Excellent Care for All: A Unified Commitment to a shared vision for Quality

“The people of Ontario and their Government share a vision for a Province where excellent health care services are available to all Ontarians, where professions work together, and where patients are confident that their health care system is providing them with excellent health care” (preamble, ECFAA).
“Ontario’s move to a high-quality, evidence-based healthcare system must be grounded in a clear and common set of provincial priorities, goals, tactics and measures. The whole system must begin to move in a common direction, a move that requires a common quality agenda” (HQO Strategic Plan 2012, page 11)

In effect, a common quality agenda answers: What Does Excellent Care for All look like?
A Common Quality Agenda focuses the system to work together for higher quality healthcare

While, the Quality Monitor Report answers: “what does a ‘high-performing health system’ look like? the common quality agenda focuses efforts to move the needle on ~40 performance indicators to demonstrate the power of partnerships.
Focus the Health Care System

• March 7, 2013 – Partner Engagement along with ICES
• External stakeholder consultations identified five key priority domains for quality improvement
• 5 months later, indicators were reduced in number and refined according to two guiding principles:
  – Availability of data and method for analysis (current/out year)
  – Alignment with HQO, regional, provincial, pan-Canadian and international indicators and priorities
Partners Improving System Performance

- Evidence package explains how change can occur
- Suite of HQO Quality Improvement tools
- Benchmark (*where available*)
- Target performance
- Timeframe for achievement

<table>
<thead>
<tr>
<th>Indicator name</th>
<th>Evidence</th>
<th>Improvement tools</th>
<th>% baseline</th>
<th>% target</th>
<th>Timeline</th>
<th>Accountable Organization</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>
The majority of indicators are those already in use by our system. The numbers will not add-up to 40 indicators in total as the categorization (Existing, Revised and New) results in overlap by sector

* All but two of the new indicators have been reported elsewhere
What is HQO’s Accountability?

HQO will provide:

• Evidence on:
  – Which topic areas have the greatest potential for impact and will therefore be a priority
  – Benchmarks for targets to be used in QIPs
  – Relationship of indicators to Quality Based Procedures
  – Effective strategies and ideas for improvement and QI tools

• Track, evaluate, monitor and provide feedback to report on progress

• Develop and deploy cross-sectoral quality improvement initiatives with engaged partners

• Monitor and reporting of systematic barriers that inhibit achievement
System alignment through common measures and approaches

- Better Quality
- Better Access to Care
- Better Value for Money

- Ontario’s Action Plan or Health
- Ontario Seniors Care Strategy
- Mental Health & Addictions Strategy
- Ontario Cancer Plan 2011-2015
- Cardiac Care Strategy
- Health Links
- A Common Quality Agenda
  - Primary Care Performance Measurement Framework
  - Provider Level Home Care Reporting
  - Patient Safety Public Reporting
Questions

• Are there alignment opportunities that have not been reflected between MOHLTC and HQO work?
• What advice do you have for HQO to make this stick?
• As a start, the patient’s perspective was reflected in this work by leveraging CIHI’s national focus group work with the public. What other suggestions do you have for us as we enhance our patient-centered focus?
List of indicators

Refer to binder
ALIGNED SUPPORT FOR SYSTEM TRANSFORMATION: EVIDENCE DEVELOPMENT & STANDARDS
## HQO Evidence Products

<table>
<thead>
<tr>
<th>Name</th>
<th>Time</th>
<th>Description</th>
<th>Purpose</th>
<th>Number of Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rapid Review (RR)</td>
<td>2 wks.</td>
<td>Review of systematic reviews</td>
<td>Develops Evidence</td>
<td>One</td>
</tr>
<tr>
<td>Evidence-based Analysis (EBA)</td>
<td>16 wks.</td>
<td>Systematic review and meta-analysis of RCT/observational studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Episodes of Care-Quality Based Planning (QBP)</td>
<td>6 mos.</td>
<td>Linear pathway linking Care Assessment Nodes (CANs) for management of disease condition</td>
<td>Applies Evidence</td>
<td>Multiple</td>
</tr>
<tr>
<td>Mega-Analysis</td>
<td>6-8 mos.</td>
<td>Review of interventions within domains of a conceptual framework of a disease condition or health state</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Summary of Ontario’s Application of Evidence-Based Analysis

