The Ontario Senior Friendly Hospital Strategy
Implementation of Accountability Indicators for Hospital-acquired Delirium and Functional Decline

OHA Health Achieve
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www.seniorfriendlyhospitals.ca
**Ontario Pan-LHIN Senior Friendly Hospital Strategy**

**PHASE 1**

**Objective**
- Identify current state

**Plan**
- Hospital self-assessments
- LHIN-level roll-up
- Provincial roll-up

**Provincial Summary Report**

**PHASE 2**

**Objective**
- Close the gap

**Plan**
- Implement hospital improvement plans
- Develop key enablers

**SFH “Promising Practices” Toolkit**

**PHASE 3 - ONGOING**

**SFH Indicators**

**Objective**
- Monitor and sustain hospital and system improvements

**Future State**
- Prevent functional decline
- Improve patient experience
- Enable hospital staff
- Improve equity
RGP Senior Friendly Hospital Framework

- Processes of Care
- Emotional & Behavioural Environment
- Ethics in Clinical Care & Research
- Organizational Support
- Physical Environment

What we do    How    Who    Why    Where
Functional Decline
Implement inter-professional early mobilization protocols across hospital departments to optimize physical function

Delirium
Implement inter-professional delirium screening, prevention, and management protocols across hospital departments to optimize cognitive function
# Delirium Indicators (All Hospital Sectors)

<table>
<thead>
<tr>
<th>Process</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rate of baseline delirium screening</strong></td>
<td>Percentage of patients (65 and older) receiving delirium screening using a validated tool upon admission to hospital</td>
</tr>
<tr>
<td><strong>Rate of hospital-acquired delirium</strong></td>
<td>Incidence of delirium in patients (65 and older) acquired over the course of hospital admission</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data Source and/or Tool</th>
<th>Confusion Assessment Method (CAM), CAM-ICU, or Intensive Care Delirium Screening Checklist (ICDSC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exclusions</td>
<td>Patients with decreased level of consciousness (unresponsive or requiring vigorous stimulation for a response); patients in palliative care</td>
</tr>
<tr>
<td>Considerations</td>
<td>Minimum frequency of screening to capture incidence – at least daily after the initial baseline screen</td>
</tr>
</tbody>
</table>
## Functional Decline Indicators (Acute Care Sector)

<table>
<thead>
<tr>
<th>Process</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate of ADL function assessment at admission and discharge</td>
<td>Percentage of patients (65 and older) receiving assessment of ADL function with a validated tool at both admission and discharge</td>
</tr>
<tr>
<td>Rate of no decline in ADL function</td>
<td>Percentage of patients (65 and older) with no decline in ADL function from hospital admission to hospital discharge as measured by a validated tool</td>
</tr>
</tbody>
</table>

### Data Source and/or Tool
- Barthel Index
- Health Outcomes for Better Information in Care (HOBIC) – ADL Section
- Alpha-FIM Tool®

### Exclusions
- Patients in emergency department who are not admitted to hospital; patients in palliative care; patients admitted for day surgery procedures; patients with a length of stay <48 hours
### Implementation

- 42 hospitals in 10 LHINs have implemented the delirium and/or functional decline indicators
- Inform future use of the indicators in quality improvement or hospital accountability structures

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>Sources of Data</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Indicator definition</strong></td>
<td>Technical specifications</td>
</tr>
<tr>
<td><strong>Feasibility</strong></td>
<td>Completion rates</td>
</tr>
<tr>
<td></td>
<td>Change trends</td>
</tr>
<tr>
<td></td>
<td>Data quality</td>
</tr>
<tr>
<td><strong>Clinical value</strong></td>
<td>Staff perception</td>
</tr>
<tr>
<td><strong>Implementation strategies</strong></td>
<td>Success factors</td>
</tr>
<tr>
<td></td>
<td>Challenges</td>
</tr>
<tr>
<td></td>
<td>• Action plan and progress reports</td>
</tr>
<tr>
<td></td>
<td>• Data submissions</td>
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<td></td>
<td>• Staff surveys</td>
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<td>• Monthly collaboration webinars</td>
</tr>
<tr>
<td></td>
<td>• Correspondence and coaching requests</td>
</tr>
</tbody>
</table>
Participating Hospitals

South West
Grey Bruce Health Services
St Joseph's Health Care (London)
St Thomas Elgin General Hospital

Erie St. Clair
Hotel-Dieu Grace Healthcare

Hamilton Niagara Haldimand Brant
Brant Community Healthcare System
Hamilton Health Sciences
Joseph Brant Memorial Hospital
Niagara Health System
Norfolk General Hospital
St Joseph's Healthcare (Hamilton)

Toronto Central
Baycrest
Providence Healthcare
St Michael's
Sunnybrook Health Sciences Centre
Toronto East General Hospital
University Health Network – TWH + TRI
West Park Healthcare Centre

Central
Markham Stouffville Hospital
North York General Hospital
Southlake Regional Health Centre
Stevenson Memorial Hospital

Central East
Campbellford Memorial Hospital
Lakeridge Health
Northumberland Hills Hospital
Ontario Shores Centre for Mental Health Sciences
Peterborough Regional Health Centre
Ross Memorial Hospital
The Scarborough Hospital

