HSPN Health System Performance Network

Quadruple Aim Part 4:

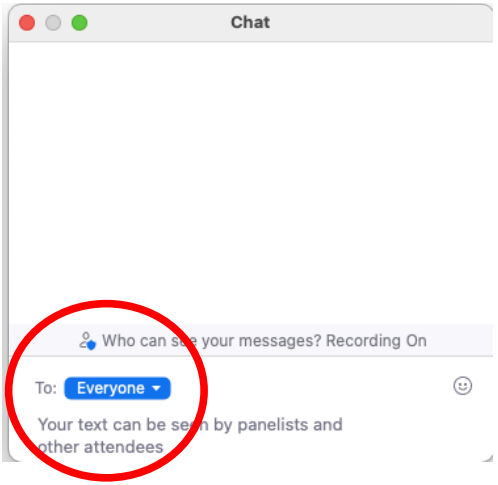
Healthcare Costs: Using cost and payment to measure and accelerate value.

HSPN Monthly Webinar

July 26, 2022

Welcome & thank you for joining us!

Please let us know who you are by introducing yourself (name & OHT or other org)



➢Open Chat

➢Set response to everyone in the chat box

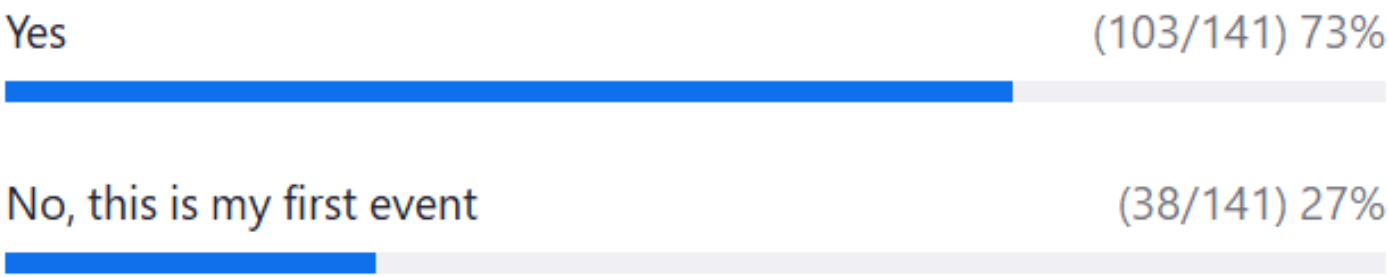
Land Acknowledgement

We wish to acknowledge this land on which the University of Toronto operates. For thousands of years it has been the traditional land of the Huron-Wendat, the Seneca, and the Mississaugas of the Credit. Today, this meeting place is still the home to many Indigenous people from across Turtle Island and we are grateful to have the opportunity to work on this land.

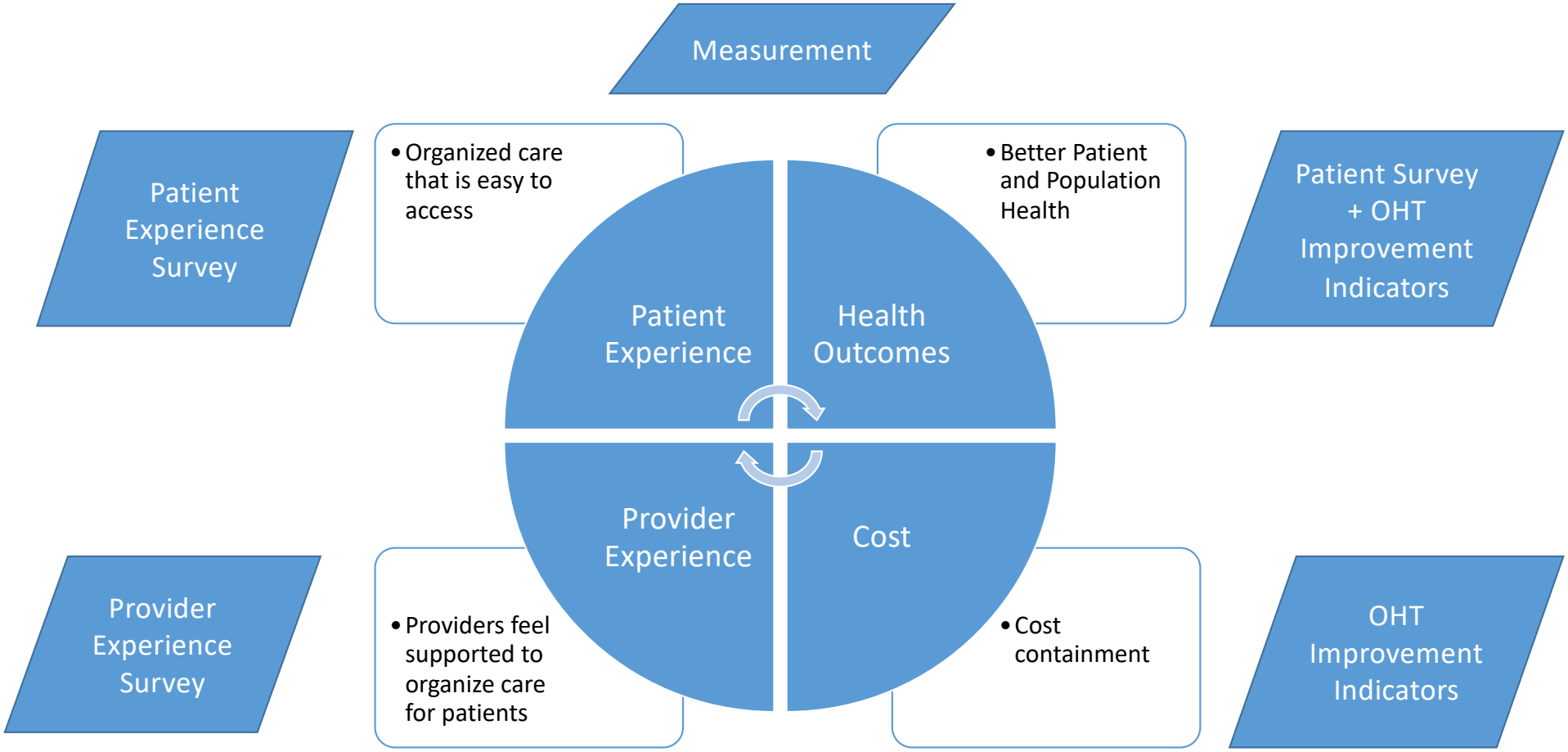
Poll

1. Have you joined us for an HSPN webinar previously ? (Single Choice) *

141/141 (100%) answered

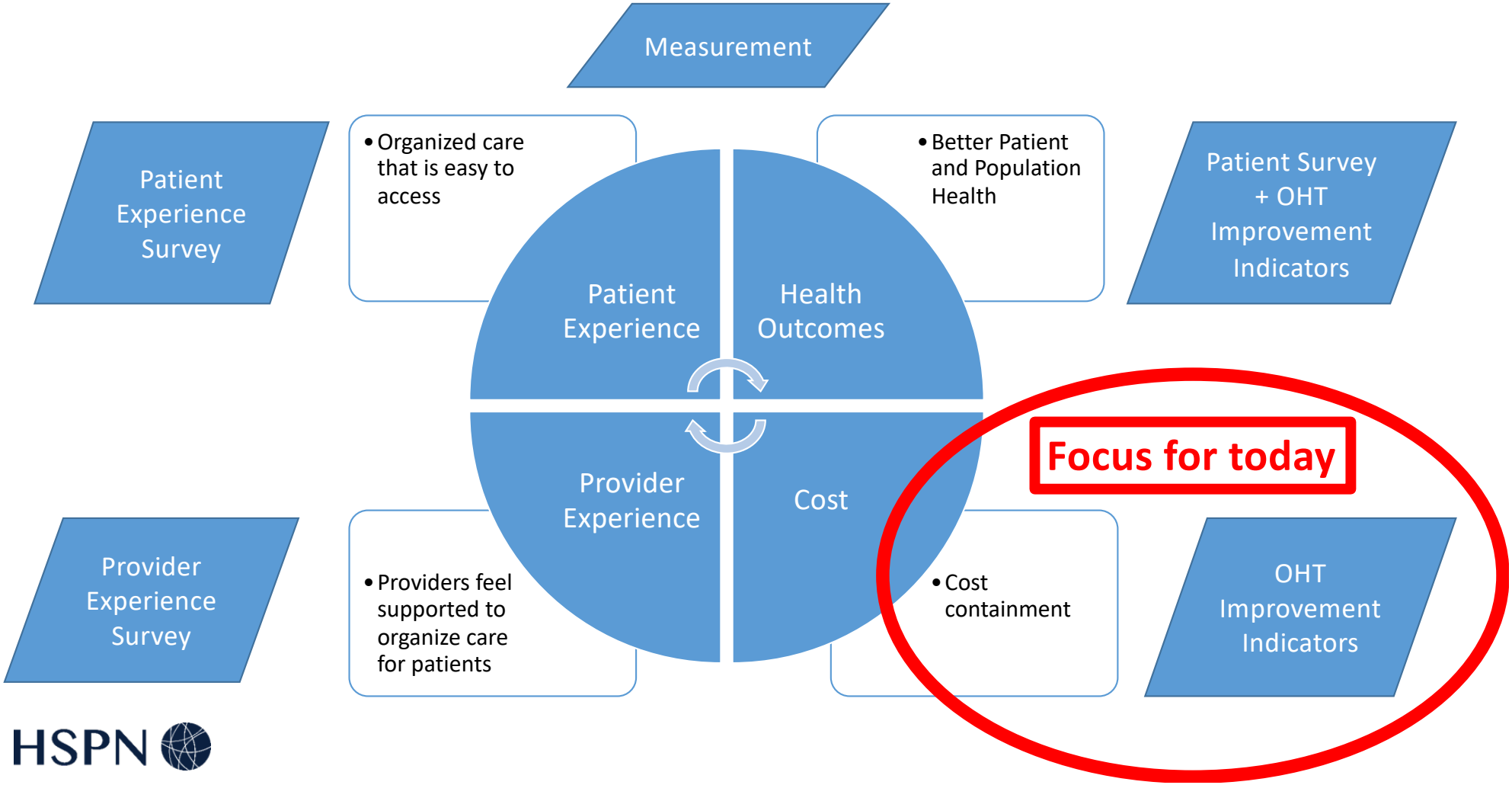


The Quadruple Aim Framework



HSPN

The Quadruple Aim Framework



HSPN

Agenda

1. Cost as performance measure
2. Cost as a planning tool
3. Episode-based payment to capture health system value
4. Approaching cost measurement and reporting.

HSPN Health System Performance Network

Today's event

Health Care Cost

Host

Dr. Walter Wodchis
Principal Investigator
HSPN

Presenters

Jillian Paul
Director, Integrated Policy and Planning
OHT Division
Ontario Ministry of Health

Howard Baker
Funding & Allocation Lead
Health Sector Models Branch,
Ontario Ministry of Health

Dov Klein
Vice-President
Value-based Care
Ontario Health

Jillian Paul

&

Howard Baker

Integrated Funding is Key to the OHT Model

Ontario Health Teams (OHTs) are groups of providers and organizations that will be clinically and fiscally accountable for delivering a full and coordinated continuum of care to their attributed population.

- **Integrated funding is a core component of the vision for integrated care in Ontario.**

- **The current funding framework in Ontario is restrictive and not designed to support the vision of OHTs** supporting the more effective allocation of resources, improved integration of delivery, and eventually being funded through a single integrated funding envelope.

- At a mature state, the integrated funding of OHTs across the province will create the optimal conditions to **innovate, be more aware of their own performance to drive quality improvement, and be fully accountable for the health care dollars they spend**.

Ontario

"Year 1" Funding Expectations for OHTs

Ontario Health Teams: Guidance for Health Care Providers and Organizations (2019) outlines the eight core components (referred to as "Building Blocks") of the OHT model, as well as **the expectations for OHTs at the end of Year One and at Maturity**.

Funding and Incentive Structure is one core Building Block, with both "Year 1" and "At Maturity" expectations listed in the Guidance Document.