• Defining the issue
• System-wide approach to evidence development and translation to policy
• Evidence
  o Identifying effective and cost-effective single technologies
  o Addressing uncertainty in decision making due to low quality evidence (Field evaluations)
  o Identifying the best investment into disease conditions and health states (Mega-analysis)
  o Bending cost and diffusion curves
  o Finding obsolescence (Appropriateness)
  o Shaping health funding models (Quality based funding)
>110 Single Technology Analyses by HQO, PATH & THETA
92% Conversion to Policy

2010 (to July 2010)
- 64-Slice Computed Tomographic Angiography for the Diagnosis of Intermediate Risk Coronary Artery Disease
- Cancer Screening With Digital Mammography for Women at Average Risk for Breast Cancer, Magnetic Resonance Imaging (MRI) for Women at High Risk: An Evidence-Based Analysis
- Cardiac Magnetic Resonance Imaging for the Diagnosis of Coronary Artery Disease
- Clinical Utility of Vitamin D Testing
- Endovascular Laser Treatment for Varicose Veins
- Extracorporeal Lung Support Technologies - Bridge to Recovery and Bridge to Lung Transplantation in Adult Patients
- Magnetic Resonance Imaging for the Assessment of Myocardial Viability
- Non-Invasive Cardiac Imaging Technologies for the Assessment of Myocardial Viability
- Non-invasive Cardiac Imaging Technologies for the Diagnosis of Coronary Artery Disease
- Population-Based Strategies for Smoking Cessation
- Positron Emission Tomography (PET) for the Assessment of Myocardial Viability
- Single Photon Emission Computed Tomography for the Diagnosis of Coronary Artery Disease
- Solid Organ External Radiation for End Stage Organ Failure in persons with HIV
- Stress Echocardiography for the Diagnosis of Coronary Artery Disease
- Stress Echocardiography with Contrast for the Diagnosis of Coronary Artery Disease
- Use of Contrast Agents with Echocardiography in Patients with Suboptimal Echocardiography

2009
- Airway Clearance Devices for Cystic Fibrosis
- Diabetes Strategy Evidence Platform
- Fenestrated Endovascular Grafts for the Repair of Juxtarenal Aortic Aneurysms
- Intravascular Lenses for the Treatment of Age-Related Cataracts
- Intravascular Computed Tomography for Evaluation of the Optimal Vascular Anatomy
- Optical Coherence Tomography for Age-Related Macular Degeneration & Diabetic Macular Edema
- Oral Appliances for Obstructive Sleep Apnea
- Phakic Intraocular Lenses for the Treatment of Low to High Refractive Errors
- Point-of-Care International Normalized Ratio (INR) Monitoring Devices for Patients on Long-term Anticoagulation Therapy
- Prevention and Management of Chronic Pressure Ulcers
- Screening Methods for Early Detection of Colorectal Cancers and Polyps
- Specialized Multidisciplinary Community-Based Care (SMCC) Series
- Ultraviolet Phototherapy Management of Moderate-to-Severe Psoriasis

2008
- Aging in the Community
- Aging in the Community: Summary of Evidence-Based Analyses
- Behavioral Interventions for Urinary Incontinence in Community-Dwelling Seniors
- Caregiver- and Patient-Directed Interventions for Dementia
- Limbal Stem Cell Transplantation
- Prevention of Falls and Fall-Related Injuries in Community-Dwelling Seniors
- Social Isolation in Community-Dwelling Seniors
- The Falls/Fractures Economic Model in Ontario Residents Aged 65 Years and Over (FEMOR)

2007
- Anal Dysplasia Screening
- Low-Density Lipoprotein Apheresis
- Multidetector Computed Tomography for Coronary Artery Disease Screening in Asym. Pop
- Scintimammography as an Adjunctive Breast Imaging Technology
- Screening Mammography for Women Aged 40 to 49 Years at Average Risk for Breast Cancer

2006
- Ablation for Atrial Fibrillation
- Advanced Electrophysiologic Mapping Systems
- Artificial Disc Replacement for Lumbar and Cervical Degenerative Disc Disease
- Coil Embolization for Intracranial Aneurysms
- Energy Delivery Systems for Treatment of Benign Prostatic Hyperplasia
- Enhanced External Counterpulsation (EECP)
- Extraanureal Photopheresis (ECP)
- Functional Brain Imaging
- Gastric Electrical Stimulation
- Hydrophilic Catheters
- In Vitro Fertilization and Multiple Pregnancies
- Intravascular Ultrasound to Guide Percutaneous Coronary Interventions
- Metal-on-Metal Total Hip Resurfacing Arthroplasty
- Midurethral Slings for Women with Stress Urinary Incontinence
- Nanotechnology
- Negative Pressure Wound Therapy
- Optimum Methadone Compliance Testing
- Polysomnography in Patients with Obstructive Sleep Apnea
- Portable Bladder Ultrasound
- Routine Eye Exams
- Ultrasound Screening for Abdominal Aortic Aneurysm
- Utilization of DIA Bone Mineral Densitometry in Ontario