South East
Brockville General Hospital

Champlain
Deep River District Hospital
The Ottawa Hospital

North East
Blind River District Health Centre
Espanola Hospital & Health Centre
Health Sciences North
Kirkland District Hospital
St Joseph's General Hospital (Elliot Lake)
Manitoulin Health Centre
North Bay Regional Health Centre
Sensenbrenner Hospital
West Nipissing General Hospital
West Parry Sound Health Centre

North West
St Joseph's Care Group (Thunder Bay)

Summary of Implementation:
Delerium – 42 patient care units at 31 hospital sites
Functional Decline – 24 patient care units at 22 hospital sites
Delirium Implementation – Staff Perceptions

n = 307 point-of-care staff from 21 (out of 35) hospital sites

Easy to Administer
Easy to Record
Will reflect pt’s clinical condition
Will help provide better care

Mean 4.4
Mean 4.2
Mean 4.2

Not at all
Very much so
## Delirium Implementation – Staff Perceptions

<table>
<thead>
<tr>
<th>Positive</th>
<th>CAM tool is accurate, simple, and easy to implement</th>
</tr>
</thead>
</table>
| Challenges | • workload and competing priorities, more paperwork  
• difficulties when conducting assessments (e.g. different languages, obtaining patient history from family, patients with cognitive challenges)  
• consistency of assessments (e.g. differences between staff, time of day)  
• risk of offending patients when they are repeatedly asked the same questions to assess cognition  
• need to link assessments with a care plan when delirium is identified |
| Use of the Data | • improve clinical awareness, trigger care plans and D/C planning earlier  
• improve staff communication, participation, and collaboration  
• help target education and quality improvement initiatives  
• help inform hospital committees and policymakers |
Delirium Implementation – Early Results

- Large community hospital, 28-bed acute medicine unit
- Front-line RNs and therapy staff perform delirium screening using the CAM
- Data is recorded and collected using electronic medical records

![Graph showing delirium screening results over three months](image)
Delirium Implementation – Early Results

- Large teaching hospital, 12-bed medical step-down unit
- Front-line RNs perform delirium screening using the CAM
- Data is recorded and collected using paper records

![Bar chart showing delirium screening results.](chart.png)
**Functional Decline – Staff Perceptions**

*n = 174 point-of-care staff from 20 (out of 23) hospital sites*

**Easy to Administer**

- Mean 4.5

**Easy to Record**

- Mean 4.4

**Will reflect pt’s clinical condition**

- Mean 4.4

**Will help provide better care**

- Mean 4.4

**Not at all**

- Very much so

- 0 1 2 3 4 5 6 n/a
# Functional Decline – Staff Perceptions

<table>
<thead>
<tr>
<th>Positive</th>
<th>Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Barthel Index can be scored quickly</td>
<td>• workload and competing priorities</td>
</tr>
<tr>
<td>• HOBIC tool is efficient and straightforward</td>
<td>• difficulties when conducting assessments (e.g. different languages,</td>
</tr>
<tr>
<td></td>
<td>uncooperative patients, time needed to complete full functional Ax)</td>
</tr>
<tr>
<td></td>
<td>• communication of assessments between shift changes</td>
</tr>
<tr>
<td></td>
<td>• HOBIC tool is too long/has too many questions</td>
</tr>
<tr>
<td></td>
<td>• electronic databases need customizing for efficient input/retrieval</td>
</tr>
</tbody>
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<table>
<thead>
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<th>Use of the Data</th>
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<td>• improve clinical awareness, trigger care plans</td>
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</tr>
<tr>
<td>and D/C planning</td>
<td></td>
</tr>
<tr>
<td>• improve staff communication, participation,</td>
<td></td>
</tr>
<tr>
<td>and collaboration</td>
<td></td>
</tr>
<tr>
<td>• help target education and quality improvement</td>
<td></td>
</tr>
<tr>
<td>initiatives</td>
<td></td>
</tr>
<tr>
<td>• improve hospital/system goals (e.g. readmissions)</td>
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</tbody>
</table>
Functional Decline – Early Results

• Community hospital, 16 beds medical unit, ALOS 6.42
• HOBIC
• Hybrid data collection paper + electronic → improving compliance
**Functional Decline – Early Results**

- Community hospital, 16-bed acute medicine unit
- Front-line RNs perform ADL function assessment using HOBIC ADL section
- Data is extracted from HOBIC electronic records

![Chart showing functional decline results]

- **Admission and Discharge Assessment**
  - **Patients with No ADL Decline**

<table>
<thead>
<tr>
<th>Month</th>
<th>No ADL Decline</th>
<th>N (Participants)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MONTH 1 (N=28)</td>
<td>75%</td>
<td></td>
</tr>
<tr>
<td>MONTH 2 (N=23)</td>
<td>91%</td>
<td></td>
</tr>
<tr>
<td>MONTH 3 (N=21)</td>
<td>86%</td>
<td></td>
</tr>
</tbody>
</table>

Legend:
- Green: Admission and Discharge Assessment
- Blue: Patients with No ADL Decline
Summary

- 42 early adopter hospitals in 10 LHINS contributing to the evaluation of indicators

Early lessons learned
- Positive staff perceptions, +clinical value
- Many of the challenges identified are system issues
- Interprofessional engagement an important success factor
- Need for education and training
- Opportunity to improve compliance
- Incidence rates of delirium appear consistent with literature
- Further examination of functional decline window and technical specifications
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