Chronic Obstructive Pulmonary Disease

The Ontario Experience

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Ontario

Patients First: Action Plan for Health Care

On February 2, the Minister announced *Patients First,* the next phase of Ontario's plan for changing and improving Ontario's health system. It exemplifies the commitment to put people and patients at the centre of the system by focusing on putting patients' needs first.

This plan focuses on four key objectives:

Government Promise	Open, transparent, accountable, effectively managed government that provides value for tax dollars
Health Promise	Patients First • *a caring, integrated experience for patients* • *faster access to quality health services* • *for all Ontarians at every life stage*

Access:
- Providing faster access to the right care

Connect:
- Providing better home and community care

Inform:
- Providing information to make the right decisions about your health

Protect :
- Ensuring our universal health care system is sustainable for generations to come

Health System Funding Reform (HSFR)

Goals and Objectives

- **Reflect needs** of the community
- **Equitable allocation** of health care dollars
- Better **quality care** and **improved outcomes**
- **Moderate** spending growth to sustainable levels
- Adopt/ learn from **approaches** used in other jurisdictions
- Phased in over time at a **managed pace**

Components

Health Based Allocation Model (HBAM)

- Evidence, health-based funding formula
- Enables government to equitably **allocate available funding** for local health services
- **Estimates future expense** based on past service levels and efficiency, as well as population and health information e.g. age, gender, population growth rates, diagnosis and procedures

40%

Quality-Based Procedures (QBPs)

- Clusters of patients with clinically related diagnoses / treatments and functional needs identified by an evidence-based framework as providing opportunity for:
  - Aligning incentives to **facilitate adoption of best clinical evidence-informed practices**
  - Appropriately **reducing variation in costs and practice** across the province while **improving outcomes**

30%

Quality-Based Procedures (QBPs)

Vision

- QBPs will be developed across the continuum of care, using different approaches to address the varying needs of patient / client populations

Definition

- QBPs are clusters of patients with clinically related diagnoses / treatments and functional needs identified by an evidence-based framework

Provide Opportunities

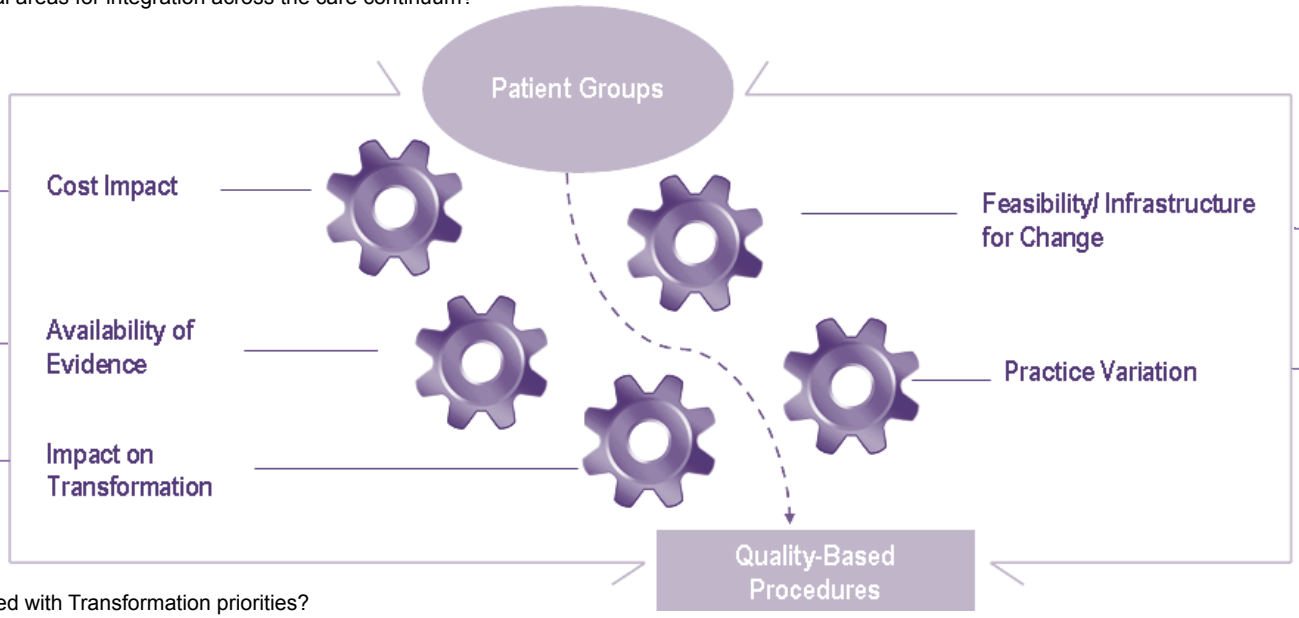
- For aligning incentives to facilitate adoption of best clinical evidence-informed practices
- For appropriately reducing variation in costs and practice across the province while improving outcomes
- For ensuring we are advancing right care, at the right place, at the right time