Appendix A – Ontario Health Team Model: From Readiness to Maturity Summary

	Readiness Criteria for Ontario Health Team Candidates	Year 1 Expectations for Ontario Health Team Candidates	Ontario Health Teams at Maturity
Patient Care & Experience	Plans in place to improve access, transitions and coordination, key measures of integration, patient self-management and health literacy, and digital access to health information. Existing capacity to coordinate care. Commitment to measure and improve patient experience and to offer 24/7 coordination and navigation services and virtual care.	Care has been redesigned. Access, transitions and coordination, and integration have improved. Zero cold handoffs. 24/7 coordination and navigation services, self-management plans, health literacy supports, and public information about the Team's services are in place. Expanded virtual care offerings and availability of digital access to health information.	Teams will offer patients, families and caregivers the highest quality care and best experience possible. 24/7 coordination and system navigation services will be available to patients who need them. Patients will be able to access care and their own health information when and where they need it, including digitally, and transitions will be seamless.
Patient Partnership & Community Engagement	Demonstrated history of meaningful patient, family, and caregiver (P/F/C) engagement, and support from First Nations communities[7] where applicable. Plan in place to include P/F/C in governance structure(s) and put in place patient leadership. Commitment to develop an integrated patient engagement framework, and patient relations process. Adherence to the *French Language Services Act*, as applicable.	Patient Declaration of Values in place. P/F/C included in governance structure(s) and patient leadership established. Patient engagement framework, patient relations process, and community engagement plan are in place.	Teams will uphold the principles of patient partnership, community engagement, and system co-design. They will meaningfully engage and partner with - and be driven by the needs of - patients, families, caregivers, and the communities they serve.
Defined Patient Population	Identified population and geography at maturity and target population for year 1. Process in place for building sustained care relationships with patients. High-volume service delivery target for year 1.	Patient access and service delivery target met. Number of patients with sustained care relationship reported. Plan in place for expanding target population.	Teams will be responsible for the health outcomes of a population within a geographic area that is defined based on local factors and how patients typically access care.
In-Scope Services	Existing capacity to deliver coordinated services across at least three sectors of care (especially hospital, home care, community care, and primary care). Plan in place to phase in full continuum of care and include or expand primary care services.	Additional partners identified for inclusion. Plan in place for expanding range and volume of services provided. Primary care coverage for a significant proportion of the population.	Teams will provide a full and coordinated continuum of care for all but the most highly-specialized conditions to achieve better patient and population health outcomes.
Leadership, Accountability, and Governance	Team members are identified and some can demonstrate history of working together to provide integrated care. Plan in place for physician and clinical engagement and inclusion in leadership and/or governance structure(s). Commitment to the Ontario Health Team vision and goals, developing a strategic plan for team, reflecting a central brand, and where applicable, putting in place formal agreements between team members.	Agreements with Ministry and between Team members (where applicable) in place. Existing accountabilities continue to be met. Strategic plan for the Team and central brand in place. Physician and clinical engagement plan implemented.	Teams will determine their own governance structure(s). Each team will operate through a single clinical and fiscal accountability framework, which will include appropriate financial management and controls.
Performance Measurement, Quality Improvement, & Continuous Learning	Demonstrated understanding of baseline performance on key integration measures and history of quality and performance improvement. Identified opportunities for reducing inappropriate variation and implementing clinical standards and best evidence. Commitment to collect data, pursue joint quality improvement activities, engage in continuous learning, and champion integrated care.	Integrated Quality Improvement Plan in place for following fiscal year. Progress made to reduce variation and implement clinical standards/best evidence. Complete and accurate reporting on required indicators. Participation in central learning collaborative.	Teams will provide care according to the best available evidence and clinical standards, with an ongoing focus on quality improvement. A standard set of indicators aligned with the Quadruple Aim will measure performance and evaluate the extent to which Teams are providing integrated care, and performance will be reported.
Funding and Incentive Structure	Demonstrated track record of responsible financial management and understanding of population costs and cost drivers. Commitment to working towards integrated funding envelope, identifying a single fund holder, and reinvesting savings to improve patient care.	Individual funding envelopes remain in place. Single fund holder identified. Improved understanding of cost data.	Teams will be prospectively funded through an integrated funding envelope based on the care needs of their attributed patient populations.
Digital Health	Demonstrated ability to digitally record and share information with one another and to adopt/provide digital options for decision support, operational insights, population health management, and tracking/reporting key indicators. Single point of contact for digital health activities. Digital health gaps identified and plans in place to address gaps and share information across partners.	Harmonized Information Management plan in place. Increased adoption of digital health tools. Plans in place to streamline and integrate point of service systems and use data to support patient care and population health management.	Teams will use digital health solutions to support effective health care delivery, ongoing quality and performance improvements, and better patient experience.

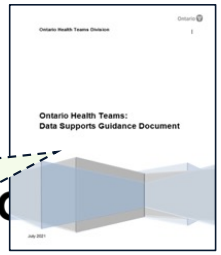
How OHTs have met "Year 1" expectations to date

Building Block	Year 1 Expectations for Ontario Health Teams	Status
Funding and Incentive Structure	"Individual funding envelopes remain in place. Single fund holder identified. Improved understanding of cost data." (*Ontario Health Teams: Guidance for Health Care Providers and Organizations, 2019*)	✓Individual HSP funding still in place. ✓Single fund holder for TPA implementation/ sustainment funds identified. ✓Second set of *Expenses* data reports produced for all Approved teams with detailed expenses information tied to attributed populations.

Supporting OHTs with Data Packages

- The ministry released an updated data package for all approved OHTs in 2021. The data packages have been developed to enhance OHTs' understanding of their patient populations and to support teams with knowing and growing their partnerships.
- The data package includes the following reports:
  - **Population, Performance and Utilization Measures (HTML)** This document provides an overview of health characteristics and demographic information about a team's attributed population, as well as data on performance and utilization measures.
  - **Attributed Population by OHT and 2016 Census Dissemination Area (Excel)** This workbook includes the count of your OHT's attributed population in each 2016 Census Dissemination Area (DA).
  - **Costs by Care Type and Health Profile Group (Excel)** This workbook focuses on the healthcare expenses of an OHT's network, including total expenses and expenses per Health Profile Group (HPG) population.
  - **Expenses (PDF)** This document provides information on expenses and service volumes stratified by hospital care types, in the form of bar graphs and pie charts.
- The latter two reports provide OHTs with a snapshot of the cost for delivering care to their full attributed population.

In July 2021, the Ministry released the ***Ontario Health Teams: Data Supports Guidance Document*** to provide a detailed walkthrough and answer common questions on the OHT Data Packages. The ***Guidance Document***, also available in French, covers the same content as today's session, in greater detail.



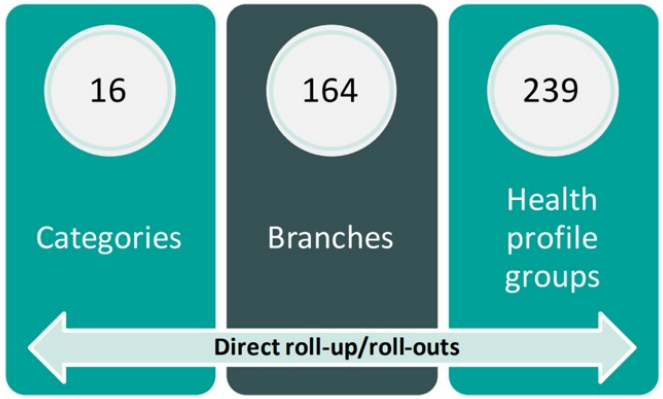
Health Profile Group (HPG) Classification

The first Expenses report (Excel workbook) provides information about OHTs' expenses by care type and patient cohorts. These cohorts are classified based on the Canadian Institute for Health Information (CIHI)'s Population Grouping Methodology (POP Grouper).

The POP Grouper's 16 Categories and 239 Health Profile Groups (HPG) are relevant for the purposes of these reports.

Each HPG represents a cohort of similar individuals based on their most complex and clinically relevant health condition.

Each HPG Category is a roll-up of HPGs with broadly similar information (e.g., acute, chronic, cancer, mental health, newborn, obstetrics, palliative) and severity (e.g., minor, moderate, major).



Source
Population Grouping Methodology, 2020, Canadian Institute for Health Information.

Expenses Report 1: Costs by Care Type and Health Profile Group (Excel)

This workbook focuses on the health care expenses of an OHT's network across the spectrum of care, including total expenses and average expenses per HPG/Category.

Care Types

Health Profile Groups

STEP 1: Show Detail HPGs | STEP 2: Hide Detail HPGs

Total Expenditures by Care Type and by Health Profile for : Network XXXXX

Attributed Population: 231,244

Program Code	HPG Category	Total Expenses by Care Type by Health Profile Group, for Network XXXX																
		Inpatient Expense	Day Surgery Expense	ER Expense	Dialysis Exper...	Oncology Expense	Other Ambulato...	Rehab Expen...	CCC Expens...	Mental Health Expense	LTC Expense	Home Care expense	GP Physician Fee Approved	Specialist Fee Approved	Lab Fee Approved	ODB Drug Fee Paid	Total Expense...
1	**p. Palliative**	**$16,018,423**	**$112,739**	**$728,824**	**$414,927**	**$1,306,594**	**$58,158**	**$160,620**	**$4,125,292**	**$86,357**	**$3,701,085**	**$3,200,449**	**$1,067,946**	**$3,113,852**	**$53,061**	**$1,407,611**	**$35,555,938**
2	**a. Major Acute**	**$44,277,676**	**$1,899,009**	**$4,059,157**	**$2,138,125**	**$1,121,097**	**$137,566**	**$4,081,437**	**$7,214,306**	**$1,165,881**	**$3,412,902**	**$8,237,670**	**$4,057,146**	**$15,503,364**	**$603,484**	**$8,515,065**	**$106,423,885**
3	b. Major Chronic	$39,074,115	$2,796,917	$3,811,449	$8,124,808	$1,806,893	$203,106	$2,641,240	$20,297,818	$2,419,095	$13,395,056	$14,065,972	$4,891,373	$18,329,644	$1,168,792	$17,407,754	$150,434,032
4	c. Major Newborn	$5,727,383	$24,135	$126,267	-	-	-	-	-	-	-	$37,100	$178,669	$1,073,462	$1,943	$16,639	$7,185,598
5	d. Major Mental Health	$14,106,256	$684,172	$3,363,492	$359,675	$172,027	$118,340	$997,289	$7,729,959	$17,289,924	$25,432,109	$10,162,459	$4,255,594	$11,141,068	$521,944	$11,581,969	$107,916,278
6	e. Major Cancer	$9,916,280	$1,638,205	$1,066,699	$681,919	$9,300,408	$510,593	$471,069	$350,922	$496,689	$445,304	$2,546,532	$1,635,127	$8,291,222	$381,886	$7,715,067	$45,447,923
7	f. Moderate Acute	$3,636,475	$1,895,399	$2,154,285	$3,155	$17,108	$111,471	$66,222	$46,444	$26,703	$1,075	$1,586,530	$3,540,892	$7,063,451	$1,026,033	$7,261,185	$28,436,426
8	g. Moderate Chronic	$8,258,322	$4,510,440	$3,151,451	$2,051	$342,700	$260,630	$338,615	$95,819	$38,883	$1,236,573	$3,278,435	$7,657,117	$21,351,242	$2,353,741	$21,560,732	$74,436,751
9	h. Other Cancer	$682,021	$862,678	$225,781	-	$1,891,422	$197,724	$24,571	-	-	-	$287,482	$804,161	$2,705,028	$279,169	$1,598,122	$9,558,160
10	i. Other Mental Health	$1,165,518	$542,059	$1,876,206	$204	-	$72,984	$9,821	-	$423,894	-	$657,908	$6,298,658	$7,606,672	$715,417	$4,518,352	$23,887,692
11	j. Obstetrics	$7,419,629	$213,440	$873,186	-	-	$39,776	$19,781	-	$2,922	-	$64,390	$1,768,027	$6,803,853	$488,221	$246,441	$17,939,666
12	k. Minor Acute	$1,384,726	$2,222,545	$4,737,663	-	$326	$218,601	-	-	$1,511	-	$1,783,553	$9,750,620	$13,112,532	$2,278,707	$3,427,781	$38,918,565
13	l. Minor Chronic	$1,022,764	$1,095,895	$1,392,781	-	$350	$93,802	-	$28,710	-	-	$689,498	$4,499,223	$6,782,484	$1,272,017	$3,419,622	$20,297,145
14	m. Healthy Newborn	$2,296,699	$21,889	$246,983	-	-	$39	-	-	-	-	$13,041	$617,234	$1,200,630	$5,254	$43,791	$4,445,560
15	n. User No Health Conditions	-	$2,743	$547	-	-	$933	-	-	-	-	$464,345	$309,677	$290,159	$146,724	$409,277	$1,624,405
16	o. Non-User	-	-	-	-	-	-	-	-	-	-	$159,782	$870	$524	$5	$137,855	$299,035
17	**Total**	**$154,986,285**	**$18,522,265**	**$27,814,771**	**$11,724,863**	**$15,958,924**	**$2,023,723**	**$8,810,668**	**$39,889,270**	**$21,951,859**	**$47,624,105**	**$47,235,146**	**$51,332,335**	**$124,369,186**	**$11,296,398**	**$89,267,263**	**$672,807,059**

Expenses Report 1: Summary and Comprehensive Views

Each tab enables the user to focus on the data either by HPG Category, or examine all HPGs separately.

