Conflict of Interest

We are co-founders of the PATH program, which includes:

– Structured clinical models to care for the frail elderly
– Team training
– Assessment tools
– Clinical practice guidelines
Frailty

- As we age we accumulate health issues
- The accumulation of health issues is called frailty
- Characterized by:
  - declining function
  - impaired mobility
  - cognitive impairment
- Frailty is a dominant emerging driver of inappropriate care
- Frailty can be easily and reliably measured
- The single most robust predictor of outcomes that matter to patients and health care providers
Appropriateness

• IOM definition
  – Care that complies with best practices or standard of practice
• BUT, application in frailty results in fragmented care that does not achieve the intended outcome
• Our definition:
  – Care that can reasonably be expected to achieve those outcomes that are important to the patient
Frailty places pressures on sustainability and accessibility.
The Secret of Frailty

• 85 year-old with bladder cancer
• Looks healthy, but has severe stage dementia,
  – Therefore, severely frail
• Dementia unrecognized by the health professionals who took care of him
• Treatment of bladder cancer made his overall health significantly worse, not better
• Died from frailty, not bladder cancer
The Secret of Frailty

• Health care providers fail to identify dementia, up to 75% of the time 1,2,3,4,5,6
  – Ask patients to make choices even when capacity/understanding may be limited
  – Ask patients/families to make complex choices without considering background frailty

• Why should we care if we’re under diagnosing dementia?
  – Take a look at Mr. G’s story

The Status Quo

Patients
- Increasing prevalence of frailty & demand for care
- Patients/caregivers not understanding prognosis and options

System
- Supply of providers silo’ed: care is not coordinated or continuous
- Clinical knowledge of frailty not being translated into care

Care poorly matched to prognosis

Poor Patient Experience

↑ Healthcare Utilization
↓ Flow
Sustainability in Frailty

Current Approach

Single-system based approach: needs are collated list of medical/social issues

Each issue requires its own program: Resource intensive, poor health outcomes

Demand

Resources
Frailty at the front lines: Mary Matthews

- 88F in hospital, post-angioplasty for severe ulcer of the left foot
- Medical conditions:
  - Anemia, gastrointestinal bleed
  - Heart disease (CAD)
  - Kidney disease
  - Lung disease (COPD)
  - Diabetes
  - Peripheral vascular disease (foot ulcers)
  - Dementia
  - 20 lb weight loss
Exploding the complexity of frailty

- How Geriatric Teams approach this scenario:
  - 60% recommend 4 consults: SW, OT, PT, dietary
  - 40% recommend 3 consults

- By exploding the complexity of frailty, we fail to provide the care that would enhance the patient experience
  - 2% list palliative care or goals of care discussion as needed
Sustainability in Frailty

Current Approach

- Single-system based approach: needs are collated list of medical/social issues
- Each issue requires its own program: Resource intensive, poor health outcomes

Proposed Approach

- Holistic approach: prognosis and frailty dictate care
- Triage resources based on overall health: ↑ satisfaction, sustainability
85 Y/O PATH assessment: severely frail with severe stage dementia

OUTCOMES

1. DEMENTIA AND FRAILTY STAGE KNOWN
2. PATIENT AND FAMILY AWARE
3. CARE PLAN MATCHES PROGNOSIS
4. REDUCED POLYPHARMACY
5. DECREASED MEDICALIZATION IN LAST 6 MONTHS OF LIFE
6. EFFECTIVE USE OF RESOURCES (TESTS, PHYSICIAN VISITS, ALLIED HEALTH AND ED VISITS)
7. LTC AND HOME CARE SUPPORT BASED ON NEED
8. IMPROVED EFFICIENCY
9. SEAMLESS NAVIGATION
# EOL care in frailty: Echoes from the past

<table>
<thead>
<tr>
<th>Pre-palliative era</th>
<th>Current EOL care for older adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>Withholding information about diagnosis</td>
<td>Avoid discussions of prognosis</td>
</tr>
<tr>
<td>• Lack of awareness about palliative care in cancer</td>
<td>• Lack of awareness of “frailty”</td>
</tr>
<tr>
<td></td>
<td>• Lack of recognition of dying</td>
</tr>
<tr>
<td></td>
<td>• Inattention to how people die</td>
</tr>
<tr>
<td>Comfort care withheld</td>
<td>Comfort care delayed</td>
</tr>
<tr>
<td>Culture of cure</td>
<td>• Futile treatments offered</td>
</tr>
<tr>
<td></td>
<td>• Specialty-based mandates</td>
</tr>
<tr>
<td>Spiritual approach at odds with medical care</td>
<td>Insensitivity to needs of dying</td>
</tr>
</tbody>
</table>
Palliative and Therapeutic Harmonization: The Vision

• Practitioners and patients collectively understand the "big picture" of health and prognosis in a standardized way

• Frailty is at the forefront of evidence-informed decision making

• Health care utilization is reduced while patient/family satisfaction increases
## PATH Stepwise Approach

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Understand</strong></td>
<td>Standardized process and tool for assembling the health trajectory and frailty</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“What is this patient’s story?”</td>
</tr>
<tr>
<td>2</td>
<td><strong>Communicate</strong></td>
<td>Approach to evidence-informed discussion of frailty and prognosis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Did you know?”</td>
</tr>
<tr>
<td>3</td>
<td><strong>Empower</strong></td>
<td>Build skills in decision maker for current and future decisions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“What information do I need to make a decision?”</td>
</tr>
</tbody>
</table>
Step 1: Understand

- In order to align care with prognosis (appropriate care), practitioners must understand the story of a person’s health
  - Frailty
  - Changes over time
  - Individualized circumstances and values that shape risk/benefit and priorities
- The PLAN tool
PLAN: Process, Outputs, and Outcomes

**Process**
- Completed by first team member to assess the patient (regardless of discipline)
- Takes 1.5 – 2 hours to complete
- Requires a collateral historian
- Uses standardized language

**Outputs**
- 360 degree snapshot of the patient
- Cognitive assessment
- Caregiver input (CGS)
- Identification of areas that need more focus
- Baseline/current summary available to all team members

**Outcomes**
- Common understanding of health issues
- Triaged team resources
- Reducing number of assessments
- Improving patient and caregiver experience
- Empowered team members, mentoring

PLAN is a standardized process that walks practitioner through assembling the story of frailty and acting on the results of assessment (care planning)
Step 2: Communicate

• Stepwise structured approach to assembling the big picture and prioritizing a plan
• Semi-structured approach to communicating this plan to practitioners and patients
### Step 3: Empower Framework for Decision Making

<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which health conditions are easily treatable? Which are not?</td>
</tr>
<tr>
<td>How will frailty make treatment risky?</td>
</tr>
<tr>
<td>How can symptoms be safely and effectively managed?</td>
</tr>
<tr>
<td>Will the proposed treatment improve or worsen function or memory?</td>
</tr>
<tr>
<td>Will the proposed treatment require time in hospital? If so, for how long?</td>
</tr>
<tr>
<td>Will the treatment allow more good quality years, especially at home?</td>
</tr>
<tr>
<td>What can we do to promote comfort and dignity in the time left?</td>
</tr>
</tbody>
</table>
No CPR
No surgery
Stop BCG rx
Comfort care

Family signs form
PATH: Clinical Programs

• Tertiary care
  – Inpatient and outpatient consultation
  – Specialty-based programs
    • Pre-surgical PATH
    • Renal PATH
    • Cardiac PATH

• Community
  – Web platform to identify and respond to frailty for family physicians and NPs
  – PATH Home Care
  – PATH LTC
Renal PATH

• Run independently by NP trained in PATH
• FACT screen identifies frailty
  – Leading Practice, Accreditation Canada, 2014
• Frail patients enrolled in Renal PATH program
  – 95% opt for conservative management
### Frailty Assessment for Care-planning Tool (FACT)

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
<th>Socializes</th>
<th>Impairment</th>
<th>Cognitive Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>○ very fit, exercises regularly (among fittest for age)</td>
<td>○ socializes weekly &amp; has a caregiver if needed</td>
<td>○ no impairment (i.e. still does everything on own)</td>
<td>○ recall 2-3, without subjective cognitive complaints</td>
</tr>
<tr>
<td>2</td>
<td>○ fit, active occasionally (seasonally)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>○ not regularly active beyond routine walking</td>
<td>○ socializes weekly &amp; might have a caregiver if needed</td>
<td>○ subjective impairment (i.e. does everything on own but finds things more difficult)</td>
<td>○ recall 2-3, but family concerned about memory</td>
</tr>
<tr>
<td>4</td>
<td>○ starting to slow down, and often tired during the day</td>
<td>○ socializes less than weekly &amp; might have a caregiver if needed</td>
<td>○ not dependent on others but symptoms often limit activities</td>
<td>○ recall 0-1, but can recall current events OR ○ recall 2-3 and can recall current events, but clock abnormal</td>
</tr>
<tr>
<td>5</td>
<td>○ walking slower and regularly uses (or needs to use) a cane or walker</td>
<td>○ socializes rarely &amp; might have a caregiver if needed</td>
<td>○ needs help with some instrumental acts of daily living (IADLs) (e.g. someone else does finances or housework)</td>
<td>○ vague/incorrect recall of current events, can recall name of US President</td>
</tr>
<tr>
<td>6</td>
<td>○ needs help of another person when going up/down stairs, walking on uneven ground, or getting in/out of bath OR has fallen more than once in the past 6 months, excluding slip on ice</td>
<td>○ mostly house-bound &amp; might have a caregiver if needed</td>
<td>○ needs cueing with basic activities of daily living such as dressing (e.g. help choosing what to wear)</td>
<td>○ incorrect recall of US President, can recall name of children/spouse</td>
</tr>
<tr>
<td>7</td>
<td>○ always need someone's help when moving around OR unable to propel self in manual wheelchair</td>
<td>○ house-bound &amp; isolated; with caregiver stress</td>
<td>○ needs help will all IADLs (i.e. shopping, cooking, housework, etc) and hands on help with BADLs (bathing, toileting, dressing)</td>
<td>○ vague/incorrect recall of children/spouse</td>
</tr>
<tr>
<td>8</td>
<td>○ bed bound, unable to participate in transfers</td>
<td>○ unable to participate in any social exchange, even when visited</td>
<td>○ dependent for all aspects of daily life</td>
<td>○ limited language skills with less than 10 words verbalized</td>
</tr>
<tr>
<td>9</td>
<td>○ Terminally ill with a life expectancy ≤ 6 months regardless of function, cognition or mobility status</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Cardiac PATH

• Inpatient Cardiology Unit
  – Routine screening for frailty in patients over 65 years using FACT
  – Those found to be frail referred to PATH for careful decision making before procedures
  – Outcomes of PATH process
    • 13% opt for invasive rx (significantly less frail)
    • 81% decline invasive rx
    • 6% uncertain
PATH Home Care

• PATH assessment completed by Continuing Care Workers
  – Assessment circulates to physicians, ED, and EMR
  – Frailty acknowledged

• Treatments and supports based on frailty stage
  – Is full PATH process necessary?
  – Services and LTC placement prioritized based on PLAN score
The PATH in LTC

• Implemented in Nursing Homes in Nova Scotia and Ontario
  – Team training
    • Assessment and care planning with PATH tools
    • Organize information to understand health trajectory
    • Learn new communication skills for ACP
  – Optimize medications
  – Support during the health crisis
PATH: Clinical outcomes

• First 150 patients completing the program:
  – 71 patients had a total of 77 procedures scheduled at the time of PATH consultation
  – 75% of these were cancelled

• 10% required hospitalization, but were cared for at home
  – Ability to respond to health crises prevents ED visits

### PATH: Appropriateness

<table>
<thead>
<tr>
<th>Baseline Measure</th>
<th>OR (95% CI) Controlled for age</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frailty (Clinical Frailty Scale)</td>
<td>3.41 (1.39 - 8.38)</td>
<td>&lt;0.005</td>
</tr>
<tr>
<td>Dementia Stage (FAST)</td>
<td>1.66 (1.05 - 2.65)</td>
<td>0.03</td>
</tr>
<tr>
<td>Ranked Invasiveness of procedure</td>
<td>1.0 (0.37 - 1.40)</td>
<td>NS</td>
</tr>
</tbody>
</table>

**Multivariate analysis:** Controlling for baseline age and frailty, procedure invasiveness showed a trend towards association with decision to proceed (OR 0.5, 0.2 - 1.0).
Participant Experience

• Participants include patients and caregivers/decision makers
• Qualitative study
  – Very high patient and caregiver satisfaction
• Themes identified
  – Service not provided elsewhere
  – Confidence in decisions
  – Discovery that there are options beyond aggressive medical interventions
  – Someone to call if needed
STEP:
Standardized Team Education Program

• Improves the efficiency and effectiveness of care delivery for hospital-based and community teams caring for frail older adults

• Skill sets
  – Recognition of frailty and its clinical drivers
  – High level care planning and decision making
  – Structured communication strategies for patients, caregivers and other health professionals
## CPGs for Diabetes: Targets for HbA1c

<table>
<thead>
<tr>
<th>HgbA1c, %</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 8</td>
<td>Decrease or discontinue diabetes treatment</td>
</tr>
<tr>
<td>&gt; 8 to &lt; 12</td>
<td>Goal is A1c above 8</td>
</tr>
<tr>
<td>&gt; 12</td>
<td>Consider increasing diabetes treatment</td>
</tr>
</tbody>
</table>

Why PATH Works

System
- Streamlines, triages, and builds efficient care
- Consistent approach to frailty across the health care continuum
- Identifies and responds to vulnerability

Practitioners
- Fosters true collaboration with improved efficiency
- Provider appetite for change: desire to avoid poor patient outcomes

Patients
- When patients understand frailty, they often opt for less costly care
- Branding results in recognizable program
- Model provides clarity about the alternatives to aggressive care
Conclusion

• What if we could provide better outcomes whilst taming the queue?
  – Data from the PATH model show that we can!

• PATH presents a full system solution to improve
  – Patient/family satisfaction
  – Management of health resources
  – Efficiency
  – Flow (ED, Home care services, LTC)

• We are eager to discuss how we might work together in your area of health care delivery