Evidence-Based Framework

Provides a foundation for QBP selection

- Does the clinical group contribute to a significant proportion of total costs?
- Is there significant variation across providers in unit costs/ volumes/ efficiency?
- Is there potential for cost savings or efficiency improvement through more consistent practice?
- How do we pursue quality and improve efficiency?
- Is there potential areas for integration across the care continuum?

- Are there clinical leaders able to champion change in this area?
- Is there data and reporting infrastructure in place?
- Can we leverage other initiatives or reforms related to practice change (e.g. Wait Time, Provincial Programs)?



- Is this aligned with Transformation priorities?
- Will this contribute directly to Transformation system re-design?

- Is there a clinical evidence base for an established standard of care and/or care pathway? How strong is the evidence?
- Is costing and utilization information available to inform development of reference costs and pricing?
- What activities have the potential for bundled payments and integrated care?

- Is there variation in clinical outcomes across providers, regions and populations?
- Is there a high degree of observed practice variation across providers or regions in clinical areas where a best practice or standard exists, suggesting such variation is inappropriate?

COPD QBP Development

Both Acute and Post-Acute COPD Clinical Handbooks have been developed, in April 2013 and February 2015, respectively

Stakeholders	Ministry	Agency	Co-Chairs	Clinical Expert Advisory Group (CEAG)
Description	• Clinical Support Branch (CSB) is Project Management (PM) Office for the successful development and implementation of QBPs • PM support includes stakeholder and issues management	• HQO provides oversight and administrative support to the Co-Chairs of the Clinical Expert Advisory Group (CEAG)	Acute COPD Co-Chairs: • Dr. Charlie Chan • Dr. Alan Kaplan Post Acute COPD Co-Chairs: • Dr. Chaim Bell • Lisa Droppo	• Members (which include multi-disciplinary (i.e. specialists, family physicians, nurses, health disciplines, patients, decision support managers), multi - sectoral and cross-provincial representation) bring clinical expertise and experience in order to meet objectives and deliverables

Deliverables	**Clinical Handbooks**
	• Includes definition of patient cohort, evidence-based best practice care pathways, and key performance indicators
	• The COPD cohort includes patients that are:
	  • 35 years or older
	  • Presenting in the emergency department and/or admitted to inpatient with chronic bronchitis, emphysema, and chronic obstructive pulmonary disease as most responsible diagnosis, admitting diagnosis, or pre-admit comorbidity.			

COPD Performance Indicators

COPD QBP Clinical Handbooks include performance indicators

Overall (Provincial) Performance in 2013 Relative to 2011

Domain	Indicators	Trend
Effectiveness	Risk-adjusted 30-day all cause mortality rate	**Improved**
	Risk-adjusted all cause in-hospital mortality rate	**Improved**
Appropriateness	Acute and Alternate Level of Care (ALC) Length of stay	**No Trend**
	Proportion of QBP COPD admissions for COPD ED Visits	**Improved***
	Proportion of QBP COPD patients receiving ventilation	**Improved***
Integration	Risk-adjusted 30-day all cause readmission rate	**Steady**
	Time to physician follow-up	**TBD**
Proposed Indicators (Not yet reportable with existing data)	Percent referred to pulmonary rehabilitation	**TBD**
	Percent of cases that have received recommended in-hospital pharmacotherapy	**TBD**
	Percent of cases that had diagnosis confirmed with spirometry	**TBD**