2005
- Bariatric Surgery
- Deep Brain Stimulation in Parkinson’s Disease and Other Movement Disorders
- Sacral Nerve Stimulation For Urinary Urge Incontinence, Urgency-Frequency, Urinary Retention, and Fecal Incontinence
- Spinal Cord Stimulation for Neuropathic Pain
- Multi-Detector Computed Tomography Angiography for Coronary Artery Disease
- Osteogenic Protein-1 for Long Bone Nonunion
- Intrathoracic Bicaflofen Pump for Spasticity
- Physiotherapy Rehabilitation After Total Knee or Hip Replacement
- Total Knee Replacement
- Intra-Articular Viscosupplementation With Hylan G-F 20 To Treat Osteoarthritis of the Knee
- Hyperbaric Oxygen Therapy for Non-Healing Ulcers in Diabetes Mellitus
- Arthroscopic Lavage and Debridement
- Biventricular Pacing (Cardiac Resynchronization Therapy)
- Implantable Cardioverter Defibrillators (ICD)
- Testosterone for Osteoarthritis of the Knee
- Positron Emission Tomography for the Assessment of Myocardial Viability
- Air Cleaning Technologies
- Endovascular Repair of Descending Thoracic Aortic Aneurysm
- Automated External Defibrillators

2004 (and prior)
- Balloon Kyphoplasty
- Bispectral Index Monitor
- Bone Anchored Hearing Aid (BAHA)
- Bone Morphogenetic Proteins and Spinal Surgery for Degenerative Disc Disease
- Computed Tomographic Colonography
- Computer-Assisted Surgery Using Telemanipulators
- Endovascular Repair of Abdominal Aortic Aneurysm
- Functional Cardiac Magnetic Resonance Imaging in the Assessment of Viability and Perfusion
- Gamma Knife
- Intracoronary Radiation: An Evidence-Based Analysis
- Islet Transplantation
- Left Ventricular Assist Devices
- Neonatal Screening of Inborn Errors of Metabolism Using Tandem Mass Spectrometer
- Patient Monitoring System for MRI (PDF)
- Primary Angioplasty for the Treatment of Acute ST-Segment Elevated Myocardial Infarction
- Pyrocarbon Finger Joint Implant
- Radio Frequency Ablation for Primary Liver Cancer
- Repetitive Transcranial Magnetic Stimulation for the Treatment of Major Depressive Disorder
- Small Bowel Transplant
- Thermal Balloon Endometrial Ablation for Dysfunctional Uterine Bleeding (TBA)
- Video Laryngoscopy for Tracheal Intubation
- Wireless Capsule Endoscopy
E.G. 1 Artificial Disc Replacement for Degenerative Disease

![Graph showing the increase in artificial disc replacement volumes from 2003 to 2008. The graph includes two lines: one for cervical volumes and another for lumbar volumes. There is a recommendation by OHTAC highlighted.]
E.G. 2 Mid-urethral Slings for Stress Urinary Incontinence
Tracking by Geographic Information Systems
Hysterectomy for Dysfunctional Uterine Bleeding 2010/2011
Rate ratio: rate of hysterectomies by residence compared to provincial average

Legend
Rate Ratio (# LHINs)
- 0.10 to < 0.75 (4)
- 0.75 to < 0.90 (2)
- 0.90 to < 1.10 (1)
- 1.10 to < 1.30 (2)
- 1.30 to 4.19 (5)

FY 2010/2011 Ontario Rate = 19.95 per 100,000
Mega-Analysis – Application of Evidence to Disease Conditions and Health States

• Mega-analyses to date:
  – Osteoarthritis of the knee HQP (2005)
  – Cardiac viability HQP (2005)
  – Aging in the community HQP/PATH (2008)
  – Colon cancer screening HQO/PATH (2008)
  – Diabetes HQO/PATH (2009)
  – Intermediate care HQO/THETA (2009)
  – Wound care prevention HQO/THETA (2009)
  – Cardiac diagnostic tests HQO/THETA (2010)
  – COPD HQO/PATH (2011)
  – Optimized Chronic Disease Management HQO/PATH/THETA (2012)
  – End of Life Care HQO/PATH/THETA (2013)

