



# Health System Performance Reporting for Long-term Care

OLTCA Conference - April 2015



Canadian Institute  
for Health Information  
Institut canadien  
d'information sur la santé

# For today

- About CIHI's Performance Reporting Initiative
- Long-term care: June 2015
- Reviewing Results
- How CIHI can help
  - Indicator resources
  - Communications support
- Wrap-up
- Q&A

# Health System Performance Initiative

- Provide structured and coordinated pan-Canadian performance reporting
- Support priorities of health system decision-makers
- Build capacity for understanding performance measurements and tools
- Reduce “indicator chaos”

→ [YourHealthSystem.cihi.ca](https://YourHealthSystem.cihi.ca) is part of this initiative



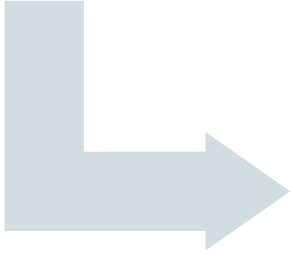
Your Health System:  
In Brief

- **Nov 2013**
- 15 indicators covering 5 dimensions of health system performance
- Meant for a general audience



Your Health System:  
In Depth

- **Sept 2014**
- 37 regional, acute care facility indicators
- Meant for MOH decision-makers and regional/facility executives
- 2 LTC indicators (Region-level)



Your Health System:  
In Depth  
*Integrating Long Term  
Care (LTC) sector results*

- **Spring 2015**
- Facility-level results for 9 LTC indicators

# Your Health System: In Depth

- Indicator results at facility, regional, provincial and national levels
- Acute care, long-term care, population health
- Focus on comparisons and top results
- Results are risk-adjusted



Target User:  
Health Executives  
Decision Makers



BUT...  
Accessible by the  
public

# What's on this website?

This site's interactive tools will help you learn more about your health system and the health of Canadians.  
Choose one of the following:



Your Health System

## [In Brief](#)

Explore 15 indicators representing 5 themes that Canadians told us were important.



Your Health System

## [In Depth](#)

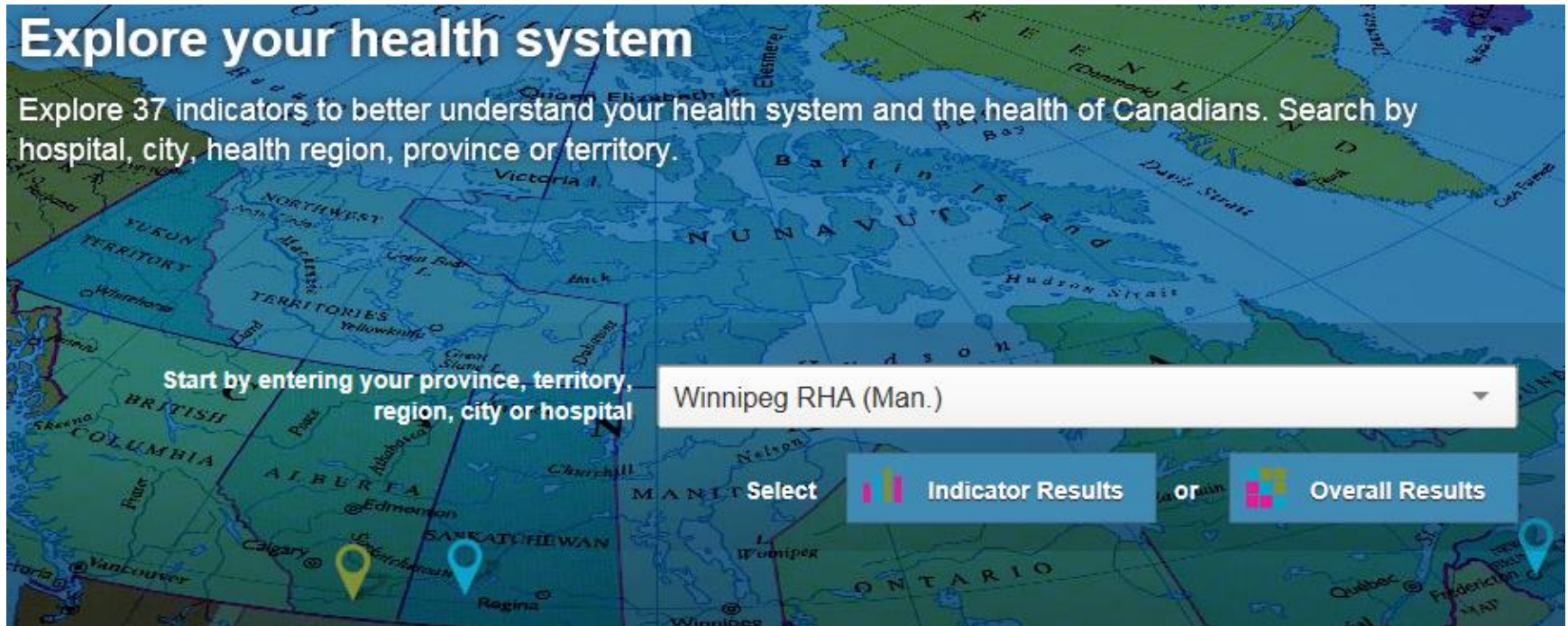
Take a look at an expanded suite of indicators: find comparable results for hospitals and regions.