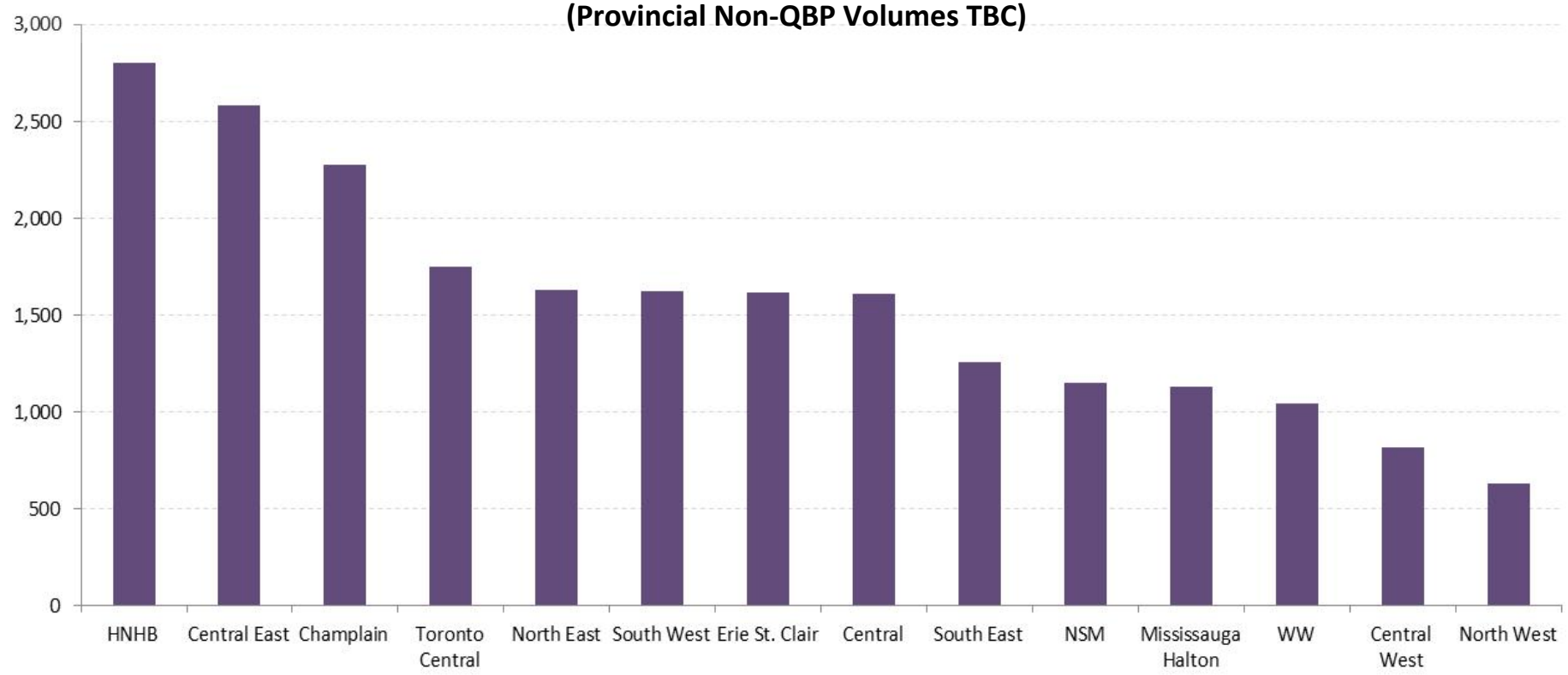
*** NOTE:** Needs to be assessed in local context to determine appropriateness of care

COPD Volumes and Price

FY 2015/16 COPD QBP Interim Price

Provincial Average Total Cost per Weighted Case	**$5,352**
Provincial Average CMI	**1.48**
Provincial Total Cost per Case	**$7,897**

FY 2015/16 COPD QBP Funded Volumes Only
(Provincial Non-QBP Volumes TBC)



Source: FY 2015/16 Funded Volumes
HNHB = Hamilton Niagara Haldimand Brant
NSM = North Simcoe Muskoka
WW = Waterloo Wellington