• Micro-economic decision analytic models
  – Ontario Cardiovascular Model (THETA) (2009)
  – Ontario Arthritis Model (PATH) (2011)
  – Ontario COPD Model (PATH) (2011)
  – Ontario Optimized Chronic Disease Management (PATH/THETA) (2012)
Methodology for Mega-Analysis

• Conduct individual evidence-based analyses (EBA)

• Partner with *PATH & †THETA for economic analysis

• Partner with ‡CHEPA to conduct qualitative analyses on patient values as these concepts relate to the interventions under review

• Contextualize evidence through expert panel process

• Combine results of EBA of interventions, expert panel contextualization, and findings from the economic and qualitative analyses
## EG Mega Analysis: Diabetes Mega-analysis

<table>
<thead>
<tr>
<th></th>
<th>Multidisciplinary Program</th>
<th>Insulin Pumps for Type 2</th>
<th>Behavioural Interventions</th>
<th>Bariatric Surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Δ HbA1c</strong></td>
<td>-1.02%</td>
<td>-0.14%</td>
<td>-0.44%</td>
<td>-2.70%</td>
</tr>
<tr>
<td><strong>$/QALY gained</strong></td>
<td><strong>$19,869/QALY</strong></td>
<td><strong>$1.9M/QALY</strong></td>
<td><strong>$36,226/QALY</strong></td>
<td><strong>$15,697/QALY</strong></td>
</tr>
<tr>
<td><strong>Δ IHD</strong></td>
<td>15,265</td>
<td>201</td>
<td>446</td>
<td>2,757</td>
</tr>
<tr>
<td><strong>Δ MI</strong></td>
<td>40,882</td>
<td>562</td>
<td>521</td>
<td>13,839</td>
</tr>
<tr>
<td><strong>Δ Heart Failure</strong></td>
<td>8,563</td>
<td>462</td>
<td>595</td>
<td>31,137</td>
</tr>
<tr>
<td><strong>Δ Stroke</strong></td>
<td>14,074</td>
<td>361</td>
<td>372</td>
<td>8,957</td>
</tr>
<tr>
<td><strong>Δ Amputation</strong></td>
<td>13,180</td>
<td>201</td>
<td>372</td>
<td>2,997</td>
</tr>
<tr>
<td><strong>Δ Blindness</strong></td>
<td>6,180</td>
<td>281</td>
<td>521</td>
<td>4,179</td>
</tr>
<tr>
<td><strong>Δ Renal Failure</strong></td>
<td>819</td>
<td>-8</td>
<td>74</td>
<td>17</td>
</tr>
</tbody>
</table>
Rationale for End of Life Mega-Analysis

- Request from OHTAC to review evidence for critical areas of end of life care to inform policy.

- Support from MOLTC for review

- Interest and support from health care providers, patients, other relevant stakeholders.
SCOPING RESULTS
Developing a Conceptual Framework

<table>
<thead>
<tr>
<th>Population</th>
<th><strong>In Scope</strong></th>
<th><strong>Out of Scope</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>In Scope</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adults within last year of life</td>
<td></td>
<td>Paediatrics</td>
</tr>
<tr>
<td>Cancer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chronic Deteriorating Health Conditions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frail elderly and persons with dementia</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Out of Scope</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Domains of Framework</th>
<th><strong>In Scope</strong></th>
<th><strong>Out of Scope</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication &amp; Decision-making</td>
<td>Processes (i.e. assessments)</td>
<td></td>
</tr>
<tr>
<td>Location of Care</td>
<td>Social</td>
<td></td>
</tr>
<tr>
<td>Models of Care (Care coordination)</td>
<td>Cultural</td>
<td></td>
</tr>
<tr>
<td>Life Support Interventions</td>
<td>Care of Imminently Dying as a unique focus</td>
<td></td>
</tr>
<tr>
<td>Spiritual Support</td>
<td>Ethical/Legal</td>
<td></td>
</tr>
<tr>
<td>Psychological/Emotional</td>
<td>Physical Symptom Management</td>
<td></td>
</tr>
<tr>
<td>Symptom Management Service</td>
<td></td>
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</tr>
</tbody>
</table>
Conceptual Framework: End Of Life Care