Summary View by HPG Category

STEP 1: Show Detail HPGs | STEP 2: Hide Detail HPGs

Note: HPG

Program Code	HPG Category	HPG Pop
1	**p. Palliative**	1,069
2	**a. Major Acute**	6,252
3	b. Major Chronic	7,825
4	c. Major Newborn	963
5	d. Major Mental Health	4,863
6	e. Major Cancer	3,250
7	f. Moderate Acute	7,461
8	g. Moderate Chronic	27,501
9	h. Other Cancer	3,573
10	i. Other Mental Health	15,489
11	j. Obstetrics	5,168
12	k. Minor Acute	84,763
13	l. Minor Chronic	19,519
14	m. Healthy Newborn	3,009
15	n. User No Health Conditions	15,183
16	o. Non-User	21,625
17	**Total**	227,513

The count of your attributed population within each HPG category is listed in the "HPG Pop" column.

Comprehensive View with the Complete Set of HPGs

STEP 1: Show Detail HPGs | STEP 2: Hide Detail HPGs

Note: HPGs

Program Code	HPG Category	HPG Pop
1	**p. Palliative**	1,069
S001	Palliative state (acute)	1,069
2	**a. Major Acute**	6,252
A006A	Stroke w/o Paraly SD w/o sig comorb	115
A007A	Stroke w/o Paraly SD w sig comorb	367
A008A	Oth cereb & spinal disrd w/o sig comorb	136

A full list of HPGs with descriptions is listed in the "Code Table" tab.

Your total attributed population is listed at the bottom.

Expenses Report 1: 'Total Expenses' and 'Per HPG Population'

Health care expenses for your attributed population are presented in **two tabs**: (1) *Total Expenses* and (2) *Per HPG Population*. Both tabs are nearly identical, with the *Per HPG Population* tab presenting the average (not risk-adjusted) cost per person in each HPG category.

STEP 1: Show Detail HPGs | STEP 2: Hide Detail HPGs

Total Expenditures

Note: HPGs with volumes < 5 are suppressed, and noted with "N/A".

Program Code	HPG Category	HPG Pop	Inpatient Expense	Day Surgery Expense	ER Expense	Dialysis Expense	Oncology Expense
1	**p. Palliative**	644	**$9,479,210**	**$239,241**	**$648,585**	**$399,825**	**$1,881,750**
2	**a. Major Acute**	2,655	**$15,909,556**	**$1,566,907**	**$1,671,256**	**$1,151,091**	**$480,365**
3	b. Major Chronic	3,418	$14,017,056	$2,009,081	$1,666,537	$3,618,929	$426,643
4	c. Major Newborn	424	$1,095,658	$12,205	$59,831	-	-
5	d. Major Mental Health	1,853	$3,556,570	$341,717	$1,050,945	$39,985	$93,129
6	e. Major Cancer	1,393	$3,565,008	$985,111	$393,570	$86,661	$5,179,813
7	f. Moderate Acute	2,745	$1,412,834	$1,352,952	$813,899	-	$32,046
8	g. Moderate Chronic	9,844	$3,169,495	$3,069,085	$1,335,915	-	$137,507
9	h. Other Cancer	1,171	$200,890	$382,220	$96,106	-	$840,434
10	i. Other Mental Health	5,988	$557,969	$436,428	$952,617	-	-
11	j. Obstetrics	1,322	$1,698,547	$179,109	$247,612	-	-
12	k. Minor Acute	20,840	$425,657	$1,069,222	$1,666,732	-	-
13	l. Minor Chronic	5,359	$280,430	$578,589	$439,889	-	-
14	m. Healthy Newborn	621	$390,256	$4,438	$49,546	-	-
15	n. User No Health Conditions	4,400	-	$21,536	$474	-	-
16	o. Non-User	5,763	-	-	-	-	-
17	**Total**	68,440	**$55,759,136**	**$12,247,841**	**$11,093,516**	**$5,296,492**	**$9,071,686**

Total Expenses tab is presented here. Costs in the *Per HPG Pop* tab are divided by the HPG Population count, and therefore (not pictured here) show the average cost per person in the HPG category.

Note that certain expenses are listed under HPGs that may not seem relevant to the HPG.

- For example, there are often oncology expenses listed under HPGs that are not related to cancer.
- As another example, as soon as a patient was determined to be palliative, all of their patient costs were rolled up into the palliative HPG.
- **CIHI's Pop Grouper categorizes patients by their most clinically relevant HPG and all of a patient's expenses are rolled-up into that HPG.** As a result, additional seemingly unrelated expenses may be included.

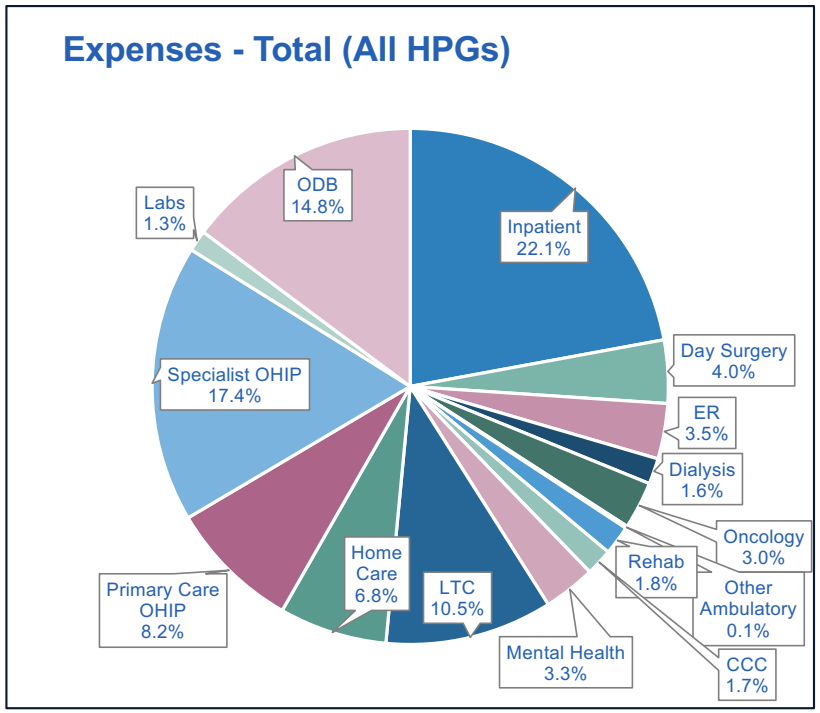
Ontario

Expenses Report 1: Using the Data to Understand Expenses for Specific Populations

Data from this workbook can be filtered to compare the distribution of costs within a specific health profile group, which aligns with your target population, e.g., frail elderly, to your entire population.

Total Expenditures by Care Type and by Health Profile for : XXX OHT

Program Code	HPG Category	Inpatient Expense	Day Surgery Expense	ER Expense	Dialysis Expense	Oncology Expense	Other Ambulato	Rehab Expense	CCC Expense	Mental Health Expense	LTC Expense	Home Care expense	GP Physician Fee Approved	Specialist Fee Approved	Lab Fee Approved	ODB Drug Fee Paid	Total Expens
Total Expenses by Care Type by Health Profile Group, for XXX OHT																	
Q007	Dementia (incl. Alzheimer's) w sig comorbidities	$12,255,953	$593,016	$1,222,784	$281,637	$130,289	$6,621	$2,027,548	$5,125,096	$5,745,402	$75,079,018	$9,237,335	$3,402,510	$3,522,430	$502,870	$9,294,324	$128,426,831
17	Total	$289,300,806	$51,748,694	$45,426,932	$21,151,403	$38,919,890	$1,864,304	$23,952,694	$21,867,425	$42,638,029	$137,252,874	$88,400,315	$107,809,075	$227,547,589	$17,351,629	$193,603,145	$1,308,834,803



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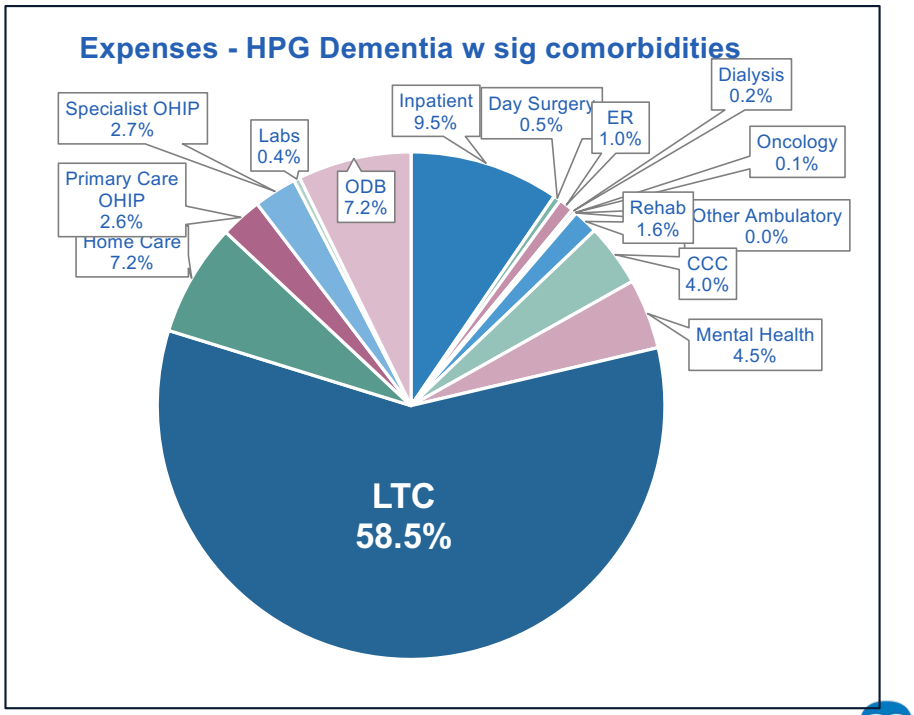
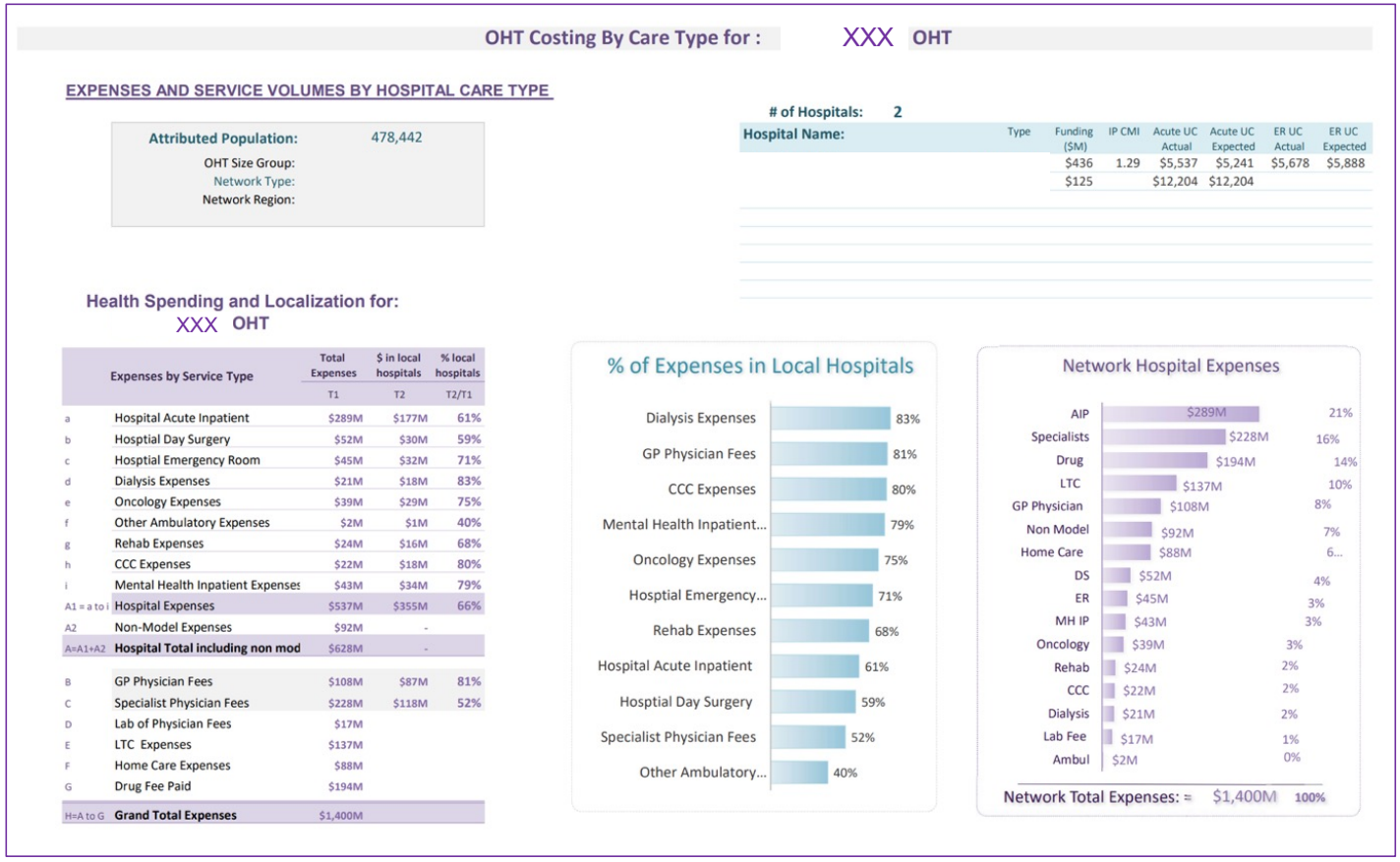


Expenses Report 2: By Care/Service Type (PDF)

The top half of this document provides information on expenses stratified by hospital care types.



