Health Quality Transformation 2013
Qualité de la santé

The Use of Benchmarks in Public Reporting: Measuring Performance & Setting Meaningful Goals

Moderator: Miin Alikhan
Director, Health Quality Branch
Ministry of Health and Long-Term Care

Presenter Disclosure

- **Session Name:** The Use of Benchmarks in Public Reporting: Measuring Performance & Setting Meaningful Goals

- **Presenters:** Miin Alikhan (moderator), Dr. Michael Schull, Dr. Walter Wodchis, Jonathan Wiersma, Corry O'Neil, Stella Leung, Cathy Fiore

- **Relationships with commercial interests:**
  - Not Applicable

Disclosure of Commercial Support

- This session has received no commercial support

Mitigating Potential Bias

- Not applicable

Learning Objectives

1. Develop an understanding of benchmarks and how they are both practically and appropriately applied to health system public reporting.

2. Discover the tactical approaches organizations in Ontario have used to drive sustained improvement and breakthrough performances.

Overview

Item	Speaker
Welcome/Introductions	Miin Alikhan
Driving Performance Improvement: Measurement & QI	Dr. Michael Schull
Benchmark Theory Burst	Dr. Walter Wodchis
Hospital Representatives	Jonathan Wiersma (Royal Victoria Regional Health Centre) Corry O'Neil (Windsor Regional Hospital)
LTC Home Representatives	Stella Leung (Mon Sheong) Cathy Fiore (O'Neill Centre)
Closing Remarks	Dr. Michael Schull
Question & Answer Period	Panel
Tools & Resources	Miin Alikhan

Health Quality Transformation 2013
Qualité de la santé

Driving Performance Improvement: Measurement & QI

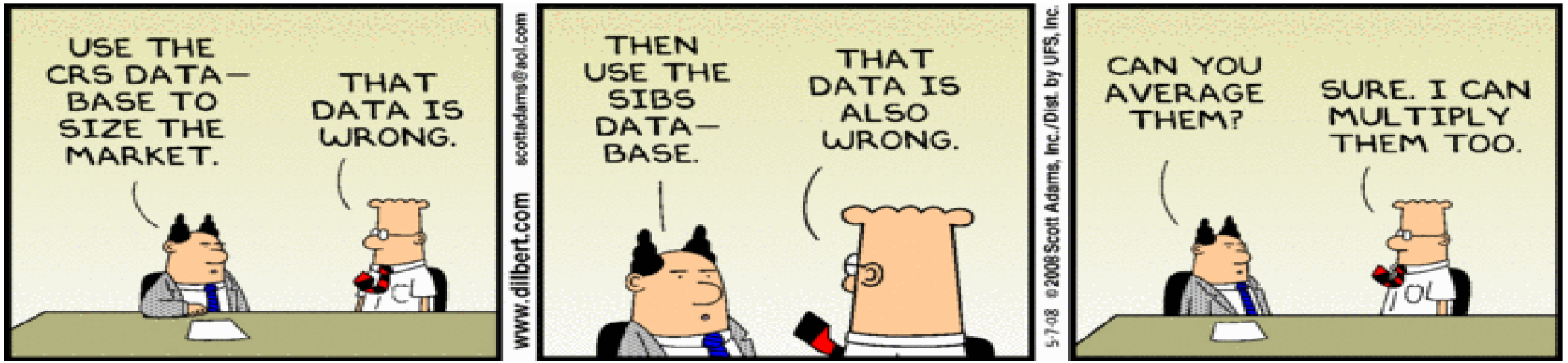
Dr. Michael Schull

President & CEO

Institute for Clinical Evaluative Sciences

“Measurement is the first step that leads to control and eventually to improvement. If you can’t measure something, you can’t understand it. If you can’t understand it, you can’t control it. If you can’t control it, you can’t improve it.”

H. James Harrington


USE THE CRS DATA-BASE TO SIZE THE MARKET.
THAT DATA IS WRONG.
www.dilbert.com
scottadams@aol.com
THEN USE THE SIBS DATA-BASE.
THAT DATA IS ALSO WRONG.
5-7-08 ©2008 Scott Adams, Inc./Dist. by UFS, Inc.
CAN YOU AVERAGE THEM?
SURE. I CAN MULTIPLY THEM TOO.

Department of Veterans Affairs Hospital Compare

Welcome to the VA Hospital Compare web site. This site is for Veterans, family members and their caregivers to compare the performance of their VA hospitals to other VA hospitals. Using this tool, Veterans, family members, and caregivers can compare the hospital care provided to patients

Quality Information on this web site is divided into four sections:

1) LinKS ("Linking Information Knowledge and Systems") summarizes outcomes in areas such as acute care, safety, Intensive Care and other measures

2) ASPIRE documents quality and safety goals for all VA hospitals, plus how well our hospitals are meeting these goals

3) Compare how well your local VA hospital cares for its veterans with congestive heart failure, heart attack and pneumonia

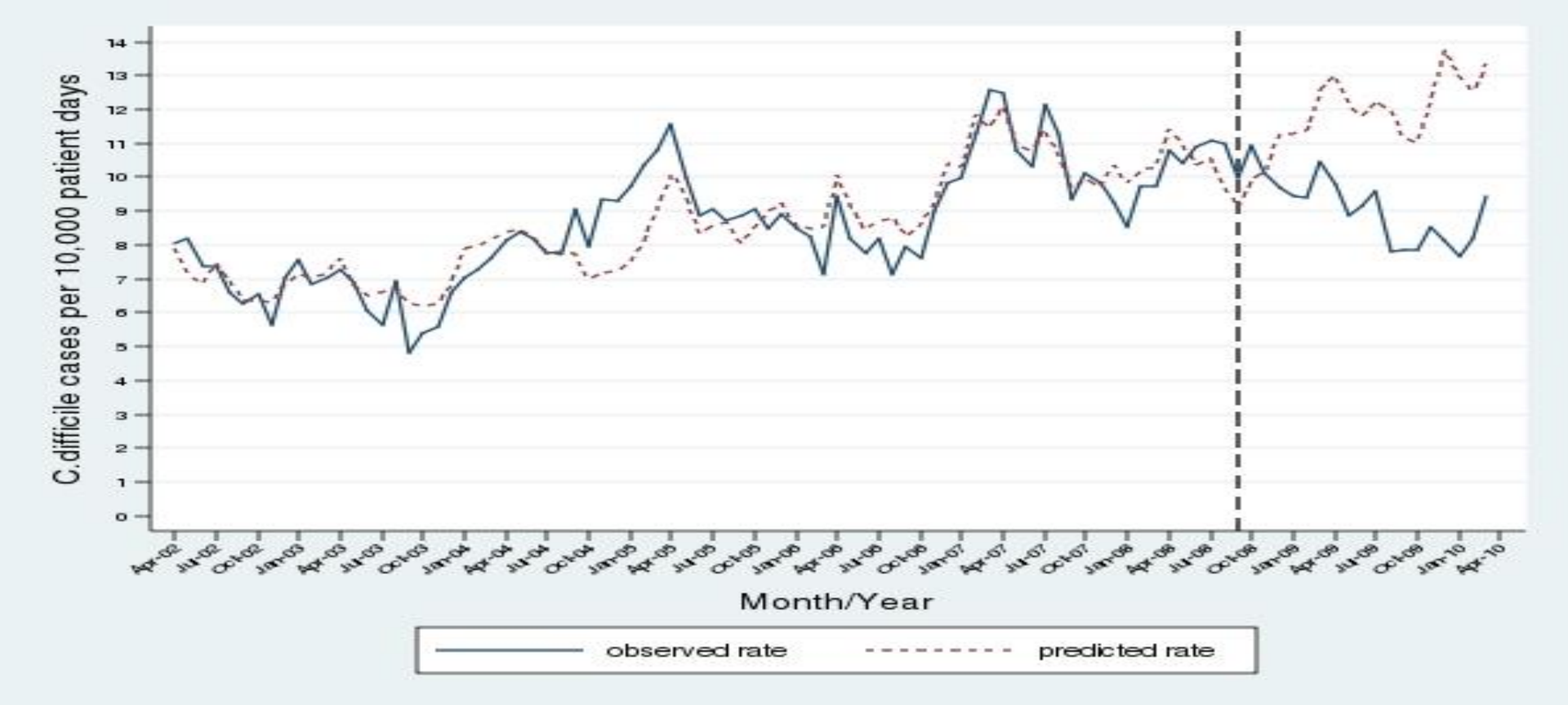
4) Tracks progress in the VA in reducing complications from surgery including infection, blood clots, cardiac, and respiratory problems