Quality of End of Life Care

- Communication
  - Fam/ Carer
  - Prov

Location
- Patient preferences for place of death
- Determinants of place of death

Models of Care
- Home
- Hospice
- Hospital

Services
- Life support (e.g. CPR, ventilation)
- Spiritual Support
- Psycho/emotional Support (e.g. depression, anxiety)

Care Delivery Models
## Scoping: Communication

<table>
<thead>
<tr>
<th>Topic</th>
<th>Preliminary Literature Identified</th>
<th>Interventions &amp; Comparators</th>
<th>Outcomes</th>
<th>Possible Research Questions</th>
</tr>
</thead>
</table>
| Communication | Systematic reviews | • Advance care planning (ACP)  
  • Discussion/conference (pt-prov, pt-fam-prov)  
  • Teams of providers/combination interventions  
  • Ethics consultation  
  • Quality-improvement intervention  
  • Printed information  
  • Telephone | • Satisfaction  
  • QOL  
  • Concordance  
  • Health care usage  
  • Psychological (e.g. stress, anxiety, depression)  
  • Symptoms  
  • Knowledge/understanding  
  • Completion of ACP documents/process  
  • Quality of communication  
  • Dying at home | • Which communication approaches (including ACP) optimize the quality of EoL care for patients with advanced disease (including those who are terminally ill), caregivers (i.e. family, etc.), and providers?  
  (See Appendix A for other research questions that were proposed) |

**Question for Panel:**
Of the interventions listed, are there any which the panel would like to focus the analysis?
## Scoping: Location of Death – Preferences and Determinants

<table>
<thead>
<tr>
<th>Topic</th>
<th>Preliminary Literature Identified</th>
<th>Interventions &amp; Comparators</th>
<th>Outcomes</th>
<th>Possible Research Questions</th>
</tr>
</thead>
</table>
| Preferences and Determinants of Location of Death | Observational studies | **Patient Preferences**  
- Cross-sectional studies  
- Multivariate analyses assessing different determinants | **Possible determinants of place of death**  
- Sociodemographic factors (age, sex, marital status, ethnicity)  
- Disease type  
- Patient preference  
- Healthcare services availability (home care team, inpatient bed availability etc.) | • What are the preferences for place of death in palliative care patients?  
• What are the determinants of place of death in palliative care patients? |
### Scoping: Models of Care

<table>
<thead>
<tr>
<th>Topic</th>
<th>Preliminary Literature Identified</th>
<th>Interventions &amp; Comparators</th>
<th>Outcomes</th>
<th>Possible Research Questions</th>
</tr>
</thead>
</table>
| Models of EoL Care   | Systematic reviews               | • Multidisciplinary palliative care teams  
• Self-management  
• Automated telephone contact  
• Education and counselling  
• Symptom management  
• Communication  
• Care pathways/ frameworks | • QOL  
• Satisfaction  
• Health care usage  
• Clinical  
• Referrals  
• Treatments  
• Mortality  
• Effectiveness of communication  
• Processes of care  
• Perceptions  
• Dying at home  
• Preferences  
• Psychological | • Within each location, which model of EoL care optimizes patient satisfaction, QOL, and health care utilization?  
(See Appendix C for other research questions that were proposed) |

**Question for Panel:**  
In the Ontario context is there a specific model of service delivery for which evidence is needed?
## Scoping: Services - Life Support

<table>
<thead>
<tr>
<th>Topic</th>
<th>Preliminary Literature Identified</th>
<th>Interventions &amp; Comparators</th>
<th>Outcomes</th>
<th>Possible Research Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Services-Life support</td>
<td>Systematic review and meta-analysis of nRCTs, 1991-2013</td>
<td>• In hospital CPR&lt;br&gt;• Mechanical Ventilation&lt;br&gt;• BP Support&lt;br&gt;• Hemodialysis</td>
<td>• Return of spontaneous circulation&lt;br&gt;• Rate of immediate survival&lt;br&gt;• Rate of survival to discharge (discharged alive)&lt;br&gt;• Predictors of survival&lt;br&gt;• Determinants of withdrawing of MV</td>
<td>• What is the effectiveness of life support interventions including CPR, MV, BP support, and hemodialysis in a terminally ill population on survival rates, quality of life, and health service use?&lt;br&gt;• What factors predict likelihood that life support measures will be effective in the terminally ill population?&lt;br&gt;• What methods are used to manage Not for Resuscitation decisions?&lt;br&gt;• What methods are used to communicate NFR decisions?</td>
</tr>
<tr>
<td></td>
<td>Surveys on patient preferences of NFR, RCTs on NFR choices and default management options,</td>
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</tbody>
</table>