COPD Utilization and Costs

Average Cost Per QBP Case

Functional Centre	COPD	
	Cost per case	% of case cost
Inpatient Nursing	$3,557	43%
ICU	$1,504	18%
Peri-operative Services (incl. Recovery Room)	$3	0%
Pharmacy	$792	10%
Clinical Laboratories , CV Perfusion, Electrodiagnostic	$394	5%
Medical Imaging	$314	4%
Allied Health	$798	10%
Ambulatory Care	$470	6%
Food Services	$301	4%
Other	$60	1%
Total	**$8,196**	**100%**
Total QBP Cases	23,865	
Cost Per Weighted Case	$5,594	
Cost Per Day	$1,129	
ALOS	7.3	
Total Costs	**$92,242,359**	

Source: *FY2013/14 Ontario Case Costing Data*

COPD Snapshot in Ontario

Impact to health care system

Admissions

- Approximately 24,014 annual acute inpatient hospitalizations for COPD

% of Total Hospital Expenditures

- Responsible for large shares of total hospital expenditure:
  - $191.42M for COPD in acute inpatient costs
    (for COPD cases that are Most Responsible Diagnosis, not including cases where they are present as co-morbidities)

Re-admissions

- High volume and high total cost of 30-day readmissions:
  - 3307 cases (14.9% readmission rate)
  - Estimated Acute Inpatient Expenditure: $29.08M

ALC

- Significant ALC contribution:
  - 25,793 ALC days (2.69% of all ALC Days)
  - Estimated cost: $17M

The Ontario Lung Association (OLA)

- *The* voice of lung health
- One of Canada's oldest and most respected charities – more than 115 years old
- Two health-care professional societies: Ontario Thoracic Society and Ontario Respiratory Care Society
  - Certified Respiratory Educators on staff
- Focuses on the prevention and management of all lung diseases, as well as risk factors such as tobacco, radon, indoor and outdoor air quality
- Mandate for research, advocacy, patient support and education for health- care providers as well as patients, their families and caregivers
- Approximately 1/3 funding received from Government (e.g. Asthma Program, tobacco prevention programs; Fitness for Breath); 1/3 from corporate sponsors (e.g. VDI on COPD program); 1/3 from individual donors (supports all of our other COPD work).
- A province-wide community presence and extensive network of partnerships

OLA: Provincial Partners in Health Care

- Members of OLA's two societies (OTS and ORCS) include some of the country's and the world's leading researchers in COPD; experts work with our staff team to develop resources for patients, public and professionals, deliver educational programs, evaluate and advise on OLA's work
- OLA provides support to Lung Health Ambassadors (13) and COPD support groups (15) of patients and caregivers across the province; also enables patients to have a voice in policy, drug review processes
- OLA partners with other provincial and national organizations with an interest in lung health: Ontario Lung Health Alliance includes more than 40 organizations and individuals and collaborated with OLA on the development of an Ontario Lung Health Action Plan
- Programs also delivered in partnership with other provincial organizations such as AFHTO, AOHC, MOHLTC,PCAP, NPAO, HQO (annual Respiratory Health Forum); CAMH (motivational interviewing, smoking cessation)
- Or with local organizations, such as YMCAs (Fitness for Breath program); LHINs, Health Links, primary care clinics and hospitals (VDI on COPD)
- Staff and patients also participated on HQO's COPD QBP Clinical Expert Advisory Groups

Value Demonstrating Initiative (VDI) on COPD

A public-private collaboration to improve community-based, multidisciplinary COPD care

Collaborating Organizations

Ministry of Health and Long-Term Care (MOHLTC)
- Overall stewardship and access to demonstration sites

Canada's Research Based Pharmaceutical Companies (Rx&D) and industry partners
- Technical resources and funding for evaluation and program manager

Ontario Lung Association (OLA)
- Lung health expertise and resources, day-to-day program management

Components of Patient Care Pathway

- **Patient identification**: hospital & primary care
- **Patient enrollment:**
  - Diagnosis confirmed using spirometry
  - Inclusion criteria based on GOLD Classification 2013
- **Patient care:**
  - Coordinated by case manager
  - Includes self-management education sessions, written action plan & medication review
  - Referral to multidisciplinary care as appropriate: pulmonary rehabilitation, smoking cessation, social services, home assessment, and remote monitoring

Governance

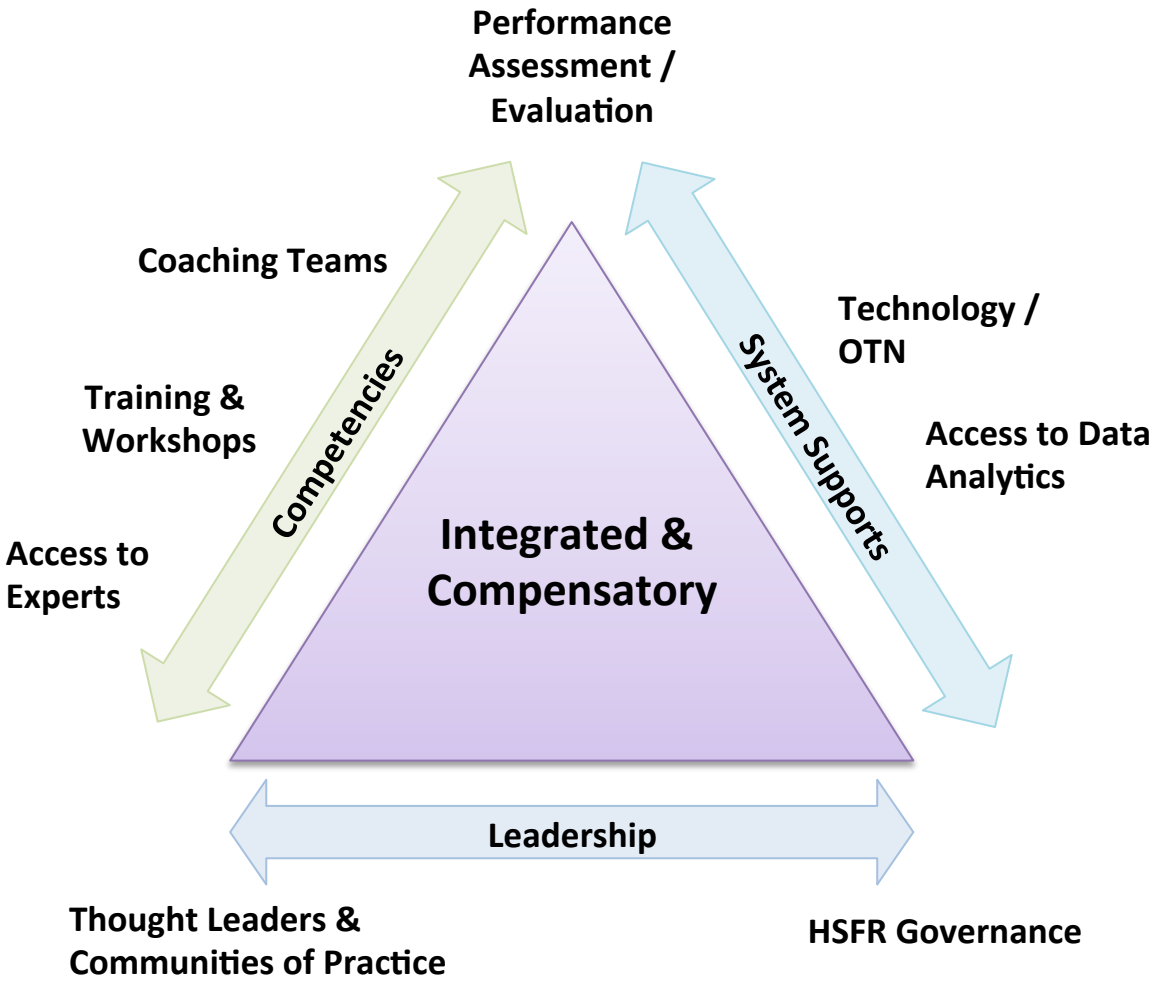
- **Governance Board** and **Steering Committee** oversee the project
  - Decisions made by consensus
- Care pathway developed by an **expert panel**
- **Clinical and Scientific Leadership Panel** oversees implementation & evaluation

Independent Evaluation

Toronto Health Economics and Technology Assessment (THETA) Collaboration to focus evaluation on:
- **Patient outcomes** (e.g. exacerbations, quality of life)
- **System outcomes** (e.g. healthcare utilization & costs)
- **Process evaluation** (e.g. barriers and facilitators to program implementation)

Opportunity for Developing a COPD Strategy in Ontario

There is a need to develop a provincial framework for a COPD strategy in Ontario, and an opportunity to leverage key provincial partners (e.g. Ontario Lung Association) for leadership and expertise.



***Source**: Adapted from the Implementation Science model*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