Key Ingredients to Success of the VA System

- Performance Measurement System
    - IT system for clinical use as well as performance monitoring
    - Benchmarks for comparisons
    - Quality Improvement support
    - Realignment of incentives to encourage better performance

Effect of the Transformation of the Veterans Affairs Health Care System on the Quality of Care Jha A et al, www.nejm.org may 29, 2003
Making performance indicators work: experiences of US Veterans Health Administration Kerr E and Fleming B. *BMJ2007;335doi: http://dx.doi.org/10.1136/bmj.39358.498889.94(Published 8 November 2007)*

Early Evidence: Positive Impact of Public Reporting in Ontario



Daneman N, Stukel, T, Ma X, Guttmann A Reduction in C.difficile Infection Rates After Mandatory Hospital Public Reporting: Findings From a Longitudinal Cohort Study in Canada, PLOS Medicine 2012

10 Recommendations for Successful Implementation of Quality Improvement Interventions (10 Ontario Hospitals; ED-PIP)

1. Need strong CEO and senior administration support
2. Careful preparation and information leading up to intervention
3. Careful and early selection of intervention team members
4. Need explicit & shared understanding of role of external consultant
5. Brand the intervention carefully
6. Invest in capacity for performance measurement
7. Remember it's a marathon and not a sprint
8. Communicate frequently and in all ways, but don't forget face-to-face
9. Ensure you have effective physician leadership
10. Develop a plan for sustainability early

Health Quality Transformation 2013
Qualité de la santé

Benchmark Theory Burst

Dr. Walter Wodchis

Associate Professor
University of Toronto, Institute of Health Policy, Management and Evaluation

Setting Targets for Performance Indicators

- Performance indicators are useful measurement tools to highlight current state.
- Performance management requires goals.
- Targets for performance indicators are required for performance management.

Common Quality Agenda: Indicator Targets

- HQO has developed a set of health system performance indicators across all care sectors and measures of system integration.

- How should targets be set?

- How are targets set?

Target Setting Framework

Desired target benchmark attributes:

1. Evidence-based/data-driven
2. Agreeable to major stakeholders
3. Catalysts for quality improvement
4. Indicators of high quality care

Target Setting Framework

- Some indicators have a natural target (e.g., never events)
- Some indicators have a known epidemiology
- Some indicators have best practice evidence

All of these are important considerations in choosing a method to select targets. HQO mostly employs a modified Delphi process incorporating all approaches that ultimately results in benchmarks having all four of the desired attributes

A case example: Long Term Care

Which Quality Indicators were Selected for Benchmarking?

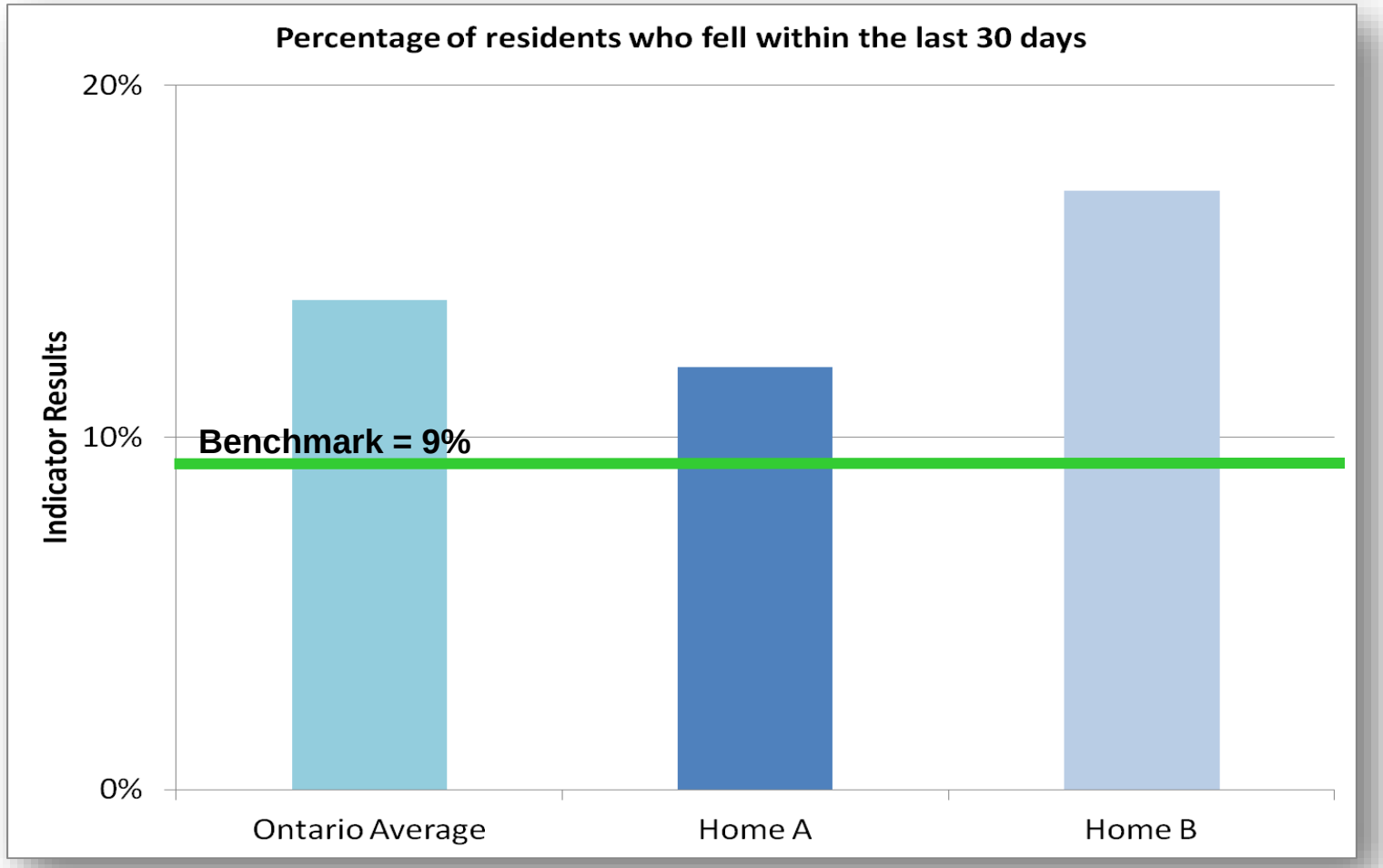
- 9 Continuing Care Reporting System (CCRS) Quality Indicators were selected for the following attributes: a) valid and reliable b) risk-adjusted and c) publicly reported