# It starts with a search

## Explore your health system

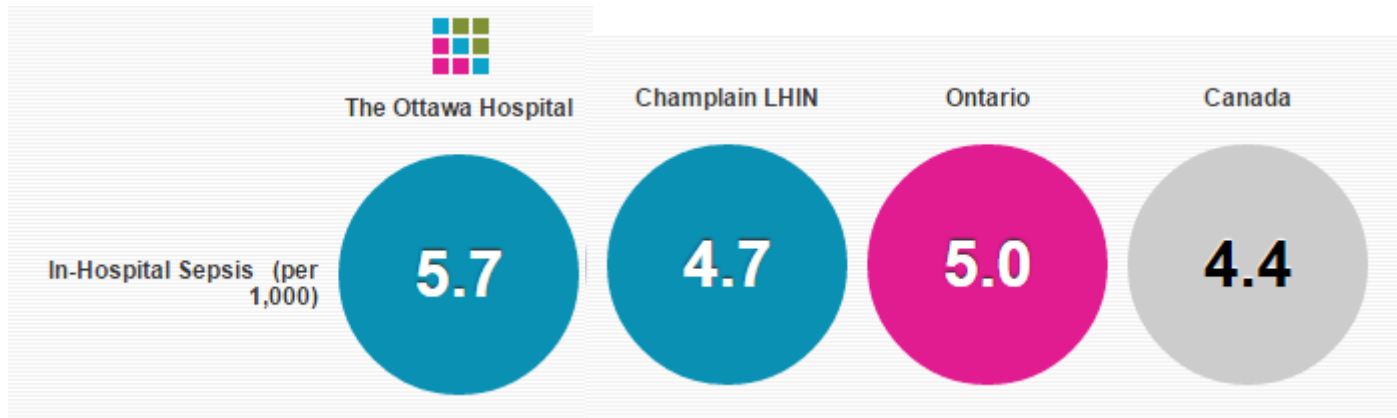
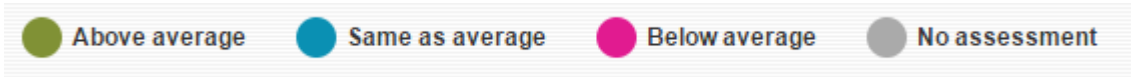
Explore 37 indicators to better understand your health system and the health of Canadians. Search by hospital, city, health region, province or territory.



Search by facility, corporation, city, region province/territory



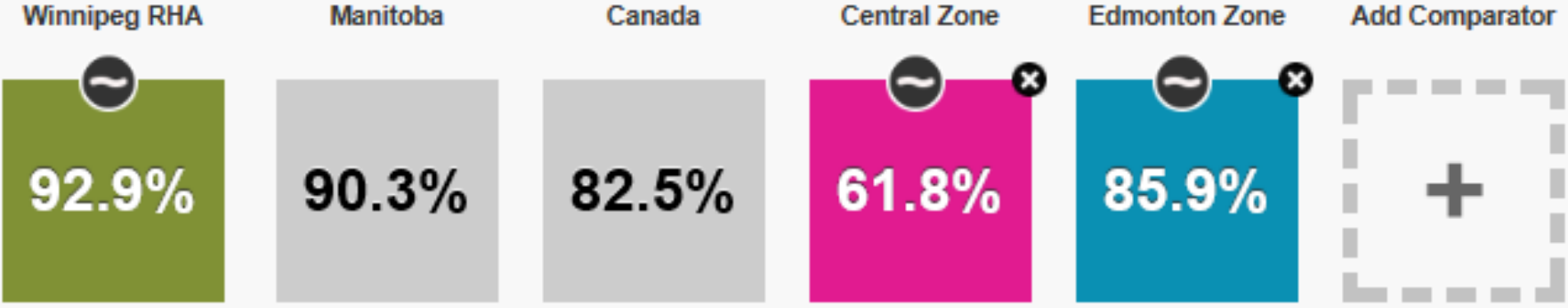
# Summary indicator results



- Next-level comparisons provided
- Note colour-coding

# How do I compare to others?

## Hip Fracture Surgery Wait Times [\[Access\]](#)



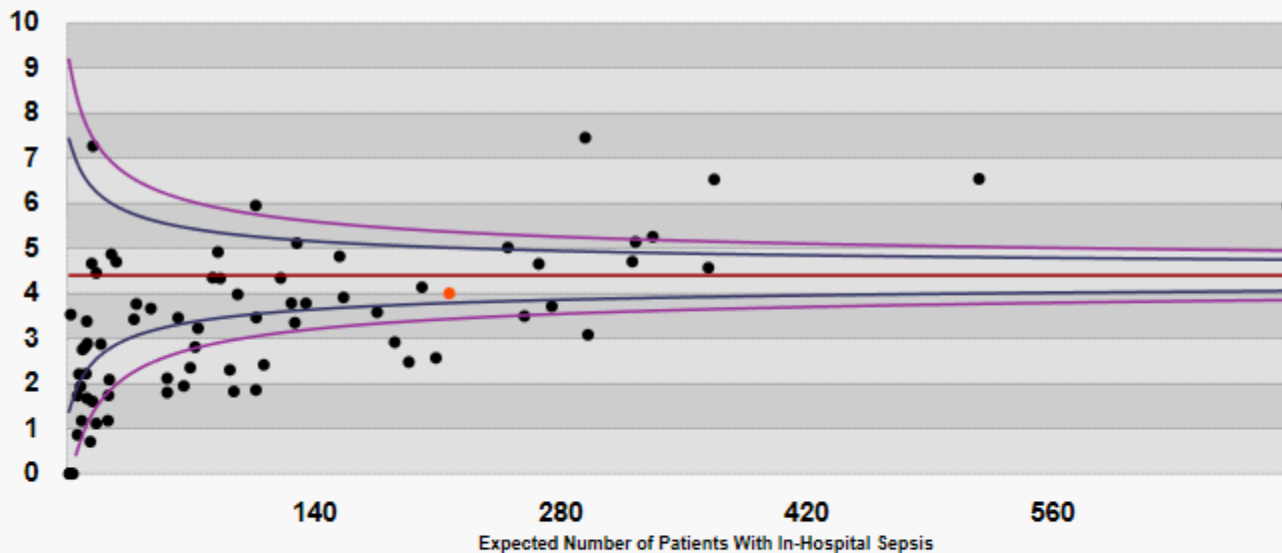
# How do I compare to others?

## Distribution of Results: In-Hospital Sepsis (per 1,000), 2012–2013

Data Export

Data points on the graph represent indicator results relative to the hospital's or region's size or service volume. Data points falling outside of the funnel are considered out of the ordinary.