OHT Costing By Care Type for : XXX OHT

EXPENSES AND SERVICE VOLUMES BY HOSPITAL CARE TYPE

Attributed Population:	478,442
OHT Size Group:	
Network Type:	
Network Region:	

# of Hospitals: 2

Hospital Name:	Type	Funding ($M)	IP CMI	Acute UC Actual	Acute UC Expected	ER UC Actual	ER UC Expected
		$436	1.29	$5,537	$5,241	$5,678	$5,888
		$125		$12,204	$12,204		

Health Spending and Localization for:
XXX OHT

	Expenses by Service Type	Total Expenses T1	$ in local hospitals T2	% local hospitals T2/T1
a	Hospital Acute Inpatient	$289M	$177M	61%
b	Hosptial Day Surgery	$52M	$30M	59%
c	Hosptial Emergency Room	$45M	$32M	71%
d	Dialysis Expenses	$21M	$18M	83%
e	Oncology Expenses	$39M	$29M	75%
f	Other Ambulatory Expenses	$2M	$1M	40%
g	Rehab Expenses	$24M	$16M	68%
h	CCC Expenses	$22M	$18M	80%
i	Mental Health Inpatient Expenses	$43M	$34M	79%
A1 = a to i	Hospital Expenses	$537M	$355M	66%
A2	Non-Model Expenses	$92M	-	
A=A1+A2	**Hospital Total including non mod**	$628M	-	
B	GP Physician Fees	$108M	$87M	81%
C	Specialist Physician Fees	$228M	$118M	52%
D	Lab of Physician Fees	$17M		
E	LTC Expenses	$137M		
F	Home Care Expenses	$88M		
G	Drug Fee Paid	$194M		
H=A to G	**Grand Total Expenses**	$1,400M		

Expenses Report 2: OHT Market Shares: Percent Localization for Specialist, GP, & Acute Inpatient Services

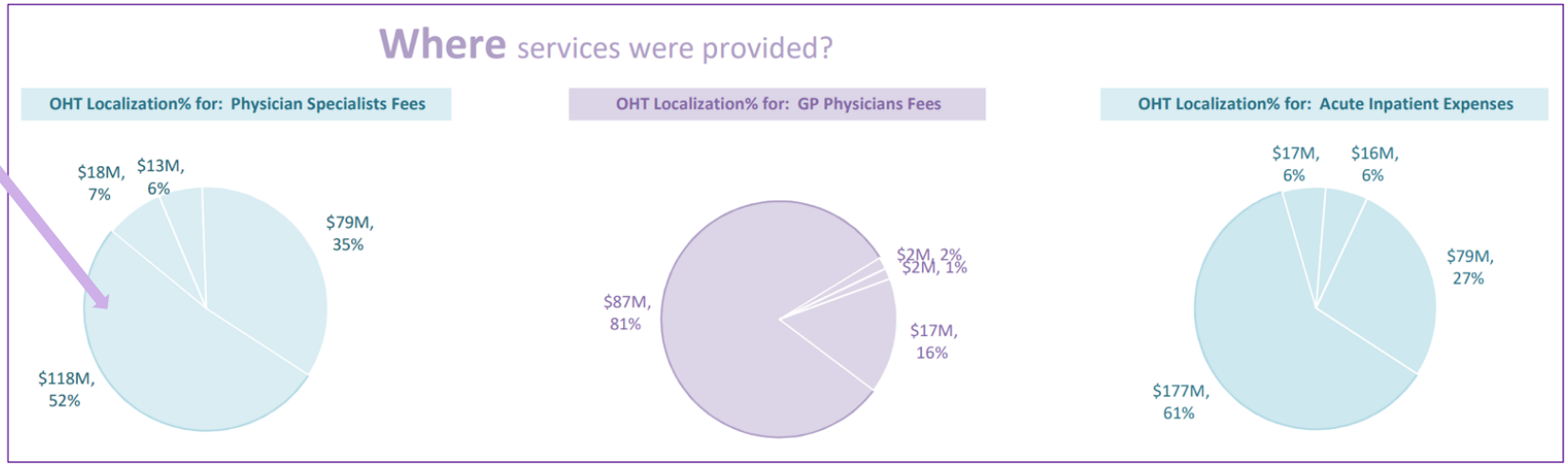
The bottom half of this document focuses on market share of services.

A key element of the OHT model is that patients can continue to access care anywhere in the province, regardless to which OHT they've been attributed. Based on reported expenses, **OHT market share data illustrates those OHTs from which the patients attributed to your OHT received most of their care.**

For each of these three service types, i.e. specialist, primary, and acute inpatient (hospital) care, these Percent OHT Localization pie charts identify the three OHTs with the highest market share of services provided to your patients.

Example: For this particular OHT

- 52% of its patients' specialist visits were provided 'locally' by physicians from the OHT.
- 48% of its patients received services outside of the OHT, i.e., 7% from another OHT, 6% from another OHT, and 35% from all other OHTs.



Dov Klein

Value-Based Care at Ontario Health:
Background and Strategic Priorities

July 2022

CONFIDENTIAL – FOR DISCUSSION PURPOSES ONLY

Ontario Health

PLEASE SEND ANY QUESTIONS TO DOV.KLEIN@ONTARIOHEALTH.CA

Contents

Ontario Health

Key Challenges Facing the System

Heading into the pandemic, several years of funding challenges, coupled with an aging and increasingly complex patient population has placed the health system under strain. The path forward requires new ways of operating.

Pressure on system to recover, contain growth and support integration in the shadow of COVID

- Classical cost cutting approaches don't get at the core of the problem
- Funding growth will be challenged
- Inflationary pressures will continue
- Need to transform while managing COVID waves and HHR constraints
- New ways of identifying efficiencies required

Ontario Health Teams & funding reform will continue to change operating assumptions

- Government as purchaser/ commissioner rather than funder
- Services and capabilities need to be reorganized to optimize performance
- Organizing at system, place and neighborhood
- Procuring value/ outcomes as opposed to inputs increasingly critical

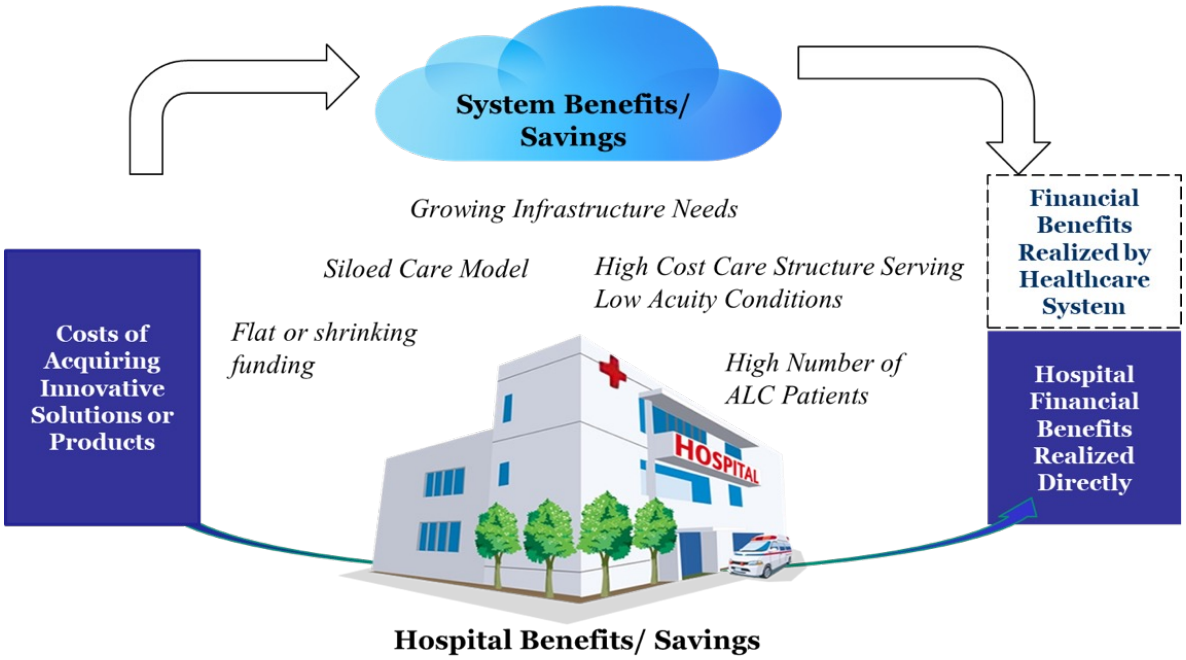
Innovation enablement & paying for the future of care

- Valuing innovation and measuring outcomes
- Innovations in 'place' and 'neighborhood' for care delivery and social supports need to be recognized
- New business and procurement models required to decrease risk and improve affordability of new assets

Ontario Health

Investment and ROI Mismatch

For many years, it's been recognized that integration of siloes in Ontario is needed to address patient needs and enable system investments from technology/innovation.



Ontario Health

Paying for a Solution vs. Parts to a Process

In alignment with global trends toward integration, established companies are evolving their offerings to better support health systems realized patient and financial outcomes within integrated funding mechanisms.

Established Medical Device Companies

- *Historical emphasis on clinical technology used by providers*
- *Recent shift to expanding beyond the device*
- *Deeper pockets enable innovation through acquisition*

MedTech Companies are Following the Increasing Trend to Suport Realization of Patient Outcomes

New Entrants in Medtech

- *Development focuses on enabling clinical technology and at-home care*
- *Service and broader solution offerings are ingrained in products*
- *Subscription offerings provide revenue streams to support new product development*

The Health Research Institute (PwC) analyzed the top ten medical device companies by revenues. These top players are broadening the scope of their product offerings and moving toward solutions.

Of the top 10 medical device companies…

5 out of 10
*Offer **customized solutions** independent of their product offerings*

7 out of 10
*Have undergone organizational changes reflecting a shift toward **services-based offerings***

10 out of 10
*Provide **training and educational resources***

Ontario Health

Ontario: Moving to Value Based Models

Like much of the world, Ontario is moving towards population-based healthcare delivery systems. At maturity, these will likely focus on a patient's full continuum/experience of care - creating better and more sustainable value for patients, caregivers and providers.

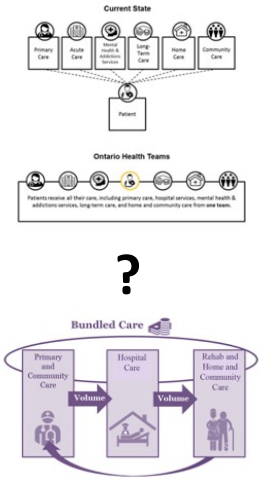
Classic Global 'Solutions' to Cost Curve

- Evidence-based medicine
- Safety/eliminating errors
- Prior authorization for expensive services
- Patients as paying customers
- Electronic medical records
- Introducing "lean" process improvements
- Care coordinators
- Retail clinics/urgent care
- Programs to address generic high cost areas (e.g. readmissions, post acute)
- Mergers and consolidation

- **Restructuring health care delivery** will be necessary, not incremental improvements

Volume	Value
Fee for Service	Capitation/Population Based Payments
	Pay for care for a **life**
Global Budgets	Bundled Payment
	Pay for care for **conditions** (acute, chronic) and **primary care segments**

- Both approaches create positive incentives for **reducing costs** and **separating payment** from performing particular services
- Capitation at the hospital or system level can **coexist** with bundle payment at the condition level



Ontario Health

Value-Based Care: Measuring Value that Matters

Value cannot be understood by looking at any one point of the patient journey in isolation. One must believe that if we improve quality we will ultimately also address the cost curve challenge.