**Question for Panel:**  
Is there a specific life support intervention for which to provide evidence?
## Scoping: Services - Spiritual Support

<table>
<thead>
<tr>
<th>Topic</th>
<th>Preliminary Literature Identified</th>
<th>Interventions &amp; Comparators</th>
<th>Outcomes</th>
<th>Possible Research Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Services - Spiritual Support</td>
<td>Systematic Review- Cochrane 2012 Included 5 RCTs</td>
<td>• Meditation/relaxation therapies</td>
<td>• QoL</td>
<td>• What is the effectiveness of spiritual interventions for adults in the terminal phase of a disease?</td>
</tr>
<tr>
<td></td>
<td>Additional RCTs not included in Cochrane 2012 were found</td>
<td>• Group Intervention</td>
<td>• Health service use</td>
<td>• What is the effectiveness of spiritual interventions for family members of adults in the terminal phase of a disease? (interventions prior to death)</td>
</tr>
<tr>
<td></td>
<td>Mostly patient focused interventions</td>
<td>• Chaplain in health care team</td>
<td>• Spiritual Well-Being Scale</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Survey data of spiritual needs and beliefs towards end of life.</td>
<td><strong>Multicomponent interventions</strong></td>
<td>• Well being</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Comparator was usual care or supportive interventions without explicit spiritual component or no intervention</td>
<td>• Coping</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Physical symptoms</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Caregiver outcomes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Death related emotional distress</td>
<td></td>
</tr>
</tbody>
</table>

### Question for Panel:
What is considered a spiritual intervention?
### Scoping: Services – Psychological/Emotional Support

<table>
<thead>
<tr>
<th>Topic</th>
<th>Preliminary Literature Identified</th>
<th>Interventions &amp; Comparators</th>
<th>Outcomes</th>
<th>Possible Research Questions</th>
</tr>
</thead>
</table>
| Services-Psychological/Emotional | Systematic Review Cochrane 2011 11 RCTs | • Exercise  
• Coping skills  
• Psychotherapy  
• Group Therapy  
• Comparator: standard care, no intervention | • QoL  
• Health service use  
• Adverse events  
• Physical outcomes (i.e. sleep)  
• Psychological distress  
• Depression symptoms  
• Anxiety  
• Emotional integrity | • What is the effectiveness of psychological and or emotional supportive interventions for patients and caregivers of patient in the terminal phase of their illness? |

**Question for Panel:**

What is considered a psychological/emotional intervention?  
How does this differ from a spiritual intervention?  
Can we combine psychologist/emotional/spiritual interventions together?
<table>
<thead>
<tr>
<th>Topic</th>
<th>Preliminary Literature Identified</th>
<th>Interventions &amp; Comparators</th>
<th>Outcomes</th>
<th>Major Issues Identified During Scoping</th>
</tr>
</thead>
</table>
| Services-Symptom Management   | Clinical trials and prospective studies                                                            | • Complementary and alternative medicine  
• Palliative care teams  
• Education on symptom management  
• Coaching in the use of muscle relaxation techniques  
• Nurse-led supportive care | • Individual symptoms  
• Multiple symptoms  
  - Edmonton Symptom Assessment System (ESAS)  
  - Condensed Memorial Symptom Assessment Scale (CMSAS)  
  - Symptom Distress Scale (SDS)  
  - Memorial Symptom Assessment Scale (MSAS)  
  - MSAS short form (MSAS-SF)  
• QOL  
• Satisfaction  
• Mood  
• Costs  
• Social support | • Very broad topic  
• Most reviews focus on a specific intervention or symptom (outcome)  
• Very few studies used the tools that assess multiple symptoms  
• Small sample sizes                                                                                         |
Economic Analysis

What is the cost-effectiveness of evidence-based interventions in the last year of life for patients and their care givers?