[Methodology](#)



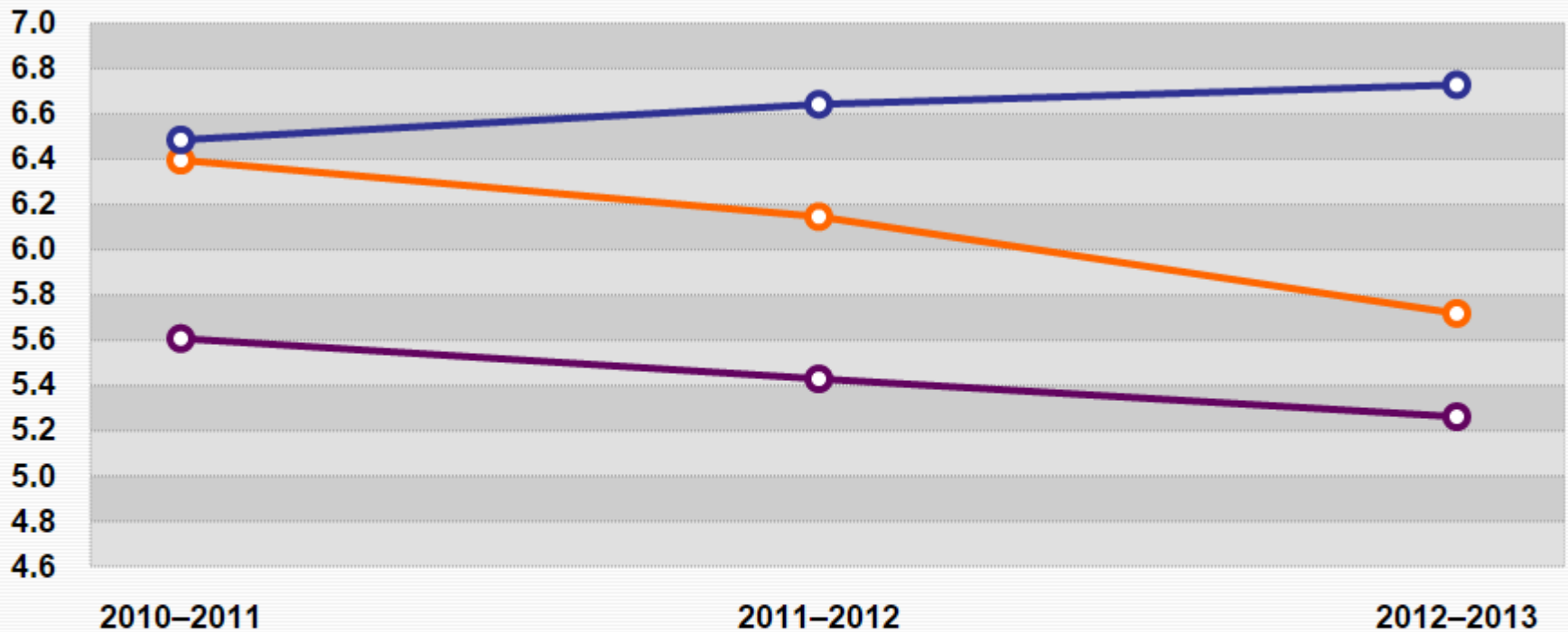
■ 99.8% Confidence Limits
 ■ 95% Confidence Limits
 ■ National Average

Show Regions Within My Province/Territory

# What has changed?



## Trend Over Time: Surgical Patients Readmitted to Hospital (Percentage)



■ Winnipeg RHA ■ Manitoba ■ Canada

Error Bar  Add Comparator


Add

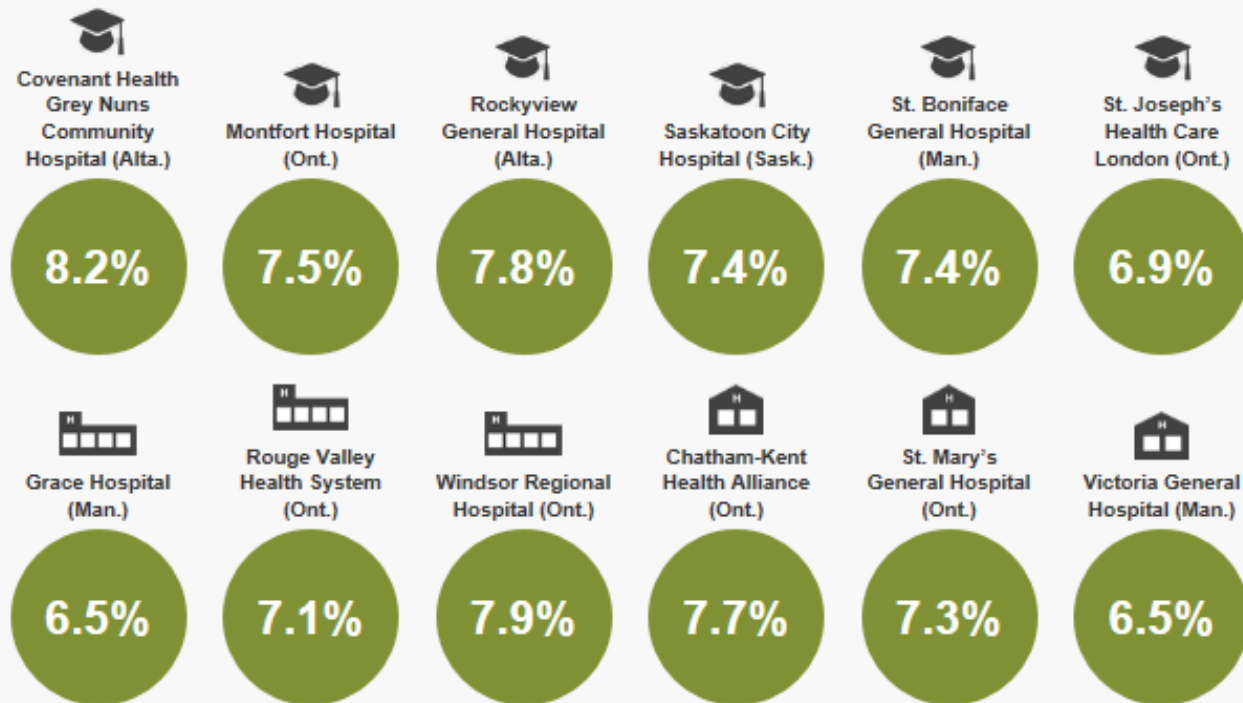
# Who can I learn from?

## Top Results

Identifies hospitals and health regions in the top 10% for the last 3 consecutive years. For hospitals, results are calculated by type of hospital. Quebec has elected not to participate in this section.