Publicly Reported Home-Level Indicators	Other Selected Indicators*
1. Percentage of residents in daily physical restraints 2. Percentage of residents who fell in the last 30 days 3. Percentage of residents whose bladder continence worsened 4. Percentage of residents whose stage 2 to 4 pressure ulcer worsened	5. Percentage of residents whose ADL self-performance worsened 6. Percentage of residents who had a newly occurring stage 2 to 4 pressure ulcer 7. Percentage of residents whose behavioural symptoms worsened 8. Percentage of residents whose mood symptoms of depression worsened 9. Percentage of residents whose pain worsened

*Prioritized by HQO's LTC Advisory Group Subcommittee on Benchmarking. Currently, no plans to publicly report at home-level.

Why are Benchmarks Needed?

Currently, homes can compare results with the Ontario average or to other homes using data on HQO's LTC Website



- For this indicator, Home A knows that it is outperforming the Ontario average and Home B

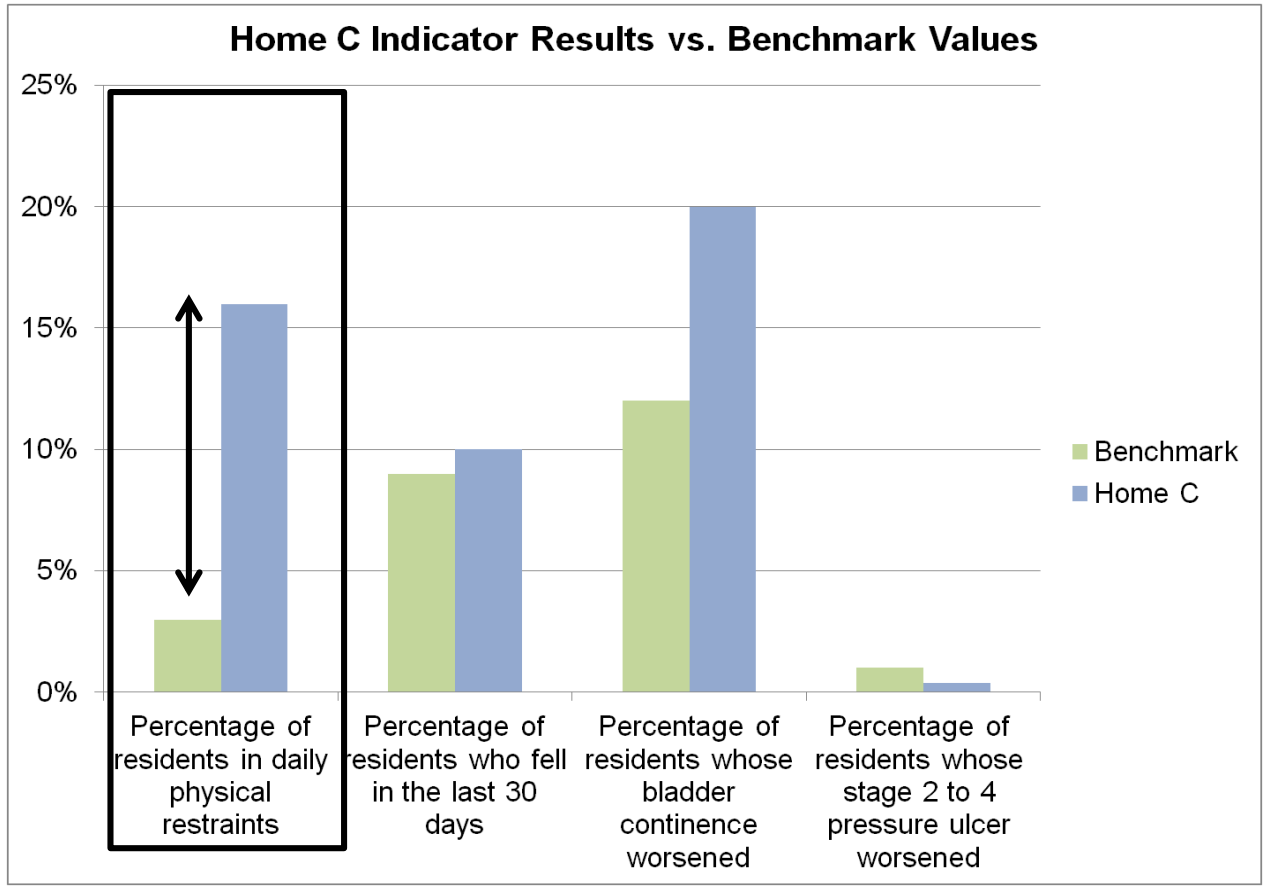
- However, there is no information on Home A's results against high quality care.

- Benchmarks provide standards for this comparison.

Benchmarks & Quality Improvement

Benchmarks can inform Quality Improvement Plan (QIP) development by:

- Prioritizing quality improvement areas
- Setting aims and targets

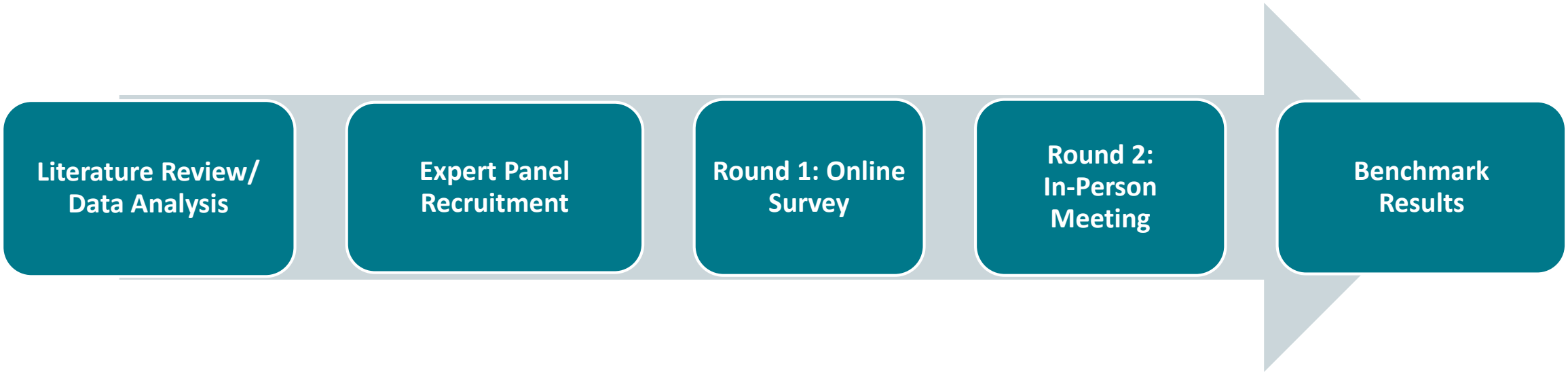


•Can inform prioritization based on performance gap between benchmark values and indicator results.

•Can set targets to benchmark values as stretch targets are associated with bigger improvements.

•Visit Residents First website for more QIP resources.

Modified Delphi Process



Information Provided to Expert Panel

1. Indicator Description

Indicator: Percent of Residents Who Had an Outcome

Indicator Description

Code:	OUTCOME02
Type:	Prevalence Indicator
Numerator:	Residents who had a n outcome
Denominator:	Residents with valid assessments
Exclusion Criteria:	None
Data Elements Used:	XYZ Outcome within 30 days
Risk Adjustment :	Individual Covariates Not totally dependent in transferring Locomotion problem Stratification Case Mix Index

2. Literature Search Results

Literature Search Results

Table A. Percent of Outcome in other jurisdictions

Jurisdiction and Sample Population	Summary Statistics	Assessment Tool	Restraint definition
USA * Nationwide * Statewide	* National average: 12% * Range in state averages 7.5% in Hawaii to 19.1% in South Dakota (Quarter 3, July-September 2010) (MDS Quality Measure/Indicator Report)[7]	MDS	*Same numerator and denominator *Same exclusion criteria *Different risk adjustment
Netherlands * 5 LTC facilities * 129 residents	* Prevalence: 20.9% ([redacted] et al., 2011)[8]	RAI-LTCF	*Same numerator and denominator *Exclusion criteria not provided *Risk adjustment not provided

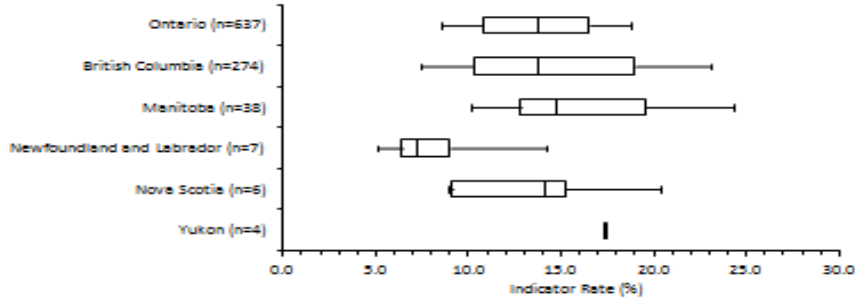
Table B. Thresholds of outcome in other jurisdictions

Jurisdiction and Sample Population	Summary Statistics	Suggested threshold or targets	Assessment Tool	Restraint definition
Missouri, USA * Statewide		5.8% * based on expert opinion & data ([redacted] et al., 1997 & 2000)[1, 2]	MDS	*Same numerator and denominator *Same exclusion criteria *Different risk adjustment
	Mean: 15.4% (Quarter 4, Oct-Dec 2009)[7]	9.8% * based on data - 20th percentile score for the state of Missouri from MDS statewide data (Oct 2008 - Mar 2009) (CJPMO, 2009)[6]	MDS	*Same numerator and denominator *Same exclusion criteria *Different risk adjustment
Queensland, Australia * 9 LTC facilities * 498 residents	Median: 13.4% 25th percentile: 11.3% 75th percentile: 15.6%	4.3% * based on expert opinion & data (O'Reilly et al., 2011)[9]	[redacted]	*Same numerator and denominator *Exclusion criteria not provided *Risk adjustment strategy not described

3. Indicator Performance in Canada

Canadian Performance

Figure A. Regional distributions of indicator



4. Indicator Performance in Ontario

Ontario Performance

Provincial Rate: **13.9%**

Figure B. Percent of outcome in Ontario LTC facilities

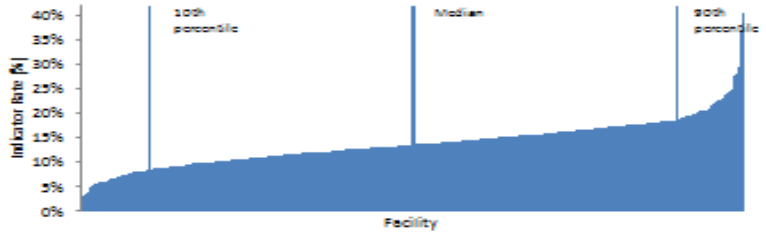


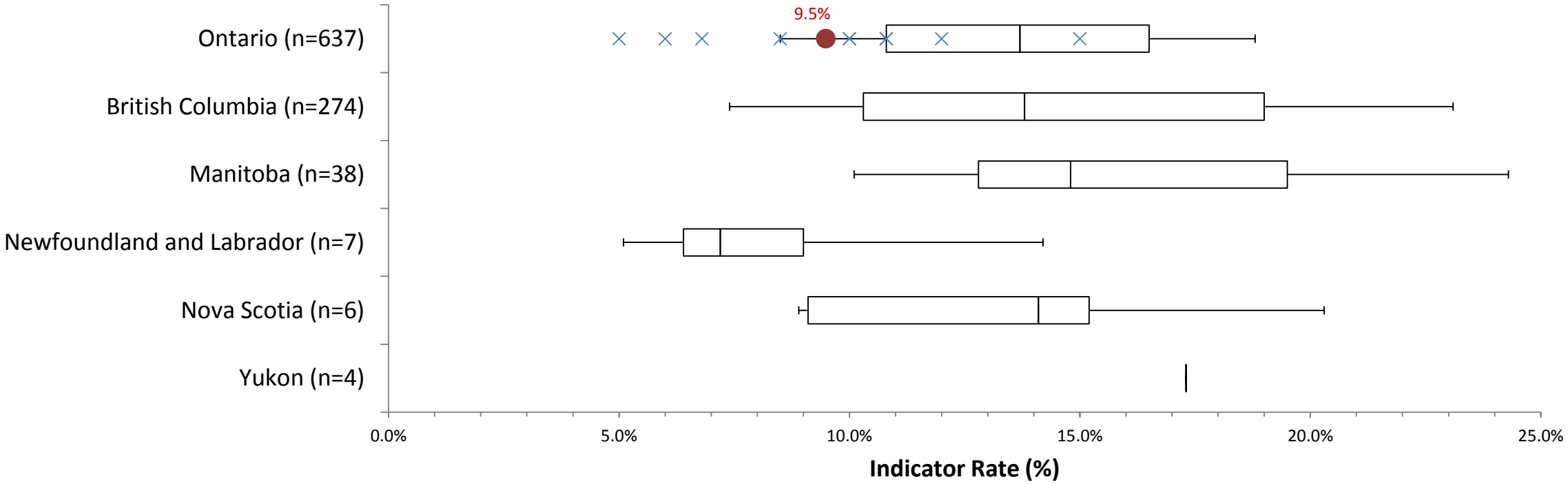
Table C. Facility-level distribution in the percent of daily outcome in Ontario

Minimum	5th Percentile	10th Percentile	25th Percentile	Median	75th Percentile	90th Percentile	95th Percentile	Maximum
2.8%	6.8%	8.5%	10.8%	13.7%	16.5%	18.8%	21.5%	40.6%

Modified Delphi Process

Regional distributions with markers for expert panel responses

- The x's mark the expert panel members' suggested benchmarks.
- The red circle is the expert panel mean response. The box-plots show the 10th, 25th, median, 75th, and 90th percentiles of the provincial rates.
- **Indicator is percent of LTC residents who fell**.



Modified Delphi Process

Benchmark Setting

Indicator 2: Percent of Residents Who Fell in the Last 30 days

Note: Answer should be between 1 and 100 percent with 1 decimal place.

Based on your clinical experience in long-term care homes and/or your professional knowledge, what is an achievable score indicating good resident outcomes and high quality care in a general LTC home population?

Answer:

%

Publicly Reported LTC CCRS Home-Level Indicators

Indicator	Benchmark	Ontario Rate, Q4 11/12	Ontario Facility-Level Distribution (Percentile) Q4 2011/12				
			10th	25th	Median	75th	90th
1. Percentage of residents in daily physical restraints	3%	14%	2%	6%	13%	21%	27%
2. Percentage of residents who fell in the last 30 days	9%	14%	9%	11%	14%	17%	19%
3. Percentage of residents whose bladder continence worsened	12%	19%	9%	14%	20%	27%	32%
4. Percentage of residents whose stage 2 to 4 pressure ulcer worsened	1%	3%	1%	2%	3%	4%	5%

Target Setting Framework

- The Modified Delphi process will largely be applied in the Common Quality Agenda.
- Some targets will adopt MOHLTC standards (e.g., ALC).
- Some targets will adopt other groups standards (e.g., Stroke Network, Public Health Agency of Canada, Cancer Care Ontario etc.).

Health Quality Transformation 2013
Qualité de la santé

Royal Victoria Regional Health Centre

Jonathan Wiersma M.Sc.

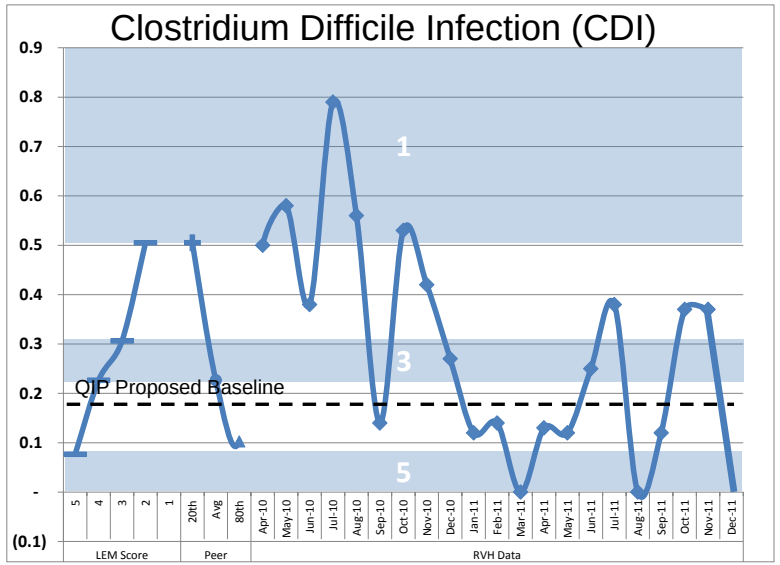
Director – Decision Support
(Royal Victoria Regional Health Centre)

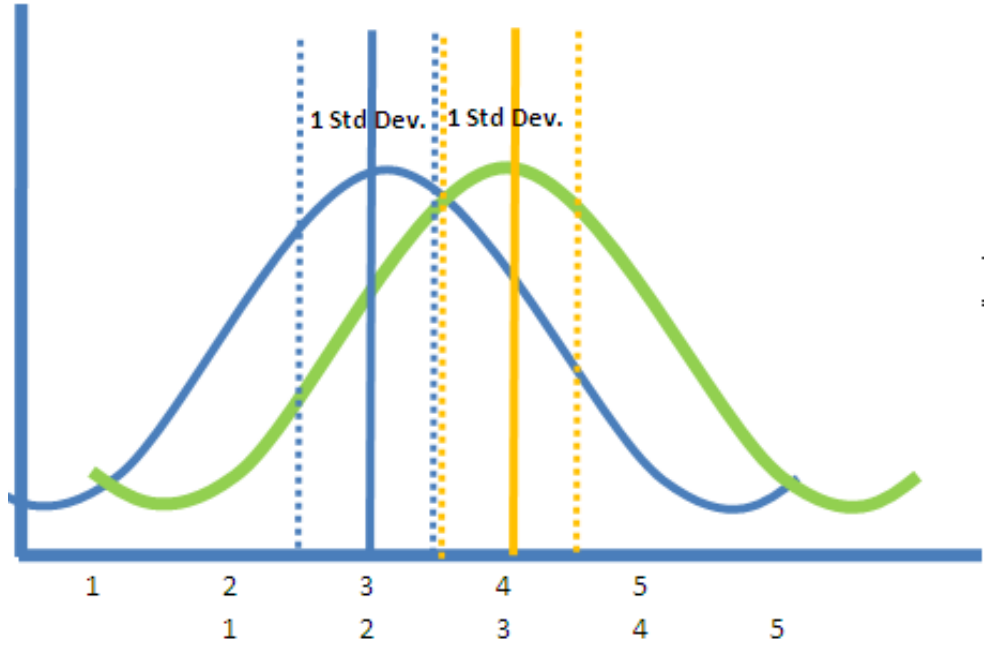
Our people – Our patients

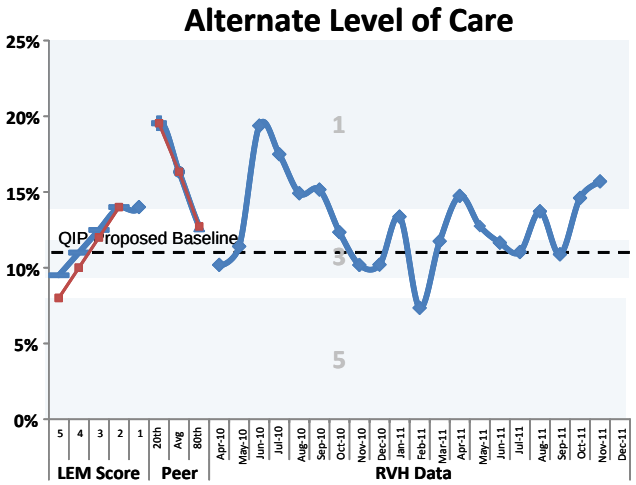
SMART Indicators / Targets

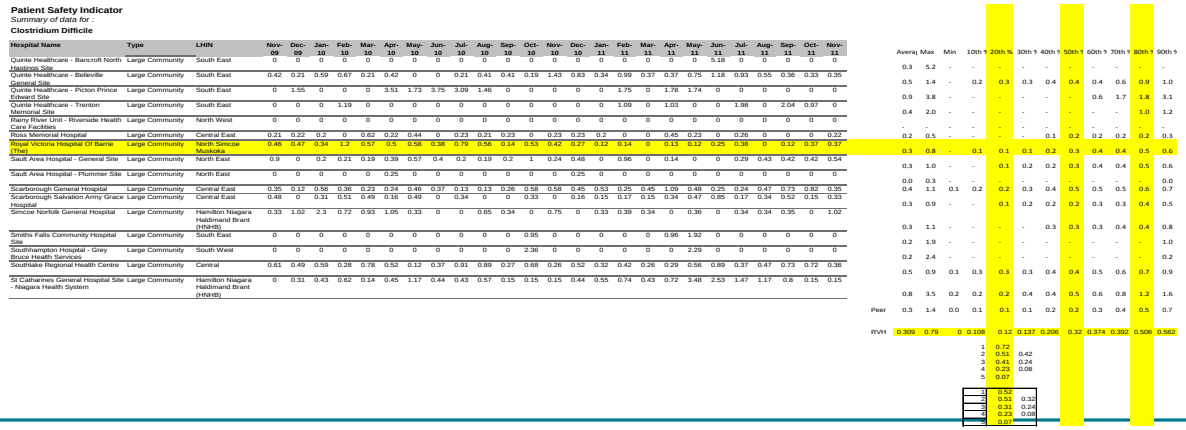
- **S**pecific – Thank you HQO, What can we do about it?
- **M**easurable – Big data!!! (HQO, MOHLTC, CIHI and RVH)
- **A**chievable – Target Setting process
- **R**elevant / Reasonable – LEM™, SLT, Org Goals
- **T**ime-bound – Quarterly Reporting

Know Thyself…"Big Data"









Patient Safety Indicator
Summary of data for :
Clostridium Difficile

Hospital Name	Type	LHIN	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11
Quinte Healthcare - Bancroft North Hastings Site	Large Community	South East	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.18	0	0	0	0	0
Quinte Healthcare - Belleville General Site	Large Community	South East	0.42	0.21	0.59	0.67	0.21	0.42	0	0	0.21	0.41	0.41	0.19	1.43	0.83	0.34	0.99	0.37	0.37	0.75	1.18	0.93	0.55	0.36	0.33	0.35
Quinte Healthcare - Picton Prince Edward Site	Large Community	South East	0	1.55	0	0	0	3.51	1.73	3.75	3.09	1.46	0	0	0	0	0	1.75	0	1.78	1.74	0	0	0	0	0	0
Quinte Healthcare - Trenton Memorial Site	Large Community	South East	0	0	0	1.19	0	0	0	0	0	0	0	0	0	0	0	1.09	0	1.03	0	0	1.98	0	2.04	0.97	0
Rainy River Unit - Riverside Health Care Facilities	Large Community	North West	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ross Memorial Hospital	Large Community	Central East	0.21	0.22	0.2	0	0.62	0.22	0.44	0	0.23	0.21	0.23	0	0.23	0.23	0.2	0	0	0.45	0.23	0	0.26	0	0	0	0.22
Royal Victoria Hospital Of Barrie (The)	Large Community	North Simcoe Muskoka	0.46	0.47	0.34	1.2	0.57	0.5	0.58	0.38	0.79	0.56	0.14	0.53	0.42	0.27	0.12	0.14	0	0.13	0.12	0.25	0.38	0	0.12	0.37	0.37
Sault Area Hospital - General Site	Large Community	North East	0.9	0	0.2	0.21	0.19	0.39	0.57	0.4	0.2	0.19	0.2	1	0.24	0.48	0	0.96	0	0.14	0	0	0.29	0.43	0.42	0.42	0.54
Sault Area Hospital - Plummer Site	Large Community	North East	0	0	0	0	0	0.25	0	0	0	0	0	0	0	0.25	0	0	0	0	0	0	0	0	0	0	0
Scarborough General Hospital	Large Community	Central East	0.35	0.12	0.56	0.36	0.23	0.24	0.46	0.37	0.13	0.13	0.26	0.58	0.58	0.45	0.53	0.25	0.45	1.09	0.48	0.25	0.24	0.47	0.73	0.82	0.35
Scarborough Salvation Army Grace Hospital	Large Community	Central East	0.48	0	0.31	0.51	0.49	0.16	0.49	0	0.34	0	0	0.33	0	0.16	0.15	0.17	0.15	0.34	0.47	0.85	0.17	0.34	0.52	0.15	0.33
Simcoe Norfolk General Hospital	Large Community	Hamilton Niagara Haldimand Brant (HNHB)	0.33	1.02	2.3	0.72	0.93	1.05	0.33	0	0	0.65	0.34	0	0.75	0	0.33	0.39	0.34	0	0.36	0	0.34	0.34	0.35	0	1.02
Smiths Falls Community Hospital	Large Community	South East	0	0	0	0	0	0	0	0	0	0	0	0.95	0	0	0	0	0	0.96	1.92	0	0	0	0	0	0
Southampton Hospital - Grey Bruce Health Services	Large Community	South West	0	0	0	0	0	0	0	0	0	0	0	2.36	0	0	0	0	0	0	2.29	0	0	0	0	0	0
Southlake Regional Health Centre	Large Community	Central	0.61	0.49	0.59	0.28	0.78	0.52	0.12	0.37	0.91	0.89	0.27	0.68	0.26	0.52	0.32	0.42	0.26	0.29	0.56	0.89	0.37	0.47	0.73	0.72	0.36
St Catharines General Hospital Site - Niagara Health System	Large Community	Hamilton Niagara Haldimand Brant (HNHB)	0	0.31	0.43	0.62	0.14	0.45	1.17	0.44	0.43	0.57	0.15	0.15	0.15	0.44	0.55	0.74	0.43	0.72	3.48	2.53	1.47	1.17	0.8	0.15	0.15

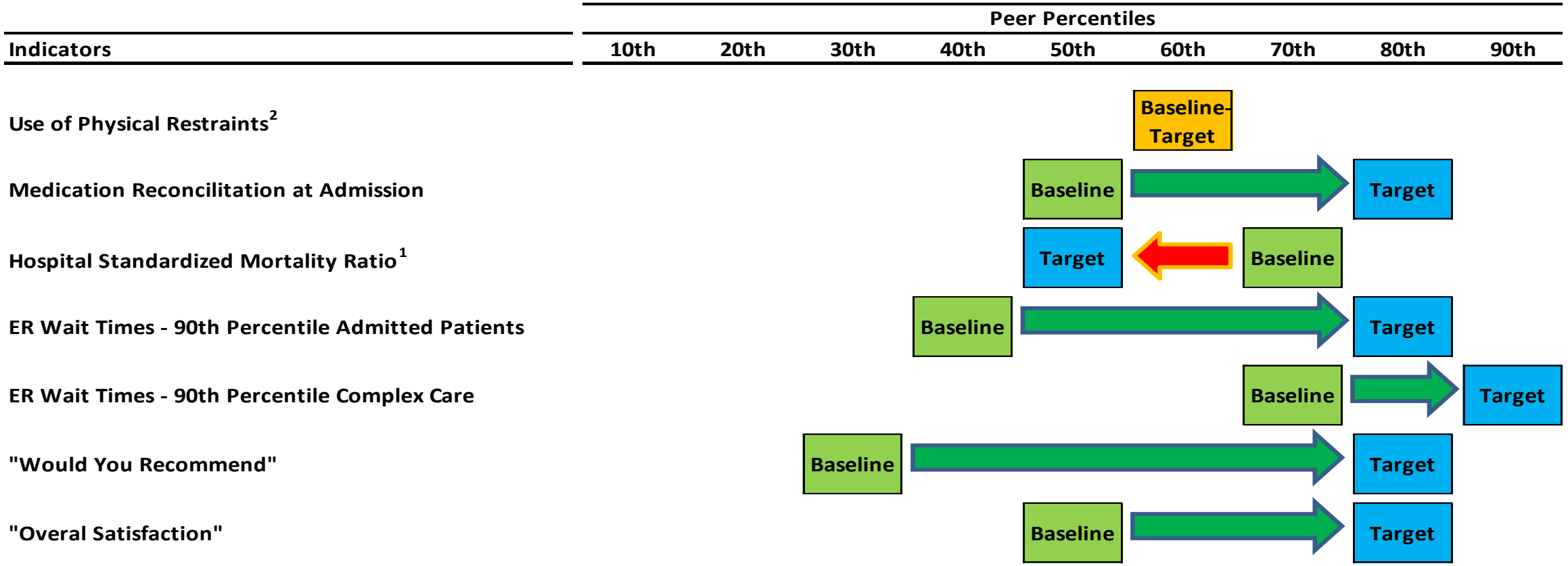
	Averaç	Max	Min	10th %	20th %	30th %	40th %	50th %	60th %	70th %	80th %	90th %
	0.3	5.2	-	-	-	-	-	-	-	-	-	-
	0.5	1.4	-	0.2	0.3	0.3	0.4	0.4	0.4	0.6	0.9	1.0
	0.9	3.8	-	-	-	-	-	0.6	1.7	1.8	3.1	
	0.4	2.0	-	-	-	-	-	-	-	1.0	1.2	
	-	-	-	-	-	-	-	-	-	-	-	-
	0.2	0.5	-	-	-	-	0.1	0.2	0.2	0.2	0.2	0.3
	0.3	0.8	-	0.1	0.1	0.1	0.2	0.3	0.4	0.4	0.5	0.6
	0.3	1.0	-	-	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.6
	0.0	0.3	-	-	-	-	-	-	-	-	-	0.0
	0.4	1.1	0.1	0.2	0.2	0.3	0.4	0.5	0.5	0.5	0.6	0.7
	0.3	0.9	-	-	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.5
	0.3	1.1	-	-	-	-	0.3	0.3	0.3	0.4	0.4	0.8
	0.2	1.9	-	-	-	-	-	-	-	-	-	1.0
	0.2	2.4	-	-	-	-	-	-	-	-	-	0.2
	0.5	0.9	0.1	0.3	0.3	0.3	0.4	0.4	0.5	0.6	0.7	0.9
	0.8	3.5	0.2	0.2	0.2	0.4	0.4	0.5	0.6	0.8	1.2	1.6
Peer	0.3	1.4	0.0	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.5	0.7
RVH	0.309	0.79	0	0.108	0.12	0.137	0.206	0.32	0.374	0.392	0.506	0.562

1	0.72		
2	0.51	0.42	
3	0.31	0.24	
4	0.23	0.08	
5	0.07		

1	0.52		
2	0.51	0.32	
3	0.31	0.24	
4	0.23	0.08	
5	0.07		

Where You Are and Where To Go?

Royal Victoria Regional Health Centre Targets Compared to Past Performance



1. Current baseline is below recognizable targets.
2. Baseline and Target are in the same percentile range due to the width of the range.

Keys to Success

- Diversity in Target Setting, not just the “Math Guys”
- Senior Leadership Team Buy In (~ 1 day)
- Make it relatable to everyone
- Keep it focused, allow for variation (ranges)
- Intertwine Quality with Performance Measurement
- Reporting (Quarterly Integrated: Front lines to Board)
- Don’t make in “another thing”
- Demonstrate Action – What we doing? What can we do
- Demonstrate Results: No complex tools (Excel, PowerPoint, Adobe)
- Celebrate Success

Health Quality Transformation 2013
Qualité de la santé

Windsor Regional Hospital

Corry O'Neil

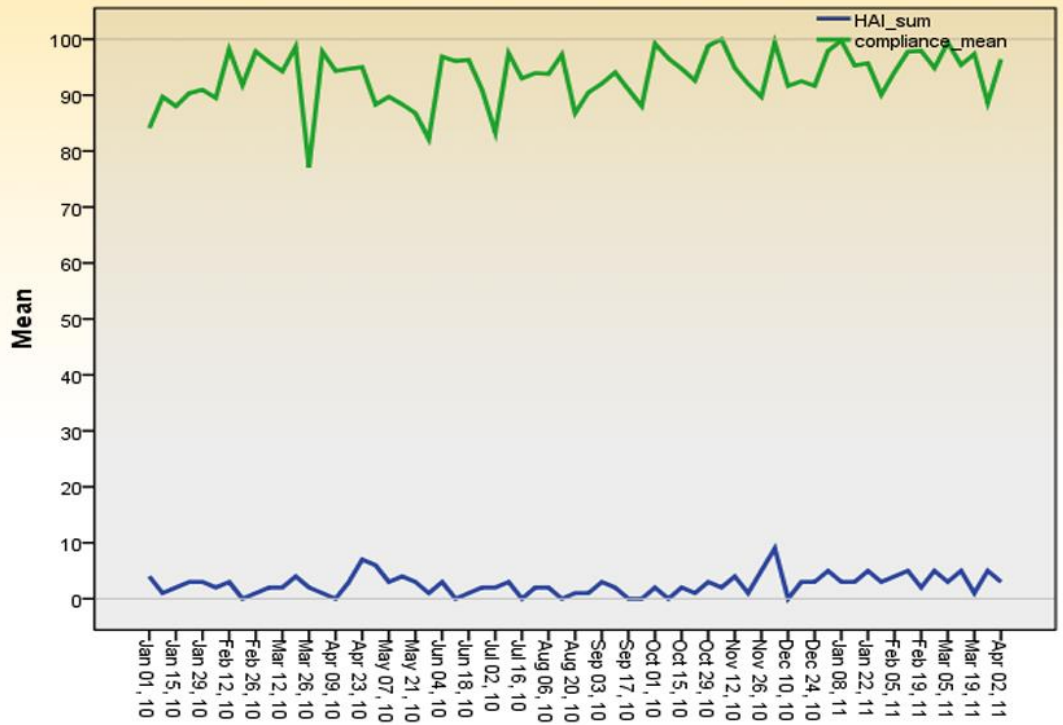
Director – Org. Effectiveness, Patient Safety and Quality
(Windsor Regional Hospital)

Windsor Regional Hospital is a large community hospital located in Windsor, Ontario, Canada directly across from Detroit, Michigan.

About Windsor Regional Hospital (WRG)

WINDSOR REGIONAL HOSPITAL
OUTSTANDING CARE – NO EXCEPTIONS!

Hospital Acquired Infections and Hand Washing Compliance



ACTION PLAN

April 18

3 HAI: RH1 – 2 MRSA, SU2 C-DIFF

Continue heightened awareness of burden, c diff and ongoing auditing of PPE practices must be carried out this week.

CPC/M - Need to monitor students and staff on units re practices and HH

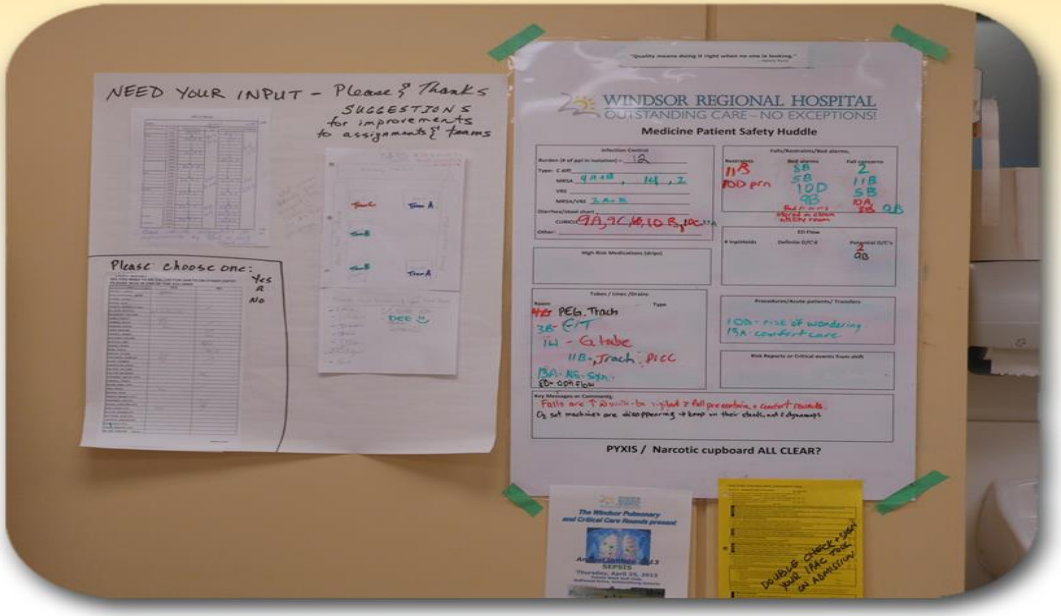
Peds -PPE sequencing guide will continue to be trialed

ME1- PPE sequencing guide will be taken to their staff this week. Will re-implement visitors stopping at desk and checking for precaution status and provide instruction

Monitoring Performance

WINDSOR REGIONAL HOSPITAL
OUTSTANDING CARE – NO EXCEPTIONS!

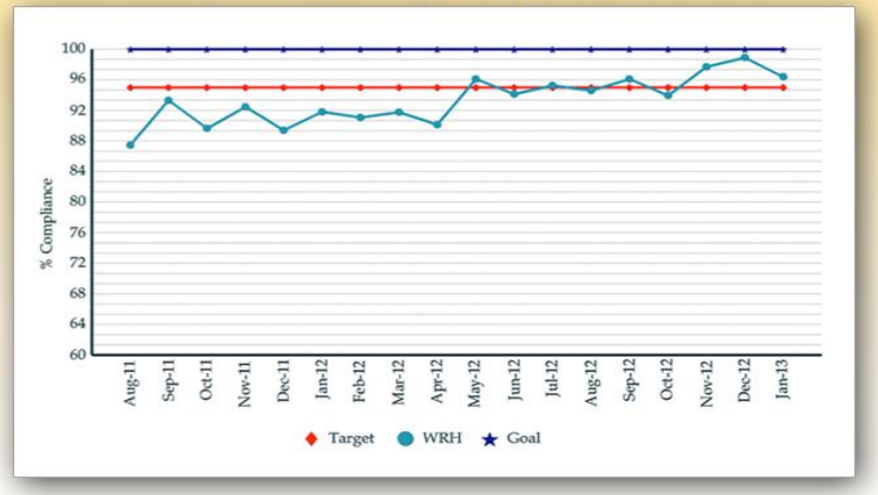
Safety Huddles



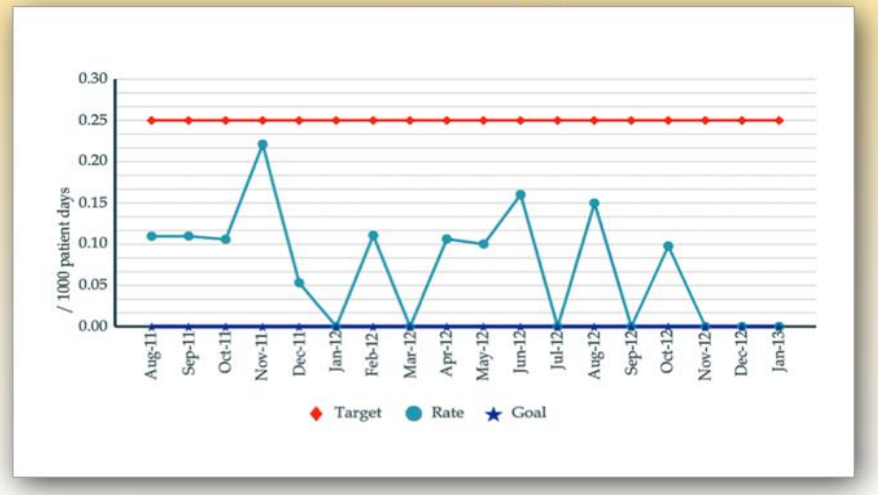
Monitoring Performance

WINDSOR REGIONAL HOSPITAL
OUTSTANDING CARE – NO EXCEPTIONS!

Hand Washing Compliance



Falls with Injury



Patient Specimen Incidents

Setting Goals

WINDSOR REGIONAL HOSPITAL

OUTSTANDING CARE – NO EXCEPTIONS!

Mon Sheong

Stella Leung

Senior Administrator
(Mon Sheong Scarborough Long Term Care Centre)

Mon Sheong Scarborough Long Term Care Centre

- **Operation Since:** 27 September, 2004
- **Capacity:** 160 beds
- **Home Layout:** 7 Units, Four Floor Levels
- **Special Programs and Services:** Secure Unit, Dementia Care, PD Services, G-tube Feeding, Oxygen Therapy, Palliative Care

Develop Benchmarks and Targets

References:

- Industrial reference
- Home historical performance