• Societal perspective
  – Health system costs, out-of-pocket costs, third party insurance,
  – Costs of time lost (e.g., lost productive work time)

• Health outcomes
  – Quality-adjusted life year of terminally ill patients
  – Quality-adjusted life year of their caregivers
  – Patient preferences (e.g., place of death)
Pathway - Input Data

- Patient characteristics
  - Age, sex, time from first palliative Dx to death
  - % patients received palliative care, inpatient hospice care
  - Summarize characteristics stratified by patients who died in hospital, died at home, died in LTC home
- Health system factors (e.g., hospital type)
- Resources and Care Transitions
  - EOL-Expenditure Index and selected Rx and procedures
  - Monthly rates of ER visits, hospitalization admissions, ICU admissions (stratified by home and LTC home)
  - LTC admission rates (stratified by home and hospital discharge)
Economic Analysis - Questions

• Is the structure of the pathway for the last year of life adequate for the evaluation of evidence-based interventions?

• Can QALY be used as the primary outcome measure in evidence-based palliative care interventions?

• What are the key data gaps (that act as barriers to policy changes)?
Integrated Knowledge Translation Nodal Network Framework

- **Macronode**: Collaboration with Experts & Stakeholders
- **Secondary Node**: Key Strategic Partners Activate Knowledge Translation Networks to Promulgate and Implement Episode of Care
- **HQO**: Monitor Key Performance Indicators for Episode of Care

Key Stakeholders

- Experts
- EDS Hybrid Model

**HQO Development of Episode of Care and Indicators**

- OHA Implementation and KT
- OMA Implementation and KT
- CAHO Implementation and KT
- CCAC Implementation and KT
- OCFP Implementation and KT
- CCN, OSN, Implementation and KT
- LHINs Implementation and KT
- RNAO Implementation and KT

**Review and Monitor KPIs for Episode of Care**

Health Quality Ontario
# Bending Cost Curves

## Using Evidence and Economic Analysis

<table>
<thead>
<tr>
<th>TECHNOLOGY</th>
<th>DECISION WITHOUT EVIDENCE</th>
<th>DECISION WITH EVIDENCE</th>
<th>ANNUAL COST-SAVING</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Drug-eluting stents</td>
<td>$58M</td>
<td>$38M</td>
<td>$20M</td>
<td>Approve only for high risk</td>
</tr>
<tr>
<td>*PET Scanning</td>
<td>$160M</td>
<td>$10M</td>
<td>$150M</td>
<td>Based only on clinical utility</td>
</tr>
<tr>
<td>*CT Angiography</td>
<td>$50M</td>
<td>$5M</td>
<td>$45M</td>
<td>Approved when coronary angio not possible</td>
</tr>
<tr>
<td>PSA Screening</td>
<td>$250M</td>
<td>$0M</td>
<td>$250M</td>
<td>Includes downstream costs</td>
</tr>
<tr>
<td>Breast cancer screening 40-49</td>
<td>$27M</td>
<td>$0</td>
<td>$27M</td>
<td>Assumes 40% uptake and 10% biopsy rate for average risk</td>
</tr>
<tr>
<td>Vitamin D testing</td>
<td>$70M</td>
<td>$10M</td>
<td>$60M</td>
<td>Do not approve for average risk</td>
</tr>
<tr>
<td>Infusion pumps for type 2 diabetes</td>
<td>$150M</td>
<td>$0</td>
<td>$150M</td>
<td>Cost ineffective. Amortised over 5 years assuming 25% uptake</td>
</tr>
<tr>
<td>Intra-articular hyaluronic acid</td>
<td>$63M</td>
<td>$0</td>
<td>$63M</td>
<td>Ineffective</td>
</tr>
<tr>
<td>Monofocal v multifocal lenses for cataract Sx</td>
<td>$86M</td>
<td>$0</td>
<td>$86M</td>
<td>Minimal advantage</td>
</tr>
</tbody>
</table>

**TOTAL**

| TOTAL | $915M | $63M | $852M |
Quality Based Funding: Translating Evidence into Episodes of Care
What is Driving Quality-Based Funding?

- Major government strategy to shift hospital funding to a greater share of ‘patient-based’ funding - ‘Quality Based Procedure’ reimbursement

- Initial focus was on hospital-based care, the goal of ‘bundling’ payments for broader episodes of care

- For 2012/13, HQO is developing bundles for stroke, congestive heart failure, chronic obstructive pulmonary disease and hip fracture
Key Elements of the QBF Episode of Care

• Apply a framework to assess evidence within the episode, building on HQO’s EBA process

• Draw on expert panels to map care trajectory

• Develop a clinical pathway through the episode of care, with key interventions and clinical trajectories

• Apply a decision analytic tree structure to the episode pathway to incorporate probabilities and decision nodes

• Interrogate modules with evidence analysis

• Combine all the above to generate the hybrid episode model: pathways, evidence and decision analytics
Quality Funding Episode-Decision Analytic Model for a COPD Acute Exacerbation

INDEX EVENT: PATIENT PRESENTS AT ED WITH ACUTE EXACERBATION OF COPD
N = 16,502 (2010/11)
P = 1.0

MODULE 1: ED DIAGNOSTICS

MODULE 2: TREATMENT IN ED
P = 0.516

MODULE 3: ACUTE RESPIR. FAILURE
P = 0.031

MODULE 4: ADMIT FOR USUAL MEDICAL CARE
P = 0.453

MODULE 5: NPPV
P = x0.446

MODULE 6: IMV
P = 0.554

MODULE 7: DISCHARGE PLANNING
P = 0.968

DEATH
P = 0.032

MODULE 8: VAP
P = 0.003

MODULE 9: WEANING
P = 0.226

CLINICAL ASSESSMENT NODE 1
DECISION TO ADMIT / TREAT IN ED

Risk factor | Treat in ED | Admit to ward
--- | --- | ---
SaO₂ < 90% | No | Yes
Changes on chest X-ray | No | Present
Arterial pH level | ≥ 7.35 | < 7.35
Arterial PaO₂ | ≥ 7 kPa | < 7 kPa

MODULE 3 ACUTE RESPIRATORY FAILURE

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Evidence</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPPV offered as first line therapy</td>
<td>OHTAC ★ Recommended</td>
<td>% NPPV vs. IMV</td>
</tr>
<tr>
<td>Oxygen therapy</td>
<td>OHTAC ★ Recommended</td>
<td>% receiving O₂</td>
</tr>
<tr>
<td>Bronchodilators</td>
<td></td>
<td>% receiving bronchodilator</td>
</tr>
</tbody>
</table>
HQO QBPs

- Heart failure - acute
- COPD - acute
- Stroke - acute
- Hip fractures - acute
- Hip and knee replacements
- Pneumonia - acute
- Heart failure, COPD and Stroke - community
- Diabetes - community

KPIs mainly derived from administrative databases
KPIs for community will include ADLs etc
Conclusions

- Preventive periodic health review should take the place of an annual health examination
ALIGNED SUPPORT FOR SYSTEM TRANSFORMATION: INTEGRATED PROGRAM DELIVERY
Supporting the Common Quality Agenda

• The Integrated Program Delivery (IPD) branch works to accelerate and support the field in their implementation of best practices and quality improvement through:
  – Developing quality improvement capacity in the province
  – Creating of a pool of implementation wisdom for organizations who are accountable for implementing change & improving outcomes
  – Strengthening collaboration with partners to achieve excellence

• Tools and resources to support quality improvement in the key areas of focus for the CQA are a priority for IPD
Integrated Programs

**Sector-based QI Expertise & Assets**

- bestPATH
- Advanced Access and Efficiency & Chronic Disease Management
- Residents First

**Comprehensive System Level QI Expertise & Assets**

- Evidence-based practice
- Tried common performance measures
- Public reporting
- Capacity building
- Improving & Driving Excellence Across Sectors (IDEAS)
- Quality Improvement Plans
- Improvement teams to strengthen QI capacity
- Strategic partnerships & relationships
- Knowledge transfer & exchange
- Referral sources
Conclusion

- As CQA focuses in on these topics, the IPD branch has, and will continue to develop and deploy cross-sectoral quality improvement initiatives relevant to these priorities with our partners.

- Monitoring and reporting of CQA indicators demonstrates where quality improvement efforts have been successful and where more support is needed.

- IPD supports quality improvement by providing resources that facilitate health system change and excellent care for all.
WHAT TO EXPECT GOING FORWARD
Engagement & Roll-out

- **September 10, 2013**
  - Vision of CQA, alignment, support, domains, indicators and targets
  - Provider and sector associations, provincial program and data partners
- **Mid Sept to end of October** partner consultation meetings
  - Individual partner, sector and shared accountability meetings
- **November 21** Health Quality Transformation confirmation event
  - Introduction to the confirmed indicators with partner support documented
- **FY 2013-14** Public reporting aggregated by Provincial results and by LHIN, some anonymous disaggregated reporting (2011-12 data)
- **FY 2014-15** Provincial, LHIN, and increased anonymous disaggregated reporting (2012-13 data)