to volunteers

Exclusion criteria:
• reside in long-term care,
• out of the country > 50% of trial duration,
• are palliative or receiving end-of-life care,
# Clients \(n=312\)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Intervention (n=158)</th>
<th>Control (n=154)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, mean(SD)</td>
<td>78.1 (6.4)</td>
<td>79.0 (6.6)</td>
</tr>
<tr>
<td>Female, n(%)</td>
<td>99 (63.9)</td>
<td>90 (60.0)</td>
</tr>
</tbody>
</table>
| Education, n(%)                       | At least high school: 60 (39.22%)  
Post-secondary/higher: 93 (60.78%) | At least high school: 70 (48.28%)  
Post-secondary/higher: 75 (51.72%) |
| English, n(%)                         | 126 (94.16%)           | 153 (92.67%)     |
| European/White, n(%)                  | 109 (88.62)            | 107 (86.99)      |
| Born in Canada, n(%)                  | 73 (57.94%)            | 79 (62.70%)      |
| Married/Common law, n(%)              | 62 (50%)               | 59 (47.58%)      |
| ≥ 1 hospital admission, n(%)          | 30 (19.23%)            | 33 (22.45%)      |
| ≥ 1 ER visit, n(%)                    | 36 (23.08%)            | 29 (19.73%)      |
| ≥ 1 urgent care visit, n(%)           | 12 (7.69%)             | 11 (7.48%)       |
| ≥ 1 fall, n(%)                        | 29 (18.59%)            | 38 (26.03%)      |
| Number of meds, mean(SD)              | 5.35 (4.30)            | 5.58 (3.64)      |
| 5+ meds, n(%)                         | 76 (49.03%)            | 83 (56.85%)      |
Implementation Results: Quantitative
### Volunteer Visits (for intervention group)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of home visits</td>
<td>393</td>
</tr>
<tr>
<td>Active volunteers</td>
<td>78</td>
</tr>
<tr>
<td>Average time spent in training</td>
<td>11.5 hours (VLC, Launch, L&amp;L)</td>
</tr>
<tr>
<td>Average duration of TAP-App surveys</td>
<td>1hr20min (excluding travel)</td>
</tr>
</tbody>
</table>
Client reported health and life goals (based on 167 intervention clients who set goals)

<table>
<thead>
<tr>
<th>Goal area</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical activity</td>
<td>94 (19.4%)</td>
</tr>
<tr>
<td>Productivity</td>
<td>84 (17.4%)</td>
</tr>
<tr>
<td>Social connection</td>
<td>69 (14.3%)</td>
</tr>
<tr>
<td>Medical</td>
<td>58 (12.0%)</td>
</tr>
<tr>
<td>Maintain health</td>
<td>52 (10.7%)</td>
</tr>
<tr>
<td>Diet/nutrition</td>
<td>43 (8.9%)</td>
</tr>
<tr>
<td>Other (faith, travel, financial)</td>
<td>36 (7.4%)</td>
</tr>
<tr>
<td>Rehabilitation</td>
<td>29 (6.0%)</td>
</tr>
<tr>
<td>Mental health</td>
<td>16 (3.3%)</td>
</tr>
<tr>
<td>Smoking/alcohol</td>
<td>3 (0.6%)</td>
</tr>
<tr>
<td>Total (per person) goals set</td>
<td>484 (2.9 per person)</td>
</tr>
</tbody>
</table>
Number of reports and alerts generated (n=173 reports)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Intervention group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of reports sent to clinic</td>
<td>173</td>
</tr>
<tr>
<td>Number of reports triaged by TAP huddle</td>
<td>173 (100%)</td>
</tr>
<tr>
<td>Total number of reports with action evidence in chart</td>
<td>172</td>
</tr>
<tr>
<td>Total number of alerts generated</td>
<td>590</td>
</tr>
<tr>
<td>Average # alerts generated per client</td>
<td>3.41 ± 2.37</td>
</tr>
<tr>
<td>Proportion with at least one alert</td>
<td>93.6%</td>
</tr>
<tr>
<td>Proportion with 5 or more alerts</td>
<td>26.6%</td>
</tr>
</tbody>
</table>
Alerts generated

The most common alerts generated:

- suboptimal physical activity 82.7% (n=143)
- talk on advanced care planning 57.2% (n=99)
- nutritional risk 46.2% (n=80)
- loses control of bladder 35.3% (n=61)
- on 5+ medications 35.3% (n=61)
- forget medications 26% (n=45)
- memory 24.9% (n=43)
- fall in past year 23.1% (n=40)
Clinical Actions from TAP-Report

- Based on 183 chart audits, across 11 action instances

<table>
<thead>
<tr>
<th>Clinical Action</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinic visit</td>
<td>171</td>
</tr>
<tr>
<td>Phone call</td>
<td>85</td>
</tr>
<tr>
<td>Referral</td>
<td>27</td>
</tr>
<tr>
<td>Recommendation</td>
<td>212</td>
</tr>
<tr>
<td>Resources provided</td>
<td>34</td>
</tr>
<tr>
<td>Patient visits, referral occurs</td>
<td>8</td>
</tr>
<tr>
<td>Patient phone, referral occurs</td>
<td>2</td>
</tr>
<tr>
<td>Assessment</td>
<td>31</td>
</tr>
<tr>
<td>No further follow-up</td>
<td>40</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Clinic visit</th>
<th>N patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>No visits</td>
<td>90</td>
</tr>
<tr>
<td>1 visit</td>
<td>50</td>
</tr>
<tr>
<td>2 visits</td>
<td>21</td>
</tr>
<tr>
<td>3 visits</td>
<td>15</td>
</tr>
<tr>
<td>4 visits</td>
<td>5</td>
</tr>
<tr>
<td>5 visits</td>
<td>1</td>
</tr>
<tr>
<td>9 visits</td>
<td>1</td>
</tr>
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</table>
Clinical Actions

- 570 actions for 173 patients

<table>
<thead>
<tr>
<th>Action suggested by</th>
<th>N</th>
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<tbody>
<tr>
<td>Huddle</td>
<td>174</td>
</tr>
<tr>
<td>MRP/resident</td>
<td>74</td>
</tr>
<tr>
<td>Other</td>
<td>382</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Action directed to</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRP/resident</td>
<td>139</td>
</tr>
<tr>
<td>OT</td>
<td>119</td>
</tr>
<tr>
<td>Dietitian</td>
<td>80</td>
</tr>
<tr>
<td>Other</td>
<td>65</td>
</tr>
<tr>
<td>PT</td>
<td>46</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>38</td>
</tr>
<tr>
<td>Clinic group</td>
<td>27</td>
</tr>
<tr>
<td>SN</td>
<td>20</td>
</tr>
<tr>
<td>Nurse practitioner</td>
<td>19</td>
</tr>
<tr>
<td>Co-book</td>
<td>11</td>
</tr>
<tr>
<td>Social worker</td>
<td>8</td>
</tr>
<tr>
<td>Community program</td>
<td>8</td>
</tr>
<tr>
<td>Geriatric huddle</td>
<td>3</td>
</tr>
<tr>
<td>External specialist</td>
<td>5</td>
</tr>
</tbody>
</table>
Health TAPESTRY Interprofessional Teams Implementation Research – Preliminary Findings

Ruta Valaitis, Lisa Dolovich, Doug Oliver, Jenny Ploeg, Cathy Risdon, Gina Agarwal, Dee Mangin, Laura Cleghorn, Jessica Peter, Fiona Parascandalo, Nola Fuller
Research Objectives

Objectives:

1. To understand how the **structures and processes** of inter-professional teamwork and collaboration mediate the outcomes of the Health TAPESTRY RCT.

2. To understand the **similarities and differences** of health care provider, volunteer and client responses to the **implementation and normalization** of the Health TAPESTRY intervention in **two sites** of the McMaster Family Health Team.
Responses to Implementation
Clinical Staff, Volunteers, and Clients
1. Satisfaction related to receiving home visits from volunteers

2. Health TAPESTRY prompted changes in health-related behaviours for some clients

3. Lack of knowledge that TAP information gathered by the volunteers is shared with the clinic

1. Follow up by clinics identified by some clients

1. Goal setting is not for everyone

“I didn’t realize how old I was getting eh, so when I got sick, I was in bed in the hospital, I started to think and realized that well I’m 75 years old and now I can’t do this and I can’t do that, I’m an old geezer. TAPESTRY sort of told me, stop thinking that way. It was like it’s an accomplishment to reach my age.... Yeah, so that’s the grace I’m getting from TAPESTRY.” (Client 34)
Interprofessional Teams

1. IP team communication and processes improved by Health TAPESTRY
2. IP team structure evolved over time (time, space and right disciples at the table)
3. Concerns that health issues were missed or not followed up by the primary care team
4. Communication challenges between IP team and physicians (MRP)
5. Team increased understanding of one another’s roles (role clarity)
6. Clinicians concerned with the quantity and content of TAP reports (too much/too little info, concerns re. role of volunteer as data gatherer)

“So in that respect I think the group really learned a lot about each other as well, they learned a lot about **what unique things each brings to the process** and to the clinical management of the patient. So once the broader case management was taken care of around this person and priorities were named and next steps were outlined, the group became increasingly aware of what each discipline then could carve out for themselves and could offer, and **how each discipline perceived the strength and the risks for that particular patient.**” (Big “T” Team member)
Volunteers

1. Additional training was needed for some, with face-to-face real-world training being most valued

2. Volunteer coordinator and volunteer program was seen as effective

3. Mature and student pairing was effective

4. Volunteers had increasing engagement with community services and supports

5. Volunteers lacked understanding of clinical function and follow through

6. Goal setting with patients was challenging

“Each client visit I have completed made me feel fulfilled as a part of the program. Getting to know the seniors in the community who are a part of this program and building a rapport with them over a series of visits added meaning to my role.” (Student Volunteer)

“The first client that I visited was quite isolated in the community except for her family. She told us that she was very nervous about the visit and that we would ask about her loneliness. She did open up about this issue. I think I was a listening ear and she had not spoken to anyone about the way she was feeling. Hopefully through this project we can address this issue and help her be more involved with the community.” (Mature Volunteer)
Benefits

1. Clients benefited from a patient-focused team-based approach to care, which includes enhanced knowledge of individualized needs, goals, and risk factors.

2. Clinicians benefited from team-based approaches to care, and the opportunity to respond to acute care needs, as well as practice health promotion and disease prevention.

3. Clients and volunteers benefited from social engagement.

“I think it has allowed other Allied Health that may never have looked at a patient, because they haven’t fallen off the cliff yet, to have a look at the patient before that happens.” (Small “t”/huddle member)
Risks and drawbacks

1. For clinical staff, concerns about responsibility for and accountability to the TAP information, which comes to the clinic in new ways (through a volunteer interaction and a TAP report in the EMR)

2. For clinical staff, concern that screening does not result in any changed outcomes for clients

1. For volunteers, some emotional risk identified related to managing sensitive topics and discussions in interactions with clients

1. Drawbacks and risks not of concern to clients
Discussion: What We Have Learned About Implementation

• Recruitment of patients and volunteers was not challenging

• Volunteer training and ‘purposeful volunteering’ was valued by volunteers

• Physical activity and maintaining health and productivity and social connections were key patient goals
Discussion:
What We Have Learned About Implementation

• Despite a well elderly population there were extensive health needs/risks identified:
  • falls risk
  • incorrect use of medications
  • incontinence,
  • nutrition risk
  • physical activity
  • advanced care planning
  • memory concerns
Discussion:
What We Have Learned About Implementation

• The processes of collecting information in homes by volunteers, generating reports and having reports reviewed by the IP team improved over time and were generally working well after an initial adjustment period

• IP team went through incredible change: purposeful and unplanned; emerged with model that is sustainable today for complex patients
Discussion:
Implementation Challenges

• Retention of student volunteers was challenging considering their timetables

• Retention of older adult volunteers was challenging as we delayed start of intervention but was steady while we were in full swing

• Communication challenges re: role uncertainty among all participants were identified, but improved with time
Discussion:
Implementation Challenges

• Trust in information gathered by volunteers was noted as challenge by some on IP teams

• Low community referral, interactions; ideas for how to improve this emerged and improved over time

• PHR not taken up easily
Health TAPESTRY
Partners Near and Far
THANK YOU
The Behavioural Supports Ontario Clinical Leader Program:
Effecting change at the patient, family, hospital and system levels

Terri Glover & Stephanie MacKenzie
BSO Clinical Leaders

RGPs of Ontario Education Day
Behavioural Supports Ontario (BSO) in HNHB LHIN

- BSO LTCH Mobile Team
- BSO Hospital Clinical Leads
- BSO Community Outreach Team
- BSO Connect
- Integrated Community Lead
- Primary Care Tool Kit

Health Links
In 2013-14, BSO LTC Mobile Team began supporting patients ALC-LTC to transition hospital → LTC.

However, a gap was identified….
- Many patients were not yet ALC-LTC
- Patients with behaviours were denied acceptance to LTC or other discharge options

Patients were not receiving the right care, in the right place, at the right time.
The BSO perspective in Acute Care: Why is it important?

- People with dementia are admitted to hospital **two to three times** more often than people of the same age without dementia (Maslow, 2006)
- **75%** of people aged 70 and older who had cognitive impairment had responsive behaviours at some point throughout their stay in acute care (Sampson et al., 2014)
- Nurses with expertise in dementia care indicated that **responsive behaviours** are one of the greatest learning needs (Page & Hope, 2013).
- The presence of responsive behaviours is associated with longer lengths of stay with **more days designated ALC** (CIHI, 2012)
BSO Hospital Clinical Leader Program

Who can receive support?

- All hospitals in the HNHB LHIN
- Focus on patients with **responsive behaviours** and **cognitive impairment** who:
  - demonstrate responsive behaviours that are a barrier for the provision of care
  - do not have a discharge destination
  - have been declined by discharge destinations
BSO Clinical Leader Program

How does it support.....

Patients & Families?

• Collaborate with family/caregivers to understand patient’s social history and integrate this information into the recommended interventions

• Acknowledge the capabilities of the patient in developing a care plan to manage the behaviours

• Include family/caregivers, whenever possible, in the education and interventions for the responsive behaviours
BSO Clinical Leader Program

How does it support.....

Hospital Staff?

- Collaborate with staff to understand triggers for behaviours using a holistic approach
- Develop patient-specific care plans with staff and families that provide effective strategies for behaviour management
- Understand staff’s learning needs and work with internal resources to provide support
- Provide informal and formal education to staff and management re: responsive behaviours
BSO Clinical Leader Program

How does it support...?

Cross- Sectoral & System Collaboration?
• Facilitate complex case discussions among partners
• Partner with CCAC, LTC, Alzheimer Society & others to examine opportunities
• Determine and track system barriers to discharge; elevate themes and opportunities
• Support the BSO Strategy to advance ongoing quality improvement in the healthcare system
Reason for referral to BSO Clinical Leader

HNHB LHIN - May 1st, 2015 - March 31st, 2016

Physically responsive: 60
Transition support: 50
Agitation: 40
Resistance to care: 30
Verbally responsive: 20
Exit seeking: 10
Restraint use: 5
Bed exiting: 5
Wandering: 5
Acute change in behaviour: 5
Day/night issues: 5
Delirium: 5
No data: 5
Sexual behaviours: 5
Discharge locations of patients served by BSO
Hospital Clinical Leader
HNHB LHIN - May 1st, 2015 - March 31st, 2016

- Long-term care (n=40) 37%
- Community (n=16) 13%
- Tertiary inpatient Behavioural health bed (n=12) 10%
- Retirement home (n=10) 8%
- Transitional care (n=46) 32%
Why do responsive behaviours occur?

pain + constipation + infection + hearing impairment + vision impairment + substance (mis)use + metabolic problems + vascular conditions + nutritional deficiencies + perceptual disturbance + impairment in cognitive processing + executive dysfunction + memory impairment + impairment in language production + impairment in language comprehension + delusions + hallucinations + fear + anxiety + depression + apathy + frustration + change in routine + loss of autonomy or control + environmental over/understimulation + environmental press + poor it between needs & resources + past values/spiritual beliefs ………….
How existing models help inform the Clinical Leaders’ practice

(For a review of models see:
Cohen Mansfiled, 2000; Ishii et al, 2012)
What do Responsive Behaviours Indicate?

a) An unmet need in a person with cognitive impairment, whether cognitive, physical, emotional, social, environmental or other

b) A response to circumstances within the social or physical environment that may be frustrating, frightening or confusing to a person

c) Responsive refers to the fact that many of these behaviours could respond to appropriate and timely interventions, and may be occurring as a result of a message that can no longer be communicated
Approach to assessment and care planning

• Focus on understanding the cause(s) and contributor(s) to the responsive behaviour using a bio-psychosocial approach, the PIECES framework, and behavioural theories of ABC, environmental press, and unmet needs
• Collaborate with care team and family to develop individualized recommendations and plan of care based on assessment findings with a focus on promoting personhood and quality of life
• Communicate recommendations with care team and family, monitor and modify as needed
PIECES framework

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>P – Physical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I – Intellectual (Cognitive)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E – Emotional</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C – Capabilities (Function)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E – Environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S – Social</td>
<td></td>
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</tr>
</tbody>
</table>
Responsive Behaviour Algorithm for Acute Care (Version 3)

Interdisciplinary Assessment
Put the P.I.E.C.E.S together!

<table>
<thead>
<tr>
<th>Concept</th>
<th>Elements</th>
<th>Potential assessments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Health conditions</td>
<td>Rule out the 5 D's:</td>
<td>CAM, Pain assessment</td>
</tr>
<tr>
<td></td>
<td>Delirium</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Disease</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Drugs</td>
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<td>Change in intake and output</td>
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<td>Intellectual Cognitive patterns</td>
<td>Consider the 7 A's:</td>
<td>SMMSE, Clock draw test</td>
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<td></td>
<td>Anamnesia</td>
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<td>Aphasia</td>
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<td>Agnosia</td>
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<td>Altered perception</td>
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<td>Emotional Mood &amp; behaviour patterns</td>
<td>Consider the 4 D's:</td>
<td>Cornell Scale, GDS</td>
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<td>Disorder Adjustment</td>
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<td>Disorders of Personality</td>
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<td>Capabilities</td>
<td>ADLs</td>
<td>Assessment/observation from team</td>
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<td>What can the person do?</td>
<td>IADLs</td>
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<tr>
<td>Environment Physical, social, temporal</td>
<td>Overunder stimulation</td>
<td>Assessment/observation from team</td>
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<td>Relocation</td>
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<td>Change in routine</td>
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<td>Noise</td>
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<td>Lighting</td>
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<td>Social/ psychosocial</td>
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<td>Social network</td>
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<td>Life story</td>
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<td>Cultural heritage</td>
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Has the team identified possible causes of the behaviours? (Screen for pattern, frequency and severity of behaviour; use DOS and/or CMA)

Yes

Set goals and establish strategies/interventions

- Develop a patient-centered care plan in collaboration with patient, family and interdisciplinary care team that is based upon the patient’s goals, needs and strengths and reflects P.I.E.C.E.S.
- Non-Pharmacological Recommendations include:
  - See back for additional strategies...
  - Pharmacological Recommendations:
    - Consider referral to MRP, Pharmacol., Genetic Spec., and/or Psychiatry for support

Are strategies effective (i.e. behaviours manageable)?

Yes

Is there an imminent risk of harm or psychiatric condition suspected?

No

Refer to BSO Clinical Leader using Meditech Order Entry

- Initiate urgent team huddle (include consultants)
  - Consider 1:1 observation

*All behaviour has meaning! Responsive Behaviours indicate:
  a) An unmet need in a person with cognitive impairment, whether cognitive, physical, emotional, social, environmental or other
  b) A response to circumstances within the social or physical environment that may be frustrating, frightening or confusing to a person
  c) Responsive refers to the fact that many of these behaviours could respond to appropriate and timely interventions, and may be occurring as a result of a message that can no longer be communicated.
**NON-PHARMACOLOGICAL RECOMMENDATIONS** – In developing patient-specific interventions, consider what you have learned about the patient’s likes/dislikes.

### AGITATION

**Strategies:**
- Redirect attention, offer activity that patient enjoys (based on history)
- Use visual and verbal cues (gestures)

**Strategies:**
- Simplify tasks and routines
- Focus on capabilities – what can the patient do independently?
- Give options. Offer two choices to avoid overwhelming the person

### WANDERING & EXIT SEEKING

**Strategies:**
- Remove visual reminders (coat, hat, purse) from sight. These may be a trigger
- Help patient connect with familiar items (have family bring in familiar pictures, blanket, etc.)
- Reassure patient that he is safe. Provide signage to orient patient to place, time (if able to read)

**Strategies:**
- Accommodate wandering – provide assistance with walks in hall, front lobby – volunteer
- Important to address triggers
- Is patient wandering because she needs to go to the washroom? Is she thirsty? Past habits play an important role – ask family about routines when home
- Encourage movement and exercise to reduce anxiety (walks, programs)

### SEXUAL BEHAVIOURS

**Strategies:**
- Distract with activities that provide comfort (looking at family photos, provide with stuffed animal etc.) or keep hands busy (folding towels, sorting socks)
- Assist with clothing change if disrobing – may be related to body temp – hot/cold
- If sexual advances made to a visitor – distract and remove from situation (i.e., Mrs. Smith could you come with me for a moment? I need your help with ……)
- If alone in room, provide privacy. Avoid judgmental body language or tone

**Strategies:**
- Avoid approaching in ways that may be misunderstood (calling male resident honey, putting arm around waist, etc.)
- Offer body pillow at night – this is a very effective strategy in LTC
- If patient or anyone else is at risk because of any behavior – please consult with charge nurse
- If patient disrobing, try suspenders on pants.

### REPETITIVE BEHAVIOURS

**Strategies:**
- Distract with activities – change of scenery (walk), music therapy (headphones, iPod)
- Provide with something to occupy hands – facemask, stress ball, sensory activity

**Strategies:**
- Be where they are now – reality orientation does not work. I.e., Mrs. Smith rings call bell several times an hour asking for her husband (who passed away ten years ago). Do not respond by saying “your husband passed away many years ago”. Instead, say “Mrs. Smith, will you tell me about your husband? Where did you live?”
- Ask yourself, who is bothered by the behavior?

### PHYSICALLY RESPONSIVE BEHAVIOURS

**Strategies:**
- Observe for signs of increasing anxiety (increased pacing, facial expression) and intervene early by distracting (activity, walking). Assess potential for harm to self/others
- Speak in a gentle voice, avoid sudden movements.
- Assess environmental activities at time of outbursts – noisy?

**Strategies:**
- Does patient have an unsatisfied need? Thirst? Washroom? Pain?
- Approach slowly from the front, maintain eye contact, avoid touching if patient agitated.
- If resident in room and in no immediate danger, leave room and reapproach at a later time
- No means no
- Avoid arguing or expressing anger or irritation – verbally or nonverbally

### RESISTANCE TO CARE

**Strategies:**
- Stop and Go Approach

**Strategies:**
- Let person do as much as they are able (learn capabilities)
- No means no
"One Size Fits all"

I'm Sure He'll Fit...
Themes from care planning

• Using a person-centered lens, successful strategies have focused on:
  • Approach to the patient (i.e., happy facial expression)
  • Provision of meals
  • Pain management/ comfort
  • Understanding delirium (multi-factorial nature, varying time frame)
  • Toileting
  • Environmental considerations
  • Minimizing transitions
Mrs. Coffey – History and presentation to hospital

- 82 years old
- From home with daughter
- Hungarian background
- Diagnosed with dementia in 2012
- Stroke in December 2015; had expressive aphasia and some left-sided weakness
- Presented in March 2016 with a fall at home resulting in leg fracture
Mrs. Coffey – Referral to BSO Clinical Leader

• Referred to BSO Clinical Leader because she would awake at night, calling out. Staff could not identify her needs due to Mrs. Coffey’s aphasia and language barrier. Mrs. Coffey appeared to try and get out of bed at night, so a physical restraint was applied due to concerns about falls risk.

• The BSO Clinical Leader completed an assessment consisting of:
  • History taking from Mrs. Coffey’s daughter
  • Discussion with hospital staff
  • Review of previous assessments and documentation
  • PIECES assessment
### Mrs. Coffey – Findings and Strategies

<table>
<thead>
<tr>
<th>Category</th>
<th>Findings</th>
<th>Strategy/ Intervention</th>
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</thead>
<tbody>
<tr>
<td>Physical</td>
<td>In addition to baseline pain due to osteoarthritis in her knees, shoulders and hands, Mrs. Coffey had pain from her fracture. A pain relief gel was used at home with good effect</td>
<td>Clinical Leader recommended that physician re-assess pain control</td>
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<td>Pain relief gel placed at bedside and incorporated into care plan</td>
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<tr>
<td>Intellectual</td>
<td>Even at home, Mrs. Coffey called out due to difficulty expressing herself. Daughter created a ‘check list’ of Mrs. Coffey’s needs, to prompt checks of her care needs</td>
<td>‘Check list’ of strategies was posted at Mrs. Coffey’s bedside, in her MAR, and in her chart</td>
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<tr>
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<td>Strategies reviewed with nursing staff</td>
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<tr>
<td>Emotional</td>
<td>Mrs. Coffey finds comfort in traditional music</td>
<td>Linkage to Alzheimer Society enabled daughter to obtain an MP3 player loaded with preferred music</td>
</tr>
<tr>
<td>Capabilities</td>
<td>Mrs. Coffey would try to get up at home to toilet at night</td>
<td>Recommended that toileting assistance be provided at regular intervals</td>
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<tr>
<td>Environment</td>
<td>Mrs. Coffey is accustomed to being around other people</td>
<td>Clinical Leader advocated for move to shared room</td>
</tr>
<tr>
<td>Social</td>
<td>Mrs. Coffey speaks Hungarian</td>
<td>Daughter prepared key phrases with Hungarian translation and posted them at bedside</td>
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</table>
Mrs. Coffey - Outcomes

• Waited in hospital for a bed in long-term care
• BSO Clinical Leader completed a warm handoff to the BSO LTC Mobile Team
• Benefits were realized for many stakeholders:
  • Mrs. Coffey:
    • Fewer transitions in care setting and care providers
    • Decreased frequency of behaviour as per CMAI
    • Moved from private room to ward room – increased social interaction
    • Restraint reduction program successful
  • Mrs. Coffey’s daughter:
    • Reduced stress as Mrs. Coffey’s caregiver
Mrs. Coffey - Outcomes

- Benefits were realized for many stakeholders:
  - Hospital staff:
    - Skill development in supporting patients with cognitive impairment and responsive behaviours
    - Feelings of proficiency in meeting Mrs. Coffey’s care needs
  - Receiving long-term care home:
    - Supported Mrs. Coffey in a smooth transition
    - Obtained a well-developed behavioural care plan with demonstrated effectiveness for Mrs. Coffey
BSO Hospital Clinical Leader Program
key learnings and future objectives

• Provision of person-centered care is key
• Opportunities for future improvement include:
  • Supporting restraint reduction programs in acute care
  • Increasing recognition and treatment of pain
  • Assisting hospital staff to begin assessment when (or before!) responsive behaviours become evident (via the Algorithm for Responsive Behaviours in Acute Care)
  • Developing and sharing evidence-based educational materials
  • Fostering trusting, collaborative relationships between sectors.
QUESTIONS

“I AM WHO I AM, SO HELP ME CONTINUE TO BE ME”
Bibliography


Because of St. Joseph’s…
a real difference is being made in the lives of people in our community
Geriatric Interdisciplinary Team Clinic

The model and more…

Sue O’Hara NP
Cheryl McDonald OT
Specialized Geriatric Services
Priorities:

• Address needs of high risk patients in a timely way (within 2-3 weeks)

• Improve access to specialty geriatric services upstream
Senior Target Population

- Community dwelling
- Sense of urgency
- Comorbidities
- Functional impairments
- Social frailty
A hostile environment for frail seniors
Living Longer, Living Well - Dr. S. Sinha

- Evaluate the medical, functional and social needs in frail older adults.

- Emphasize an interdisciplinary approach

- Focus on improving a person’s functional abilities and quality of life in line with their goals of care.

- Consider the needs of involved family and caregivers
Geriatric Interdisciplinary Clinic: January 2013
Who are we?

Nurse Practitioner

Physiotherapy

Social Work

Occupational Therapy

CARING FOR THE BODY, MIND & SPIRIT SINCE 1869
Nurse Practitioner Role

- Complete medical assessment
- Provide diagnoses
- Order investigations
- Prescribe medications
- Refer to other specialists
Primary Care

Wait Time for Geriatrician Clinic

Recommendations

Inter D Team Clinic

• “We get the ball rolling......”
Triage

Interdisciplinary Clinic

- High risk?
- Urgency?
- A change?
- Team?
Clinic Model

Details

• 1 clinic weekly each Tuesday
• 3-4 patients
• Seen within 2-3 weeks referral received at triage
• Each appointment at least 2.5 hours
• Patient/family seen by all disciplines

Interim plan to avoid further decline and a need for higher level care
Initial phone calls & documentation started

PRIOR TO CLINIC

NP/PT Ax

OT/SW Ax

Team Debrief

CLINIC DAY

OT/SW Ax

NP/PT Ax

Final Debrief

Recommendations typed/shared with patient/family

1-2 WEEKS POST CLINIC

Documentation/Referrals Complete

Follow up phone calls
Meet our Lady in Blue
Demographics  n= 253

34%  

66%

Age Range: 53-95 years

Falls  Functional Decline
Memory  Mood
Assessment of Risk  n = 50

Assessment Urgency Algorithm

- 78% AUA 1 & 2
- 22% AUA 3 & 4
- AUA 5 & 6

AUA SCORES
RECOMMENDATIONS

SHAREDCARE MODEL
1. Family Physician
2. Inter D Team
3. Patient/Family
10% were not referred to a specialist – GP only to follow
RESTORATIVE POTENTIAL

- CCAC: 40%
- Community Support: 46%
- Geriatrician Clinic: 56%
- Geriatric Day Hospital: 25%
- Geriatric Rehab: 8%
QUALITATIVE FEEDBACK - Top 3 Themes

How was the experience of the clinic for you?

- 88% “felt listened to..”
- 42% “helpful education received..”
- 22% “thoroughness of the assessment…”
ONGOING AREAS FOR QUALITY IMPROVEMENT

• Interdisciplinary documentation
• Length of clinic
COST ?

QUALITY CARE?
Meet the brothers....

“A program where they are going to try to steer with wellness of a patient beyond a typical doctor’s visit...”
Meet the brothers...
THANK YOU!

QUESTIONS?