- Value is created in caring for a patient's **medical condition** (acute, chronic) over the **full cycle of care**

$$\text{Value} = \frac{\text{The } \textbf{set} \text{ of outcomes that matter } \textbf{for the condition}}{\text{The } \textbf{total costs} \text{ of delivering these outcomes over the full care cycle}}$$

- In **primary and preventive care**, value is created in serving **segments of patients** with similar primary and preventive needs

- The most powerful single lever for reducing cost and improving value is **improving outcomes**

Ontario Health

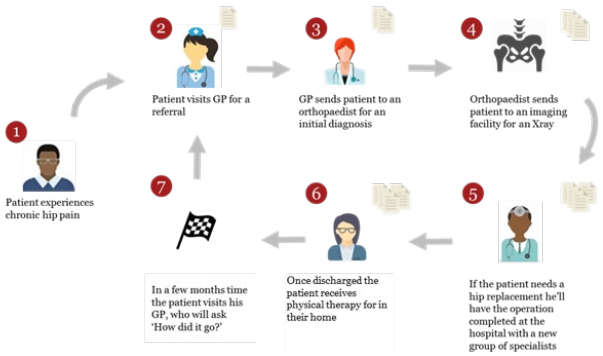
Moving to Integrated Models of Care

Many jurisdiction have been moving to enable & pay for integrated patient pathways. While bundled payments have historically enabled episodic surgical pathways, increasingly, 'facilitated networks' are developing to manage complex patient care.

Acute Episodic (Value Added Process)*

- In the best case scenario, 5 separate patient records and patient forms are created, which are not all seen/reviewed by any of the clinicians in the pathway
- The patient changes hands several times without any hands-offs or coordination discussions
- Primary care is uninvolved and unaware until the process is complete.
- There is no measurement of how the patient moves through the process, if there was a positive outcome, or degree of variation from leading practice
- If the patient needs to be readmitted or a revision is required, the hospital and physicians are compensated the same as the initial procedure

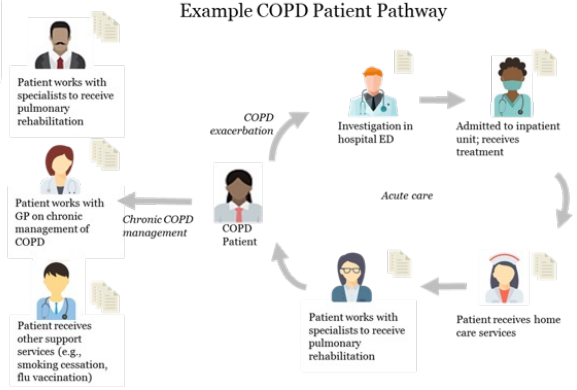
Example Hip Replacement Patient Pathway **



Complex Care Management (Facilitated Network)*

- In the best case scenario, 5-6 separate patient records and/or forms are created, that are not all seen/ reviewed by any of the clinicians in the pathway. There is no focus on prevention or population health.
- The patient changes hands several times without any hands-offs or coordination discussions
- Primary care is uninvolved and unaware until the acute stage of an exacerbation is complete
- There is no measurement of how the patient moves through the process or if there was a positive outcome
- COPD is typically associated with a number of comorbid conditions. Throughout the process, the provider managing these conditions is not informed of the change in condition
- If the patient needs to be readmitted, the hospital and physicians are compensated the same as the initial visit

Example COPD Patient Pathway



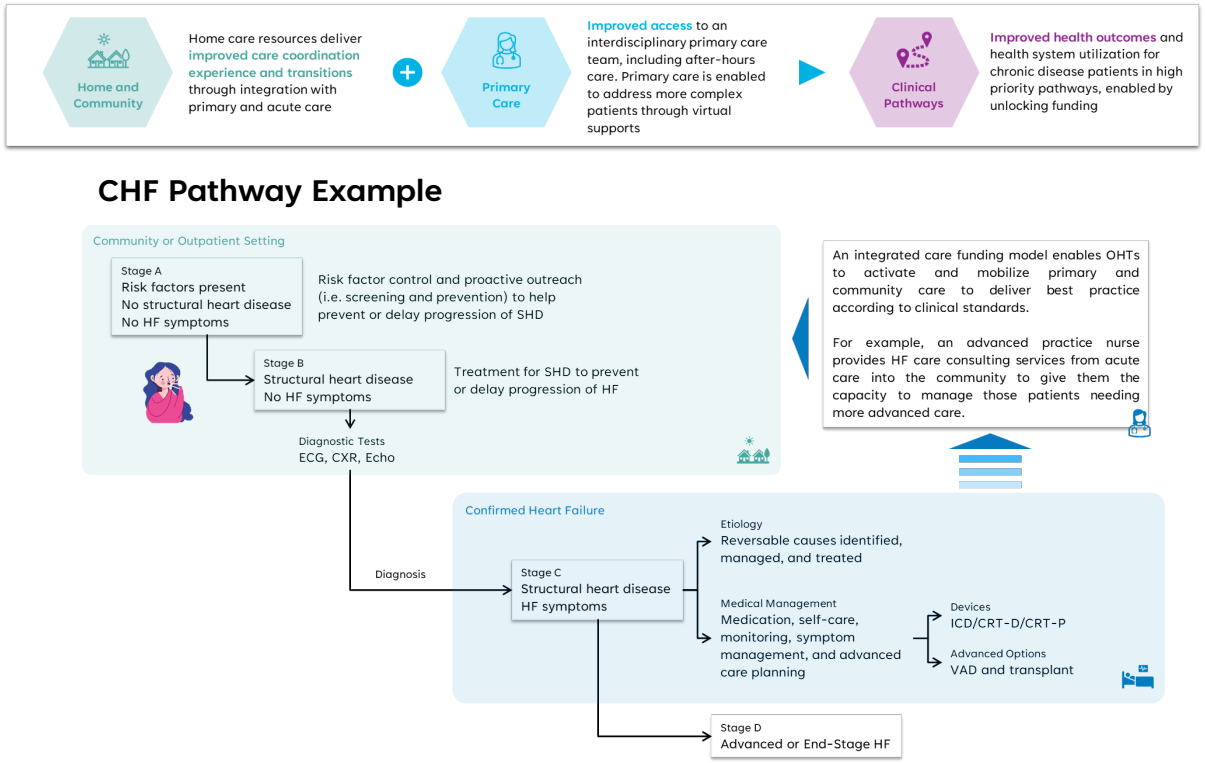
Ontario Health

** Please see appendix for overview of Christenson's Model's of Care*
*** Represents pre-bundled pathway in Ontario*

Establishing Integrated Care Pathways in OHTs

Integrated care pathways are the foundation for value-based care through enabling shared care accountability, effective transitions between providers, and health information exchange. This is the core work of an OHT.

- A pathway is the expected patient trajectory (or trajectories) for a disease or condition through the health system (and related social services).
- It should include all services and costs related to a patients' episode or experience of care, including, referrals, diagnostics and tests, services, and escalations based on patient needs and risk factors. Current QBP handbooks tend to focus only on the acute episode of care.
- Risk adjustment is one of the key features of how VBC addresses funding and risk related to patient variability.
- Our goal is to build on existing pathways to reflect the full patient journey to include both **upstream services** like screening and prevention, and **downstream services** like community management and recovery at home.
- One of the ways to promote early wins for OHTs through better integrated care is by **liberating acute volume-based funding**.



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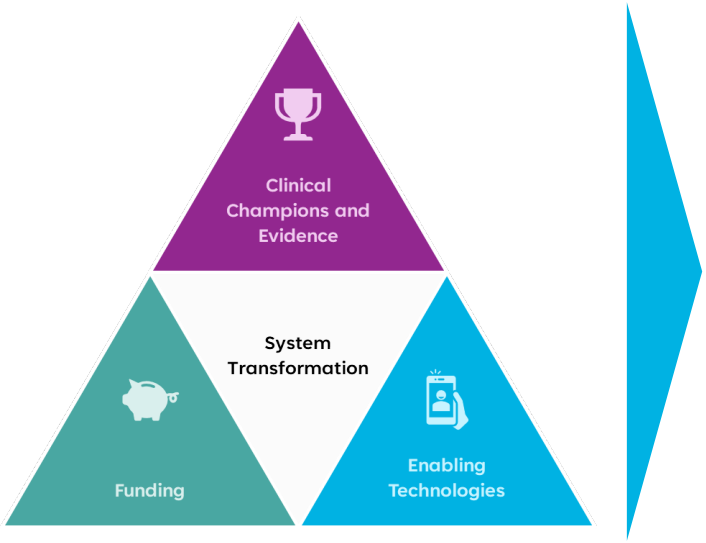
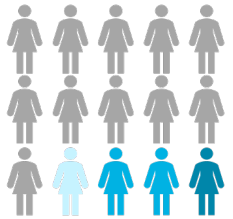
Advancing Integrated Care Pathways through OHTs

System transformation needs to be built through clinical evidence, enabling care through proven technologies and unlocking funding. High-value patient pathways with greatest opportunity to transform the health sector include most, but ideally all of the following 6 elements.



1. Have a growing **prevalence** or are identified as a clinical priority
2. Have higher **acute care utilization**
3. Can be **better managed** or prevented through primary, home or community care
4. Have both strong provincial and local **clinical leadership**
5. Have clearly identified **sources of funding** that can feasibly be unlocked
6. Can support a **robust measurement and evaluation framework**



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Key Priorities

Over the next 12 months, our team will focus on 4 core strategies in partnership with teams across Ontario Health and the broader health system. Focus will be on laying the groundwork for Ontario Health teams and capabilities to measure and report.

Unlocking Funding to Support Integration

Working across Ontario Health, examine where buckets of 'locked in' funding can be utilized to enable early demonstrations of integrated care in an OHT context.

Early focus will be on QBPs and other funding models for chronic conditions, where care should be better coordinated with primary care and other community partners. Support business case development and implementation.

Creating Data Structures and Reporting to Enable OHTs

Working with system partners, lay the groundwork for data structure, systems and tools to support real time reporting and system monitoring for integrated care.

Focus on enabling local level level reporting to help OHTs identify high priority strategies for their communities that also address equity and diversity challenges.

Supporting Performance Measurement & Accountability for Integrated Care

Working closely with the Ministry of Health & Pop Health team, support the development of 6 key streams of work for OHT development:

- *Performance and Accountability*
- *Governance*
- *Quality*
- *Patient and Provider-Reported Measures*
- *System Level Measures*

Analyzing System Investments Based on Value-Based Care Principles

Working within OH, support current investment priorities to ensure that key programs and contracts are developed around 'total cost of care' and patient oriented approaches to financial and health economic impacts.

Work with system partners on an innovation adoption pathway for Ontario Health and the broader health system.

Ontario Health

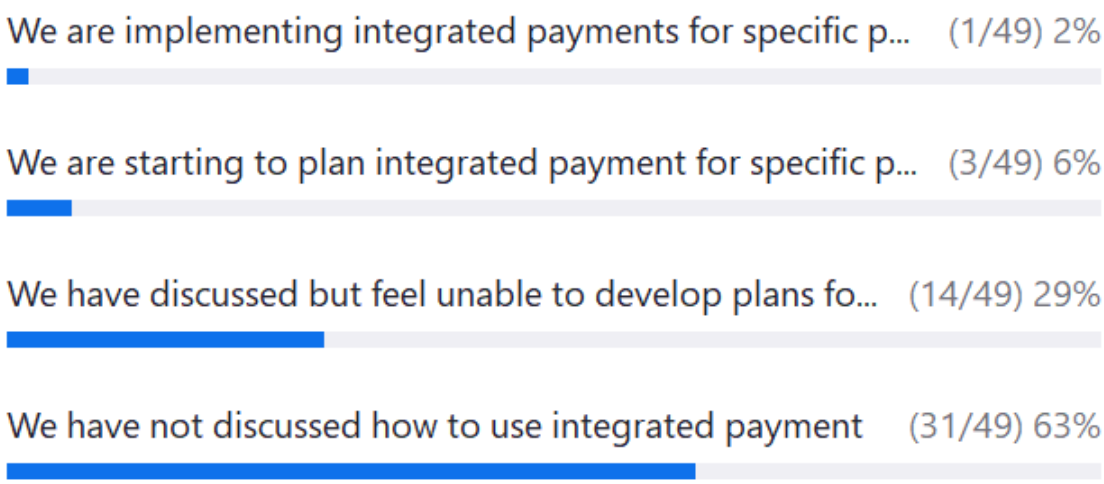
Thank You!

Ontario Health

Poll

1. Has your OHT begun to think about how integrated payment can be leveraged to implement new care pathways? (Single Choice) *

49/49 (100%) answered



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Poll 3

Has your OHT begun to think about how integrated payment can be leveraged to implement new care pathways?

- We are implementing integrated payments for specific patients
- We are starting to plan integrated payment for specific patients
- We have discussed but feel unable to develop plans for integrated payments
- We have not discussed how to use integrated payment

Chat Discussion

What kinds of care do you want to provide that would be enabled by integrated payment ?

- Please respond to everyone in the chat box

HSPN Support for Health System Cost

Walter Wodchis

RISE
Rapid-Improvement Support and Exchange

HSPN Health System Performance Network

HPG categories

Slide from our HSPN September 2021 Webinar

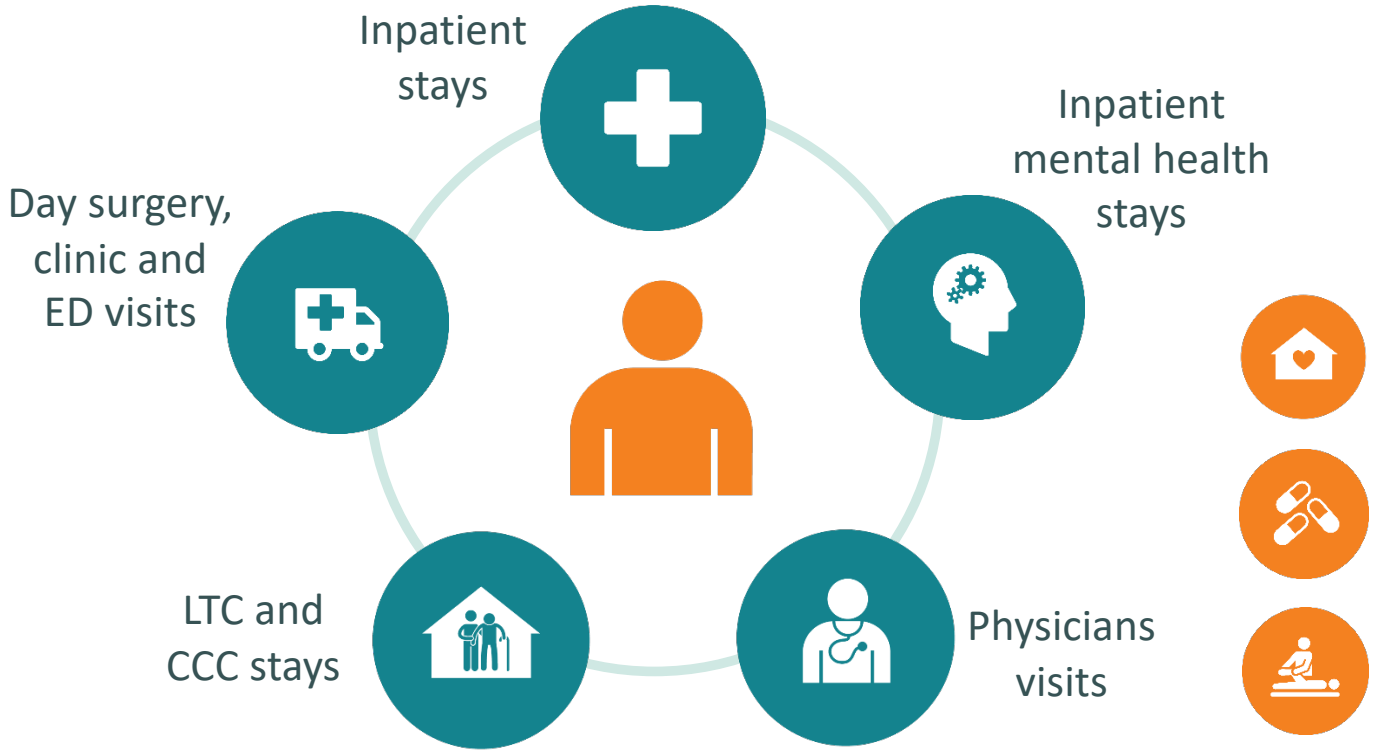
Summarizing conditions by type and severity

1. Palliative
2. Major acute
3. Major chronic
4. Major cancer
5. Major mental health
6. Major newborn
7. Moderate acute
8. Moderate chronic
9. Other cancer
10. Other mental health
11. Minor acute
12. Minor chronic
13. Obstetrics
14. Healthy newborn
15. User with no health conditions
16. Non-user

CIHI's population grouping methodology

Content from our HSPN September 2021 Webinar

- Multiple sectors
- Target population includes all persons registered for publicly-funded health care
- Looks at person over a 2-year time period

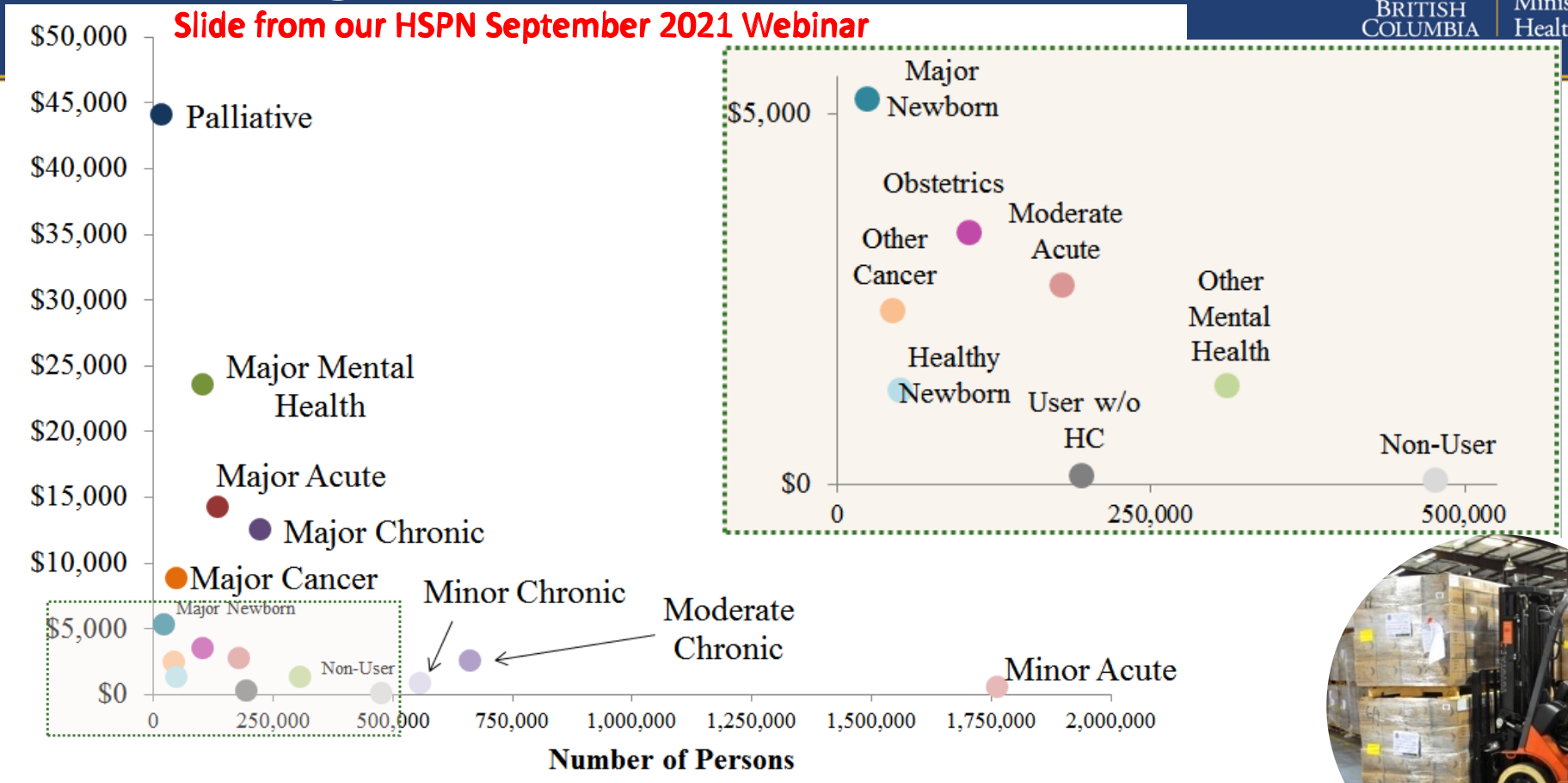


CIHI

HPG Categories

Costs per person versus population count

Slide from our HSPN September 2021 Webinar

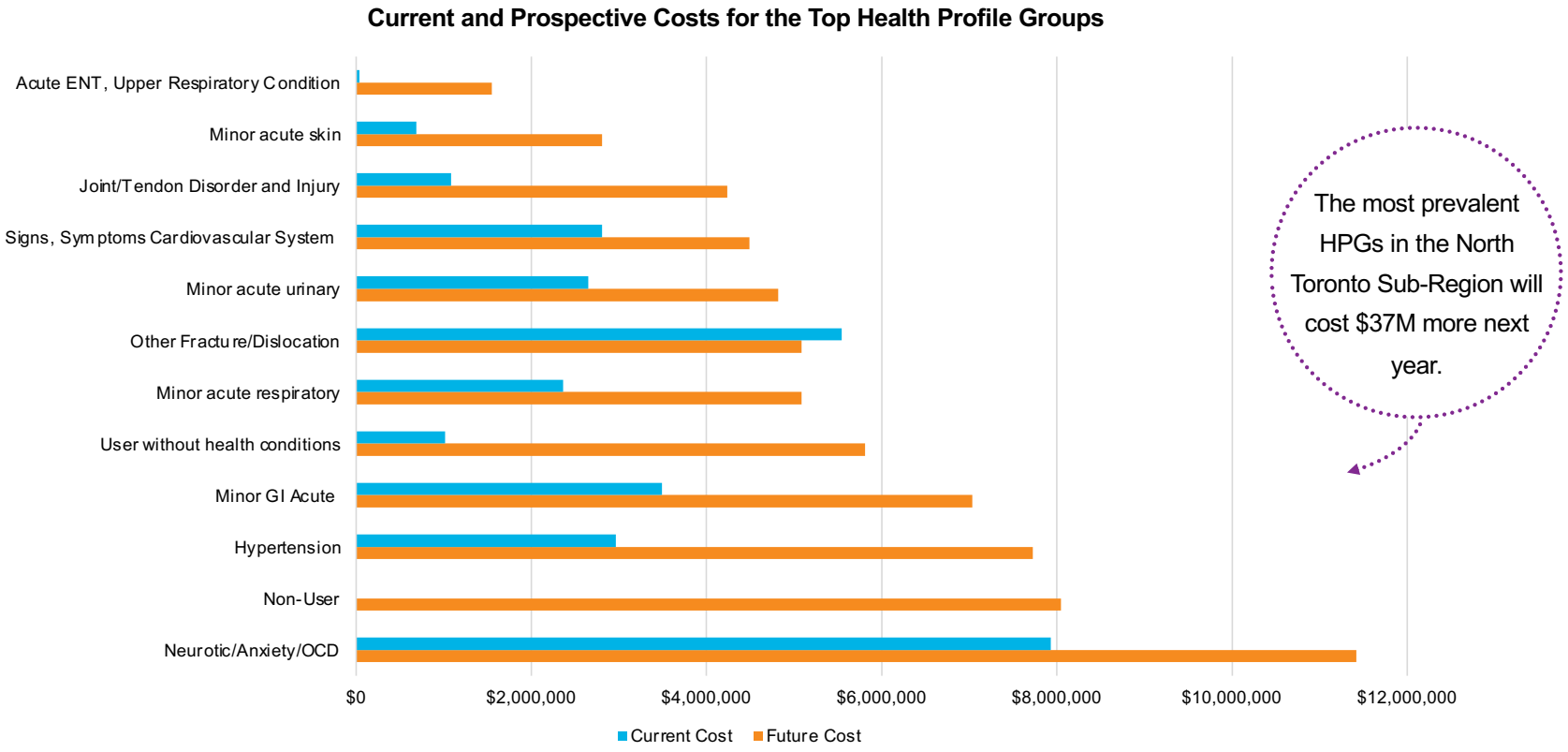


Source: Example data (CPOP) & Health System Matrix

Population Grouping Methodology licensed by the Canadian Institute for Health Information, adapted for use in British Columbia by the B.C. Ministry of Health with permission. Version 2020. Two-year lookback.

Segmenting Health Conditions by Costs

Slide from our HSPN January 2022 Webinar



*Note: Costs are noted on an annual basis.
**Analysis is only directional – gives insight into future care needs and cost drivers

HSPN OHT Health Care Cost Data

HSPN

HSPRN
health system performance research network

Guidelines on Person-Level Costing Using Administrative Databases in Ontario

Working Paper
Series
Volume 1
May 2013

https://hspn.ca/wp-content/uploads/2019/09/Guidelines_on_PersonLevel_Costing_May_2013.pdf

HSPN OHT Health Care Cost Data

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Complete Person-level Health System Cost:

Encounter/Claims-based care

- Physician Payment per visit (+ capitation)
- Ontario Drug Benefit
- Homecare (ongoing / episodic + assess & coord.*)
- Assistive Devices Program

Shorter episode-based care

- Acute hospital discharges
- Inpatient/Acute Mental Health
- Inpatient Rehabilitation
- Same Day Surgery / Chemotherapy / Dialysis / ED

Longer Episode-based care

- Complex Continuing Care
- Institutional Long Term Care

*

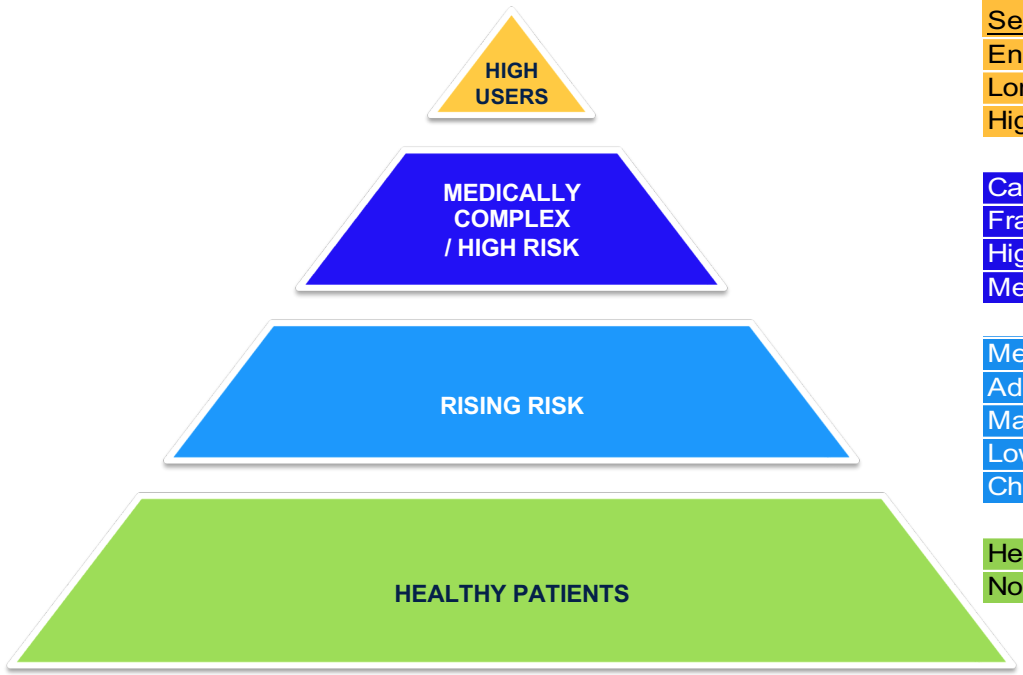
Population Segmentation

- We met with 46 OHTs in March and April 2022 to review cQIP indicators according to population segments.
  - First we used the BC Health System Matrix to segment the entire OHT population.
  - We ranked the population segments according to total health system cost using provincial data.
  - For each segment we reported: Total cost; Premature mortality; and the proportion of the OHT population for each OHT.
  - We did the same with the CIHI grouper

*RISE Rapid-Improvement Support and Exchange

HSPN Health System Performance Network

Ontario: Cost, Mortality and Population Sizes of Population Groups/Segments Using BC Health System Matrix



Source: Adapted from Kaiser Permanente

Segment	$ PMPM	Premature Mortality	% Pop
End of Life	$ 5,366	22,664	0.6%
Long-Term Care	$ 4,319	10,040	0.6%
High Chronic with Frailty	$ 2,739	6,518	1.0%
Cancer	$ 1,680	3,073	0.7%
Frail in Community (Home Care)	$ 1,356	2,695	0.7%
High Chronic Conditions	$ 929	1,374	4.0%
Mental Health & Substance Abuse	$ 731	967	1.1%
Medium Chronic Conditions	$ 450	542	8.2%
Adult Major Age 18+ yrs	$ 310	243	2.8%
Maternity & Healthy Newborn	$ 228	28	2.1%
Low Chronic Conditions	$ 193	200	27.0%
Child and Youth Major <18 yrs	$ 188	41	0.9%
Healthy (low user)	$ 66	52	39.1%
Non-user	$ 31	61	11.2%

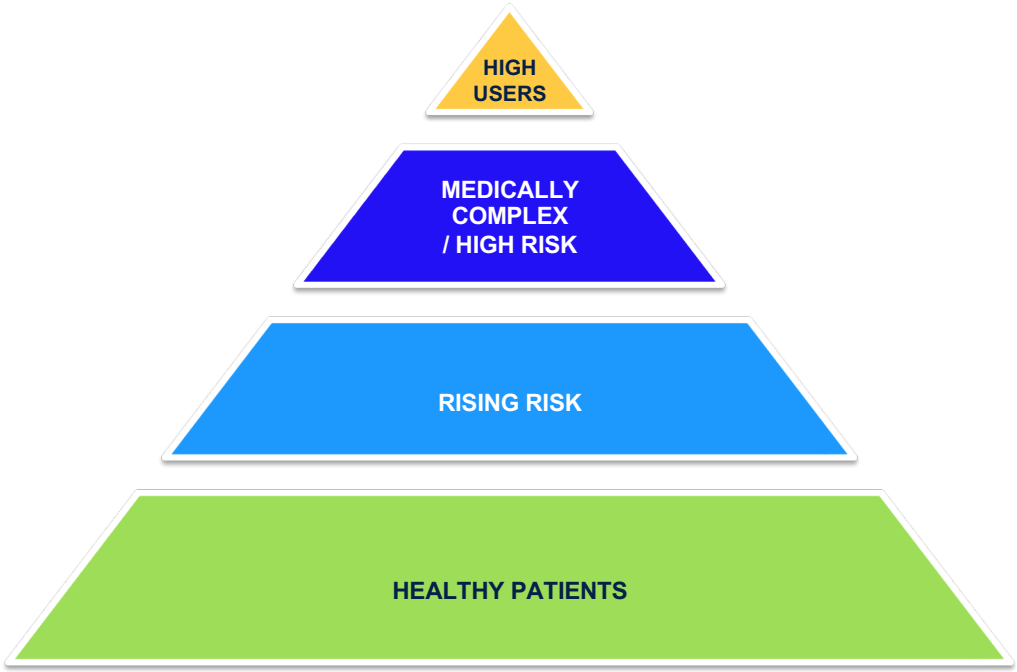
All data for 2020/21 based on 2019 Attributed Population (N = 14,358,560)
$PMPM = Provincial attributed government cost per member per month
Premature mortality per 100,000 population (Missing if fewer than 5 events)

IC/ES

RISE Rapid-Improvement Support and Exchange

HSPN Health System Performance Network

Ontario: Cost, Mortality and Population Sizes of Population Groups/Segments Using CIHI Population Grouping Methodology



Source: Adapted from Kaiser Permanente

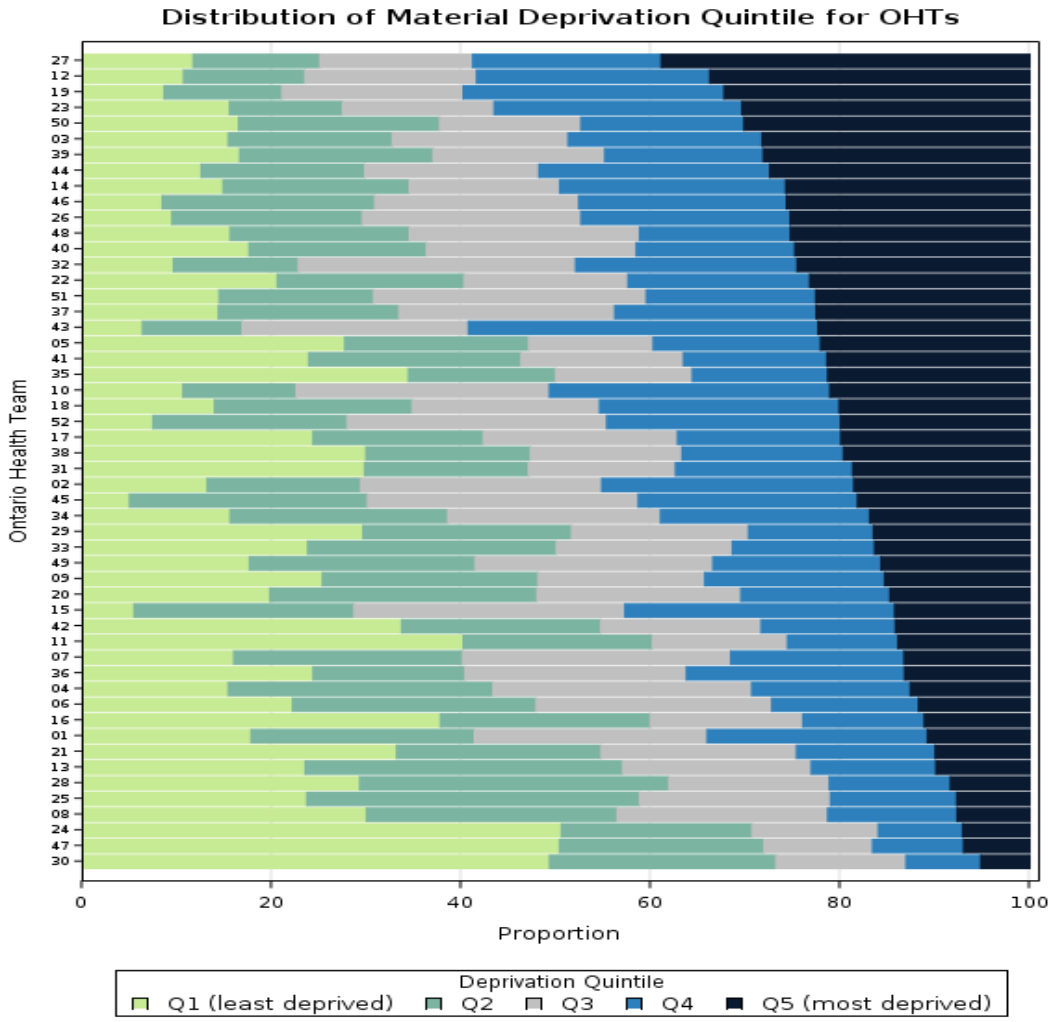
Segment	$ PMPM	Premature Mortality	% Pop
Palliative	$ 7,590	51,051	0.1%
Major Mental Health	$ 1,775	1,706	2.0%
Major Cancer	$ 1,670	4,807	1.5%
Major Chronic	$ 1,484	2,263	3.6%
Major Acute	$ 1,127	1,697	2.9%
Moderate Chronic	$ 390	314	10.6%
Other Cancer	$ 388	352	1.7%
Moderate Acute	$ 302	297	6.6%
Other Mental Health	$ 164	226	7.2%
Minor Chronic	$ 138	122	10.5%
Obstetrics	$ 230	28	2.2%
Major Newborn	$ 121	36	0.4%
No Health Conditions	$ 77	115	4.8%
Minor Acute	$ 76	66	36.9%
Healthy Newborn	$ 54	13	1.2%
Non-users	$ 36	97	8.0%

All data for 2020/21 based on 2019 Attributed Population
$PMPM = Provincial attributed government cost per member per month
Premature mortality per 100,000 population (Missing if fewer than 5 events)

IC/ES

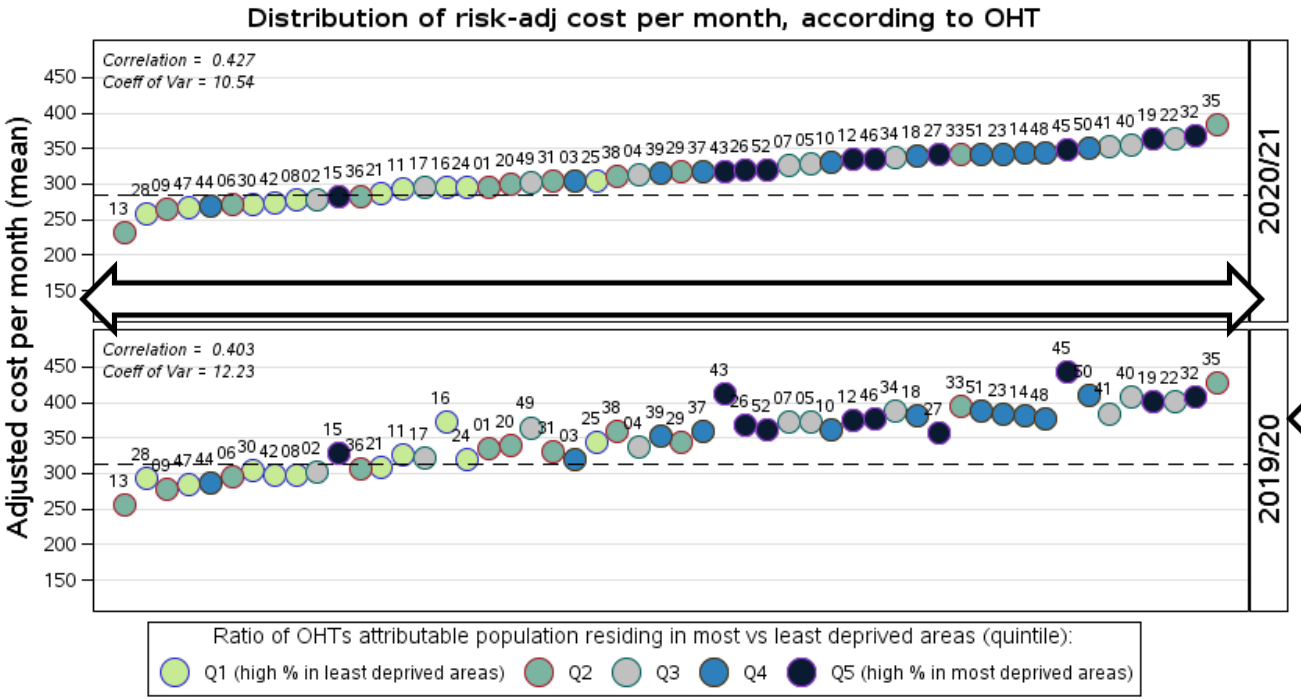
Equity measurement for all indicators: Material deprivation varies across OHTs

Quintile data: a score of 5 means it is in the most deprived 20% of Ontario



For information on ON-Marg, see: Matheson FI and van Ingen T. *2016 Ontario Marginalization Index User Guide*. Toronto, ON. St. Michael's Hospital; 2018. Joint publication with Public Health Ontario.

Total System Cost: Per OHT member by OHT deprivation



More desirable value

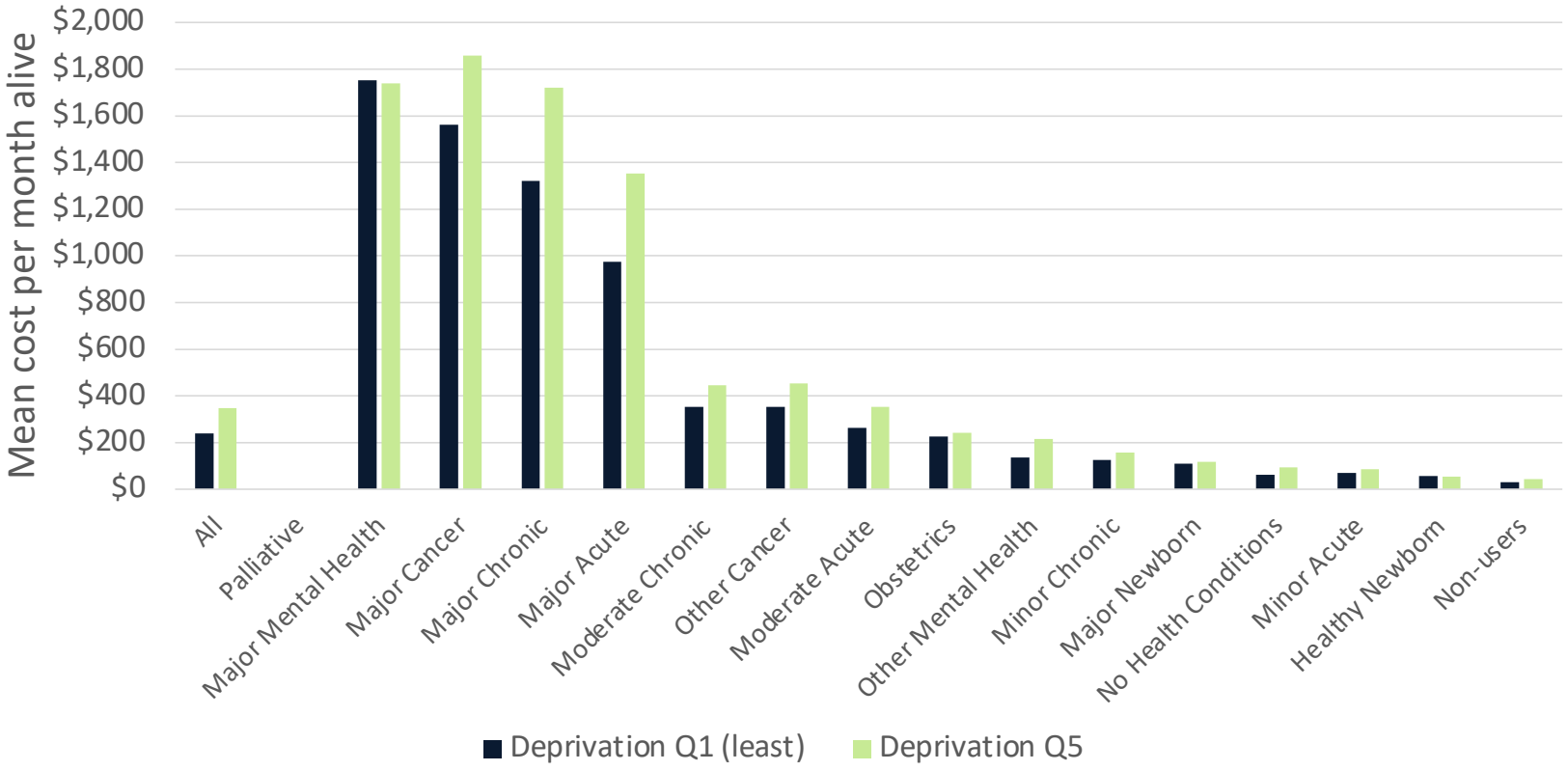
Less desirable value

coloured according to the proportion of their attributable population living in the most vs least deprived neighbourhoods

*ranked/ordered according to their performance in **2020/21****

Correlation with deprivation	Variability across OHTs (same year)
Strong ($tau_{2020/21}$=0.427)	Moderate ($CV_{2020/21}$=10.5)

Total System Cost: Within-OHT Variation by Deprivation



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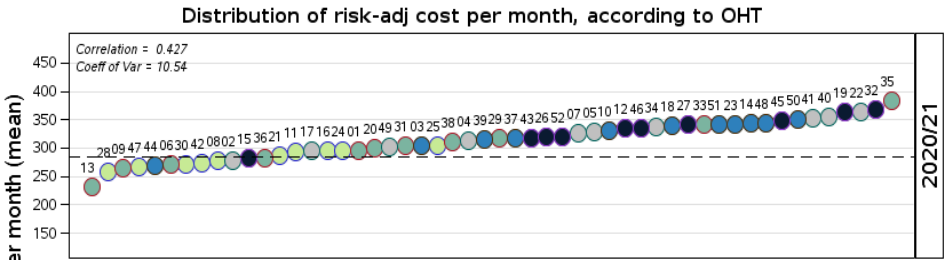
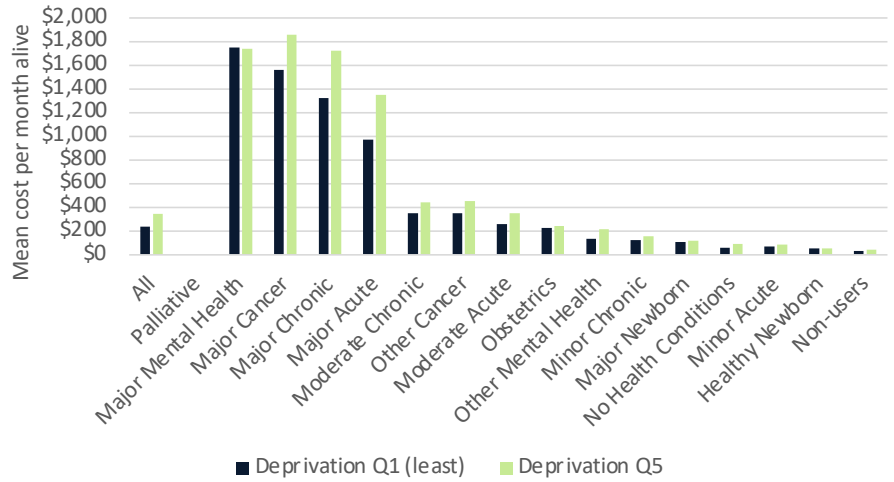
Total System Cost





What stands out?

How does this relate to discussions in your OHT?

➢Please respond to everyone in the chat box

HSPN IC/ES

Making Comparisons

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Current State

- Rank all OHTs by performance, use colour coding to show material deprivation
- OHTs remain anonymous (each know their own ID)

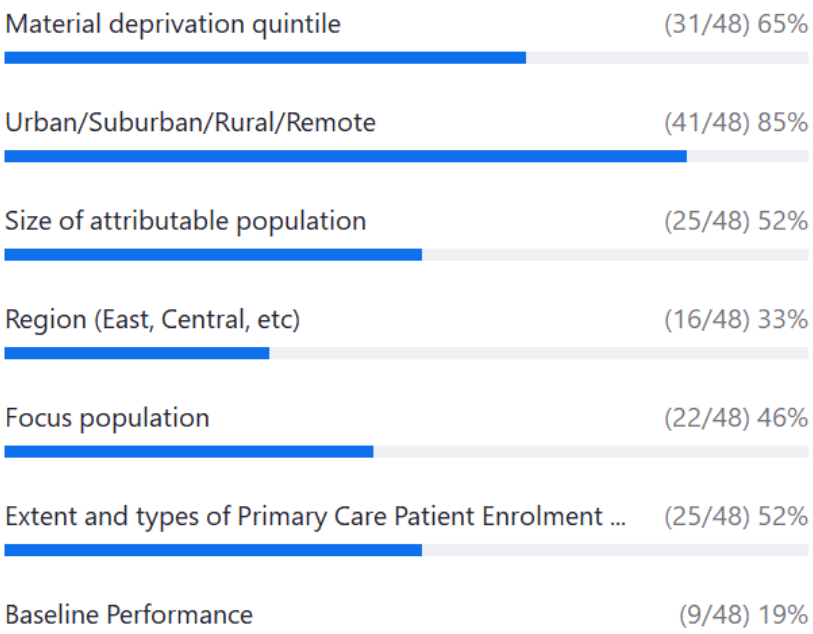
Future State

- Create peer groupings
- Identify OHTs in reporting

Poll

1. What factors makes another OHT comparable to your OHT (select all that apply) (Multiple Choice) *

48/48 (100%) answered



Common Errors in Using Costs

- Including only one specific service cost when an intervention shifts costs from one sector to another:
  - Evaluate cost savings to hospital from early discharge of patients to home
  - Evaluate costs savings of diabetes management program including only intervention and hospital costs when increased referrals to specialists are increased with no change in hospitalizations (substitute CHF)

- Using average rather than marginal costs:
  - Incremental costs associated with one more operation in an operating room are lower than costs of first operation
  - Corollary: reducing operating room activity by one case saves less on the margin than average case cost

Recommendations for Use of Cost

- Measure as much of the entire health system cost as possible.

- Try to consider mortality when assessing costs
  - Early mortality can vastly reduce health care system spending at the individual level
  - Interventions that prolong life increase total person-level health care spending

- Consider re-allocation spill-over effects
  - Total health care system spending is largely fixed in the short-run.
  - Short-run sector and institution-specific spending is largely fixed
  - Increased/reduced spending on one individual in one care setting is generally offset by reduced/increased spending on other individuals … what are these spill-overs?

- Consider marginal costs

Up Next

HSPN Webinar Series

- 4th Tuesday of the Month: 12:00 – 1:30pm

September 2022:

- Results from the Organizing for Ontario Health Teams Survey of leadership in Ontario Health Teams

October 2022:

- Joint Online event with IFIC Canada

Tell us what you think …

Central OHT Evaluation Team

Co-Leads

Dr. Walter P. Wodchis

Dr. Ruth E. Hall

Team Members

Dr. Gaya Embuldeniya

Dr. Kaileah McKellar

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THANK YOU!

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