[Methodology](#)

 Community—Large
  Community—Medium
  Community—Small
  Teaching

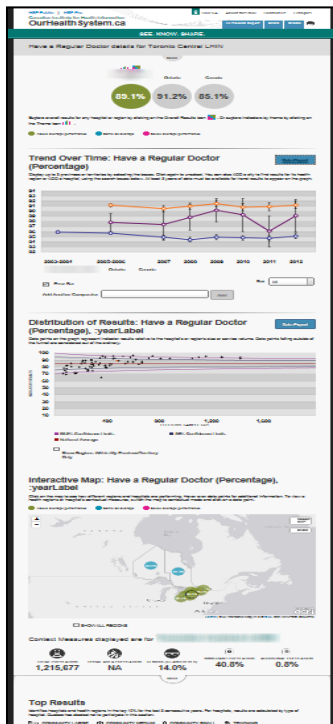


Example:

All Patients  
Readmitted to  
Hospital

# Exporting Capability

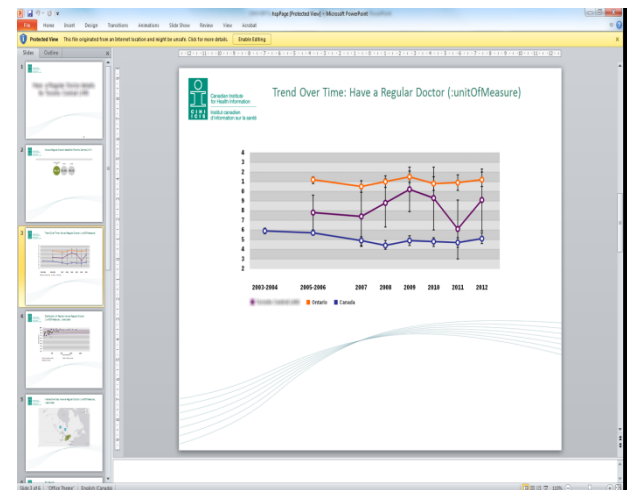
- Data into excel format
- Visuals into PPT, PDF



Distribution of Results: Percentage of Population With a Regular Medical Doctor (Percentage), 2012

[http://cihi.staging.hkstrategies.ca/health-indicator-vebssp-ur/rap\\_pno/indicator/0013/C-5007/H1yVpBcDmCGAbzAvkAA](http://cihi.staging.hkstrategies.ca/health-indicator-vebssp-ur/rap_pno/indicator/0013/C-5007/H1yVpBcDmCGAbzAvkAA)

Region	Province/Territory	Indicator Results	Effective Sample Size <sup>2</sup>	Canadian Average
1	Alberta	84.0	644.1	85.1
2	Alberta	79.3	282.8	85.1
3	Alberta	79.6	386.6	85.1
4	Alberta	74.9	257.4	85.1
5	Alberta	87.5	312.2	85.1
6	British Columbia	85.8	868.2	85.1
7	British Columbia	87.2	559.7	85.1
8	British Columbia	85.6	230.2	85.1
9	British Columbia	84.8	541.2	85.1
10	British Columbia	87.4	559.7	85.1
11	Manitoba	89.3	235.3	85.1
12	Manitoba	69.1	86.6	85.1
13	Manitoba	84.3	297.0	85.1
14	Manitoba	84.7	202.9	85.1
15	Manitoba	84.2	434.0	85.1
16	New Brunswick	93.9	579.2	85.1
17	New Brunswick	91.9	447.3	85.1
18	New Brunswick	89.9	282.8	85.1
19	New Brunswick	96.5	559.7	85.1
20	New Brunswick	94.1	386.6	85.1
21	New Brunswick	95.5	365.6	85.1
22	New Brunswick	95.7	447.3	85.1
23	Newfoundland and Labrador	87.4	211.4	85.1
24	Newfoundland and Labrador	95.4	1159.1	85.1
25	Newfoundland and Labrador	70.6	62.9	85.1
26	Newfoundland and Labrador	89.9	282.8	85.1
27	Nova Scotia	89.4	215.9	85.1
28	Nova Scotia	95.8	749.1	85.1
29	Nova Scotia	89.0	490.9	85.1
30	Nova Scotia	95.5	523.6	85.1
31	Nova Scotia	92.8	346.4	85.1
32	Nova Scotia	90.1	276.1	85.1
33	Ontario	92.6	720.6	85.1
34	Ontario	90.6	621.3	85.1
35	Ontario	84.9	1104.6	85.1
36	Ontario	87.9	868.2	85.1
37	Ontario	92.2	882.0	85.1
38	Ontario	93.4	1281.0	85.1
39	Ontario	92.6	1053.9	85.1
40	Ontario	85.3	386.6	85.1
41	Ontario	92.3	461.2	85.1
42	Ontario	83.2	337.3	85.1
43	Ontario	84.5	1281.0	85.1
44	Ontario	92.0	1423.3	85.1




# Make Use of Social Media

Tweet it, Post it, Email it



Share

 CIHI\_ICIS follows  
**VCH Healthcare** @VCHhealthcare · Oct 10  
Great tool! RT @CIHI\_ICIS Want to know the average cost of a stay in your local hospital?  
Explore #YourHealthSystem: [ow.ly/CzPre](http://ow.ly/CzPre)

← ↻ 3 ★ 1 ⋮



**The Ottawa Hospital** @OttawaHospital · Sep 18  
The Ottawa Hospital performs well in national quality scorecard [bit.ly/1p2CZXb](http://bit.ly/1p2CZXb)  
[@CIHI\\_ICIS](#) #ottnews #cdnhealth #YourHealthSystem

← ↻ 3 ★ 2 ⋮



# *LTC Release – Spring 2015*



# Long-term care reporting

- Nine indicators reported by long-term care facility
- The first public *pan-Canadian* report of facility-level LTC performance
- Indicators selected from CIHI's Continuing Care Reporting System (CCRS) on advice from expert advisory group
- Does not replace existing CCRS eReports
- No benchmarking

# Long-term care indicators



Dimension	Indicator	Desired State
Appropriate & Effective	<ul style="list-style-type: none"> <li>• Daily Restraint Use</li> <li>• Potentially Inappropriate Antipsychotic Use</li> </ul>	<ul style="list-style-type: none"> <li>• Lower</li> <li>• Lower</li> </ul>
Safe	<ul style="list-style-type: none"> <li>• Falls in the Last 30 Days</li> <li>• Worsened Pressure Ulcer</li> </ul>	<ul style="list-style-type: none"> <li>• Lower</li> <li>• Lower</li> </ul>
Improve health status of residents	<ul style="list-style-type: none"> <li>• Worsened Depressive Mood</li> <li>• Improved Physical Functioning</li> <li>• Worsened Physical Functioning</li> <li>• Experiencing Pain</li> <li>• Experiencing Worsened Pain</li> </ul>	<ul style="list-style-type: none"> <li>• Lower</li> <li>• Higher</li> <li>• Lower</li> <li>• Lower</li> <li>• Lower</li> </ul>

# CCRS indicators in use

CIHI	HQO*
<ul style="list-style-type: none"> <li>• Daily Restraint Use</li> <li>• Potentially Inappropriate Antipsychotic Use</li> <li>• Falls in the Last 30 Days</li> <li>• Worsened Pressure Ulcer</li> <li>• Worsened Depressive Mood</li> <li>• Improved Physical Functioning</li> <li>• Worsened Physical Functioning</li> <li>• Experiencing Pain</li> <li>• Experiencing Worsened Pain</li> </ul>	<ul style="list-style-type: none"> <li>• Daily Restraint Use</li> <li>• Falls in the Last 30 Days</li> <li>• Worsened Pressure Ulcer</li> <li>• Incontinence</li> </ul> <p>(*home-level reporting)</p>
	<p><b>QIP Indicators (Unadjusted)</b></p> <ul style="list-style-type: none"> <li>• Daily Restraint Use</li> <li>• Falls in the Last 30 Days</li> <li>• Worsened Pressure Ulcer</li> <li>• Potentially Inappropriate Antipsychotic Use</li> <li>• Incontinence</li> </ul>

# Additional facility information - profile



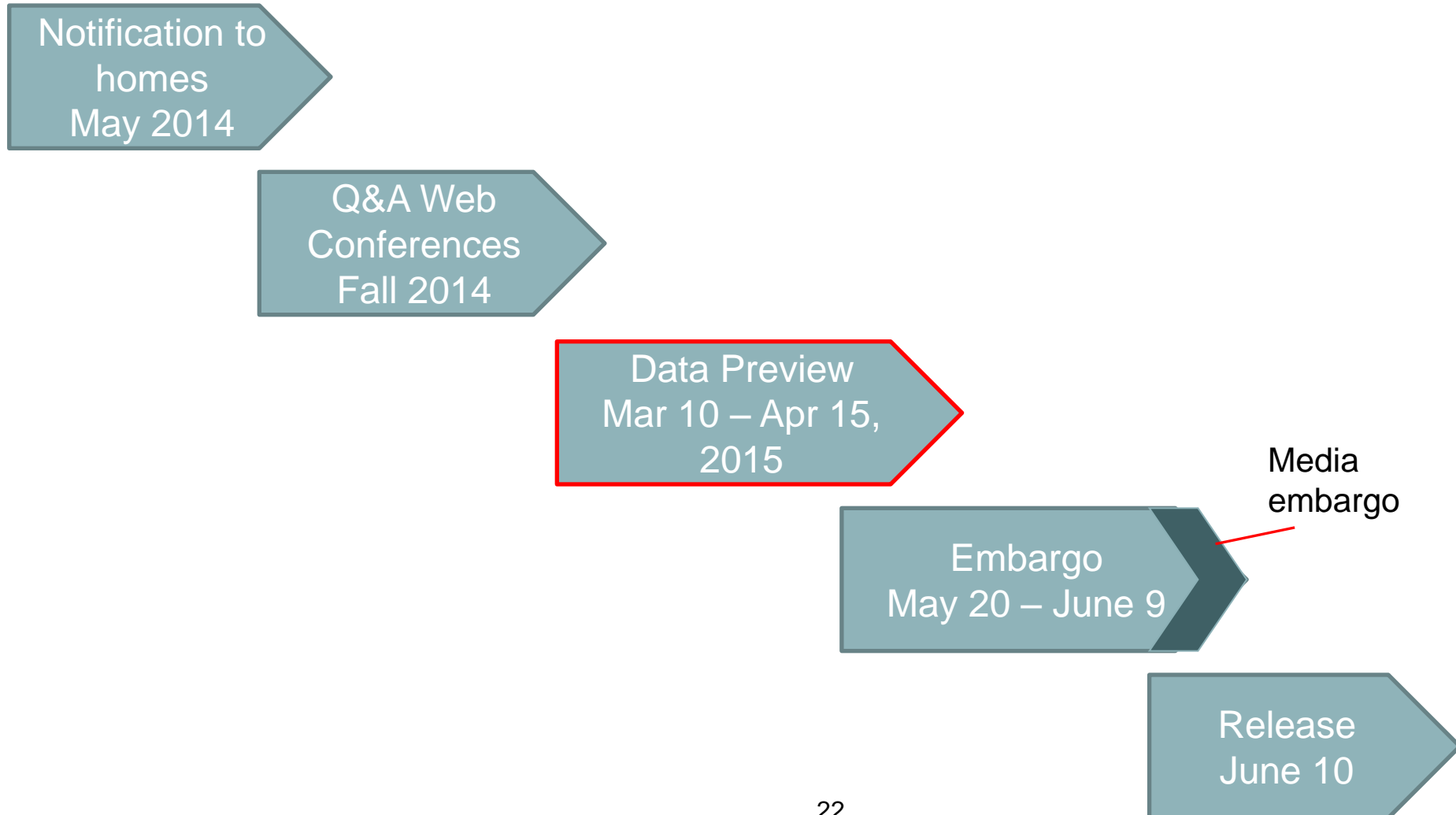
Contextual Measure	Level of Reporting
Located in urban/rural area	Facility
Long-term care facility size (S/M/L)	Facility
% female long-term care residents	Facility, Corporation
% residents under 65 years of age	Facility, Corporation
% residents over 85 years of age	Facility, Corporation
% residents with dementia	Facility, Corporation
% residents with heart failure	Facility, Corporation
Average length of stay in long-term care	Facility, Corporation

→ Not part of performance/comparison

## Which homes and results are included?

- A minimum of one full year of data needed
- Must have at least 30 assessments for an indicator
- Closed sites not included
- Re-organization may impact inclusion
- June release: Focus on 2013-2014 data
- Annual refresh cycle

# Where are we now?





# *LTC Release*

## *Reviewing Results*

# Data Preview Period

- March 10 – April 15 (5 weeks)
- Full preview file provided
  - Risk-adjusted results for indicators
  - Four years of data (2010-11 to 2013-14)
  - Facility, corporation, LHIN, province, national results
  - Performance measure: above, at or below national average
- Allows time to review results and prepare for release
- Preview file available in eReports



# Sample Indicator Results: ABC Home



Indicator	Indicator Result (%)	Lower Confidence Limit (%)	Upper Confidence Limit (%)	Comparisons
Falls in the Last 30 Days	17.1	13.8	20.3	Same as average
Worsened Pressure Ulcer	3.4	2	4.8	Same as average
Potentially Inappropriate Use of Antipsychotics	8.1	4.5	11.7	Above average
Restraint Use	1.1	0	2.3	Above average
Experiencing Pain	13.6	10.2	17.1	Same as average
Experiencing Worsened Pain	8.9	6.9	10.9	Above average
Improved Physical Functioning	9.9	7.2	12.6	Below average
Worsened Depressive Mood	23.9	20.9	26.8	Same as average
Worsened Physical Functioning	28.3	24.4	32.3	Above average

YourHealthSystem.cihi.ca



Risk  
Adjustment

Confidence  
Intervals

# Risk Adjustment

- Methodology that allows comparison
  - Adjusts for risk profiles of residents
  - Modifies the result so it is relative to the standard reference population
- When a QI is risk-adjusted, the question being asked is:
  - The raw result is **X%** for your residents, but what would it be if your residents were more like the *standard reference population*
- Full methodology available at [www.cihi.ca/ccrs](http://www.cihi.ca/ccrs)

# Basic example: Risk adjustment by sex

- Standard reference population

Sex	Standard Reference Population
Men	50%
Women	50%

- Facility A: Adjusted rate

	Risk Adjusted QI
50% x 10%	<u>5%</u>
50% x 26%	<u>13%</u>
	<b>18%</b>

- Facility A: 30 men and 50 women

Sex	Assessments	Indicator Z	Raw QI
Men	30	3	$3/30 \times 100\% = 10\%$
Women	50	13	$13/50 \times 100\% = 26\%$
	<b>80</b>	<b>16</b>	<b><math>16/80 = 20\%</math></b>

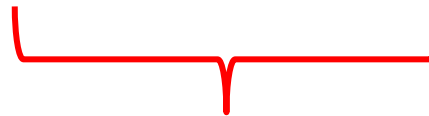


The 20% raw rate is risk adjusted to 18%, because there were fewer men than the standard ref pop, and they were doing well.

# Confidence Intervals

- Used to determine whether result is truly different from the average
- Takes into account variability in results from quarter to quarter

Indicator Result	Lower Confidence Limit	Upper Confidence Limit
17.1	13.8	20.3



We are 95% confident that your actual result is somewhere between 13.8% and 20.3%

# Am I different from the average?



- 1) Risk-adjusted result and confidence intervals are determined for each facility for a given indicator



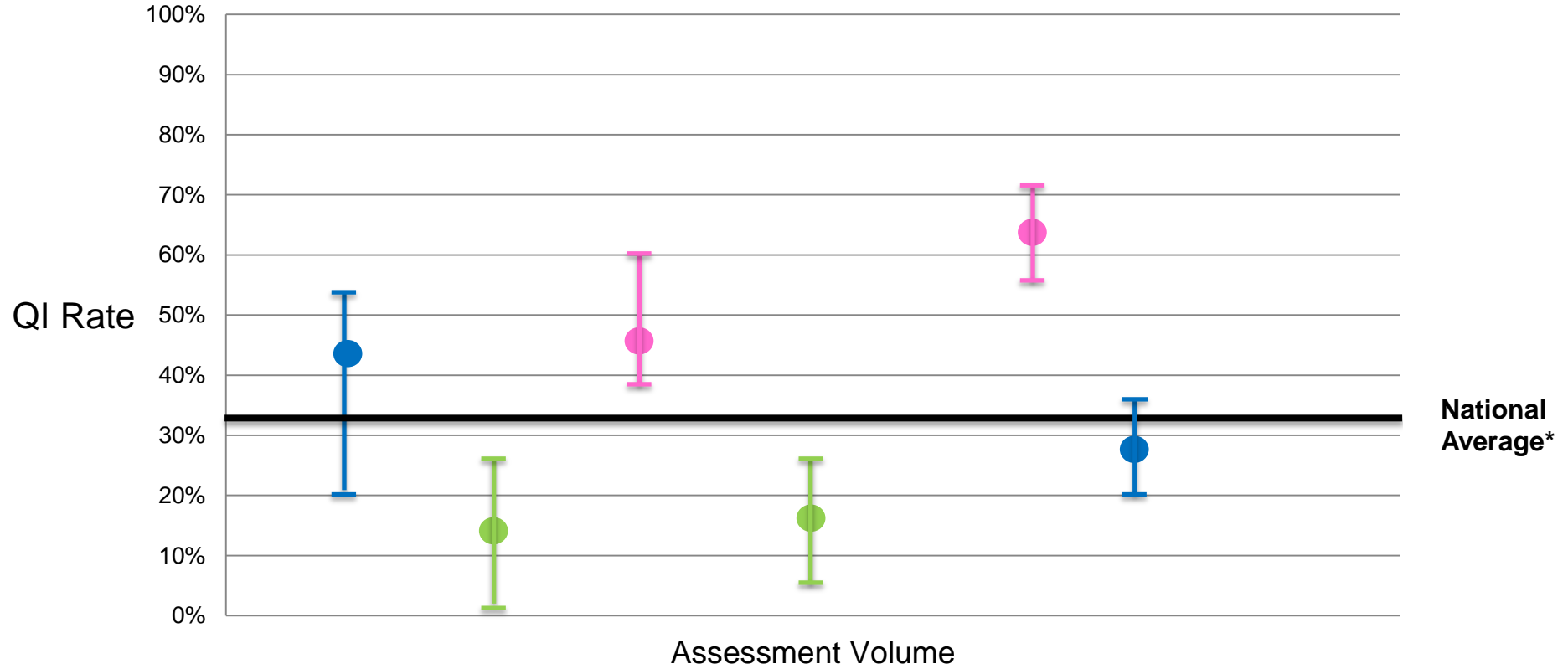
- 2) Indicator result is calculated for national average

National Average

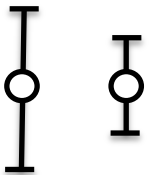


- If ● falls between , result considered to be same as average
- If ● falls outside , result considered to be different from average

# Example: Confidence Intervals



Smaller Facility    Larger Facility

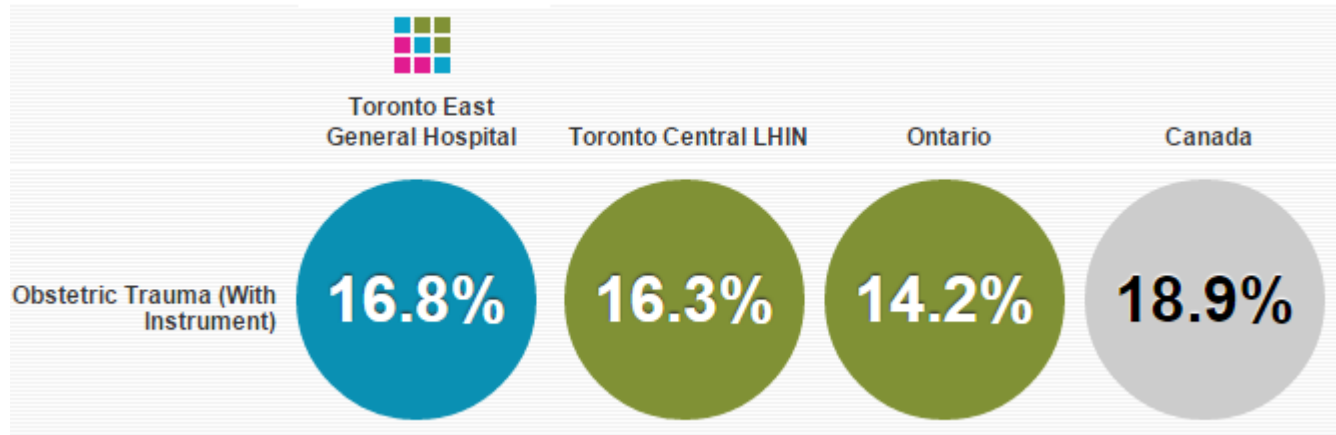


- Above average
- Same as average
- Below average

\*Note: for this QI, lower is better

# Web Tool Colour-Coding

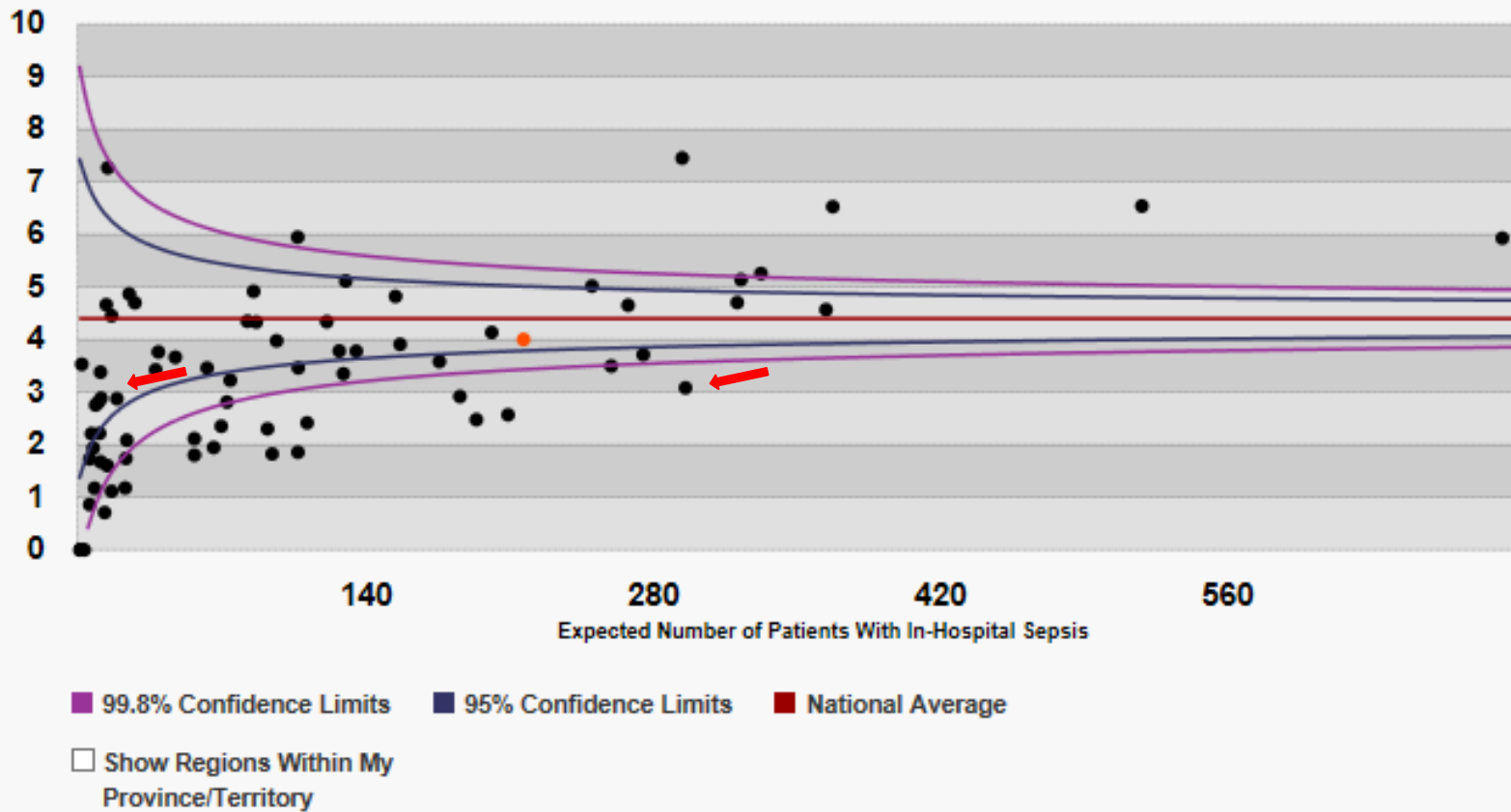
● Above average   ● Same as average   ● Below average   ● No assessment





# Confidence Intervals and Facility Size

## In-hospital Sepsis Rates



# Take-Home Messages

- Confidence Intervals:
  - Allow reporting of a result as it compares to the Canada average
  - Describes results that are statistically different from the average
    - These results may warrant additional investigation
  - Discourage ranking





# Preparing for Spring 2015

# Leading up to June 10<sup>th</sup> release

## Stakeholders

- Embargo: Secure access to the site for 3 weeks prior to release
- Resources for communications: Information about indicators, key concepts, key messages
- Embargo web conference

## Media

- Embargo: Secure access to site, 1-2 days pre-release
- Interviews during embargo and post-release

## Social media

- Twitter, Facebook

# Looking In before Speaking Out

What else is needed in order to understand results?

Issue	CIHI Resource
How is the number calculated?	CIHI's Indicator Library
Is the MDS information accurate?	RAI MDS Clinical Coding Standard
What are my unadjusted rates?	Preview file or eReports
Questions?	<a href="mailto:ccrs@cihi.ca">ccrs@cihi.ca</a>

# Looking In before Speaking Out

## Other factors to consider

- Have things changed since 2013-2014 data?
- Look at overall results, trends over time
- Where are you performing well vs what areas might need further investigation
- Who can you learn from?



# Speaking Out

To media, stakeholders, clients, families and others

# CIHI approach to key messages

- This work is focused on improvement. It is not about ranking homes or pointing fingers.
- Results are a trigger to ask questions and investigate further. There are many factors that can contribute to a result.
- The site provides an opportunity for learning and sharing best practice.
- There is a great deal of variation across the country. No one facility, region or province is all good or all bad.



# Plan Ahead

- Who will be interested in this information?
  - Clients, families, media, staff
- What potential questions might you be asked?
  - Different questions and answers might be needed for some groups
- When should you communicate?
  - Timing may be different depending on audience
- How can you communicate with them?
  - Face-to-face, web, media, newsletters

# Key messages

## *Foundation of your response*

- Where are you doing well? Where is a closer look needed?
- What context can you provide to help others better understand your results?
- What action have you taken? What action are you going to take?

# Reiterate why the information is important

"The more data the public has access to, the better. It helps us to identify where we're doing well and where we need to improve, and it empowers residents to make informed decisions about their health care."

- Bruce Lauckner, chief executive of the [Waterloo Wellington Local Health Integration Network](#)

"To have that ability to compare is fundamentally important for an institution to get better."

- Dr. Alan Forster, The Ottawa Hospital's chief quality and performance officer

# Provide context

*“According to Your Health System: In Depth, Southlake is performing better than its peer group and/or provincial average in the following areas.... Two areas have been identified at Southlake that require some deeper reflection. These areas include: the number of patients who – during labour – were reported to have experienced a perineal tear, and administrative expenses.”*

- [Southlake website](#); message for community

Sunnybrook Health Sciences Centre [response](#) to 30-day mortality after major surgery indicator

- YouTube, message to stakeholders

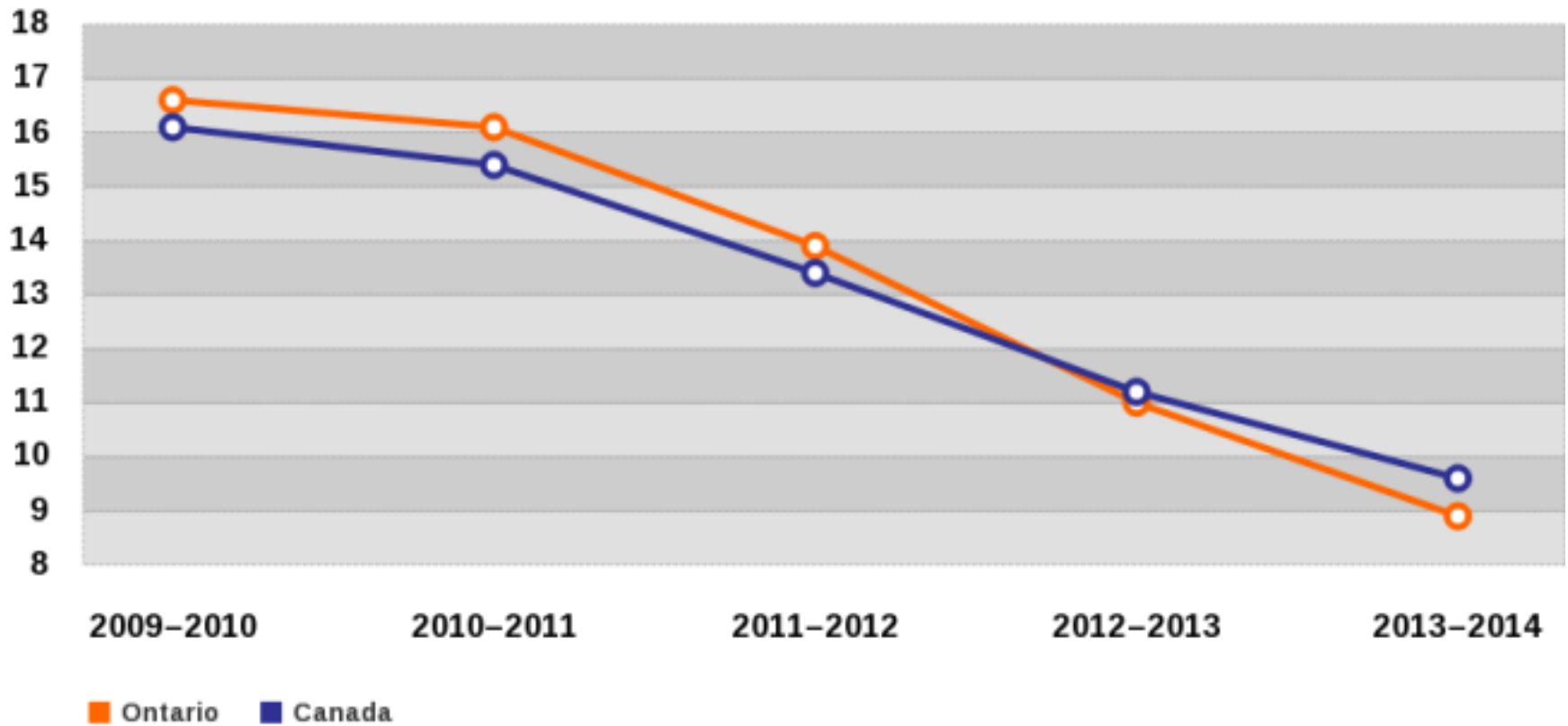
# Focus on action

“The Niagara Health System is committed to the highest quality and safest care for all of our patients and families. Our renewed focus on quality care is guiding our efforts to build a world-class hospital system in Niagara. **We have a number of quality initiatives underway that support this commitment.** Quality improvement is an ongoing journey, and we are very pleased with the progress we continue to make.”

- NHS President Dr. Suzanne Johnston, [www.niagarahealth.on.ca/en/your-health-system](http://www.niagarahealth.on.ca/en/your-health-system)

# Share Your Success Stories

## Ontario: Daily Restraint Use in Long-Term Care



(Source: Canadian Institute for Health Information)



Thank you

[hsp@cihi.ca](mailto:hsp@cihi.ca)

Your Health System: [www.YourHealthSystem.cihi.ca](http://www.YourHealthSystem.cihi.ca)

CIHI website: [www.cihi.ca](http://www.cihi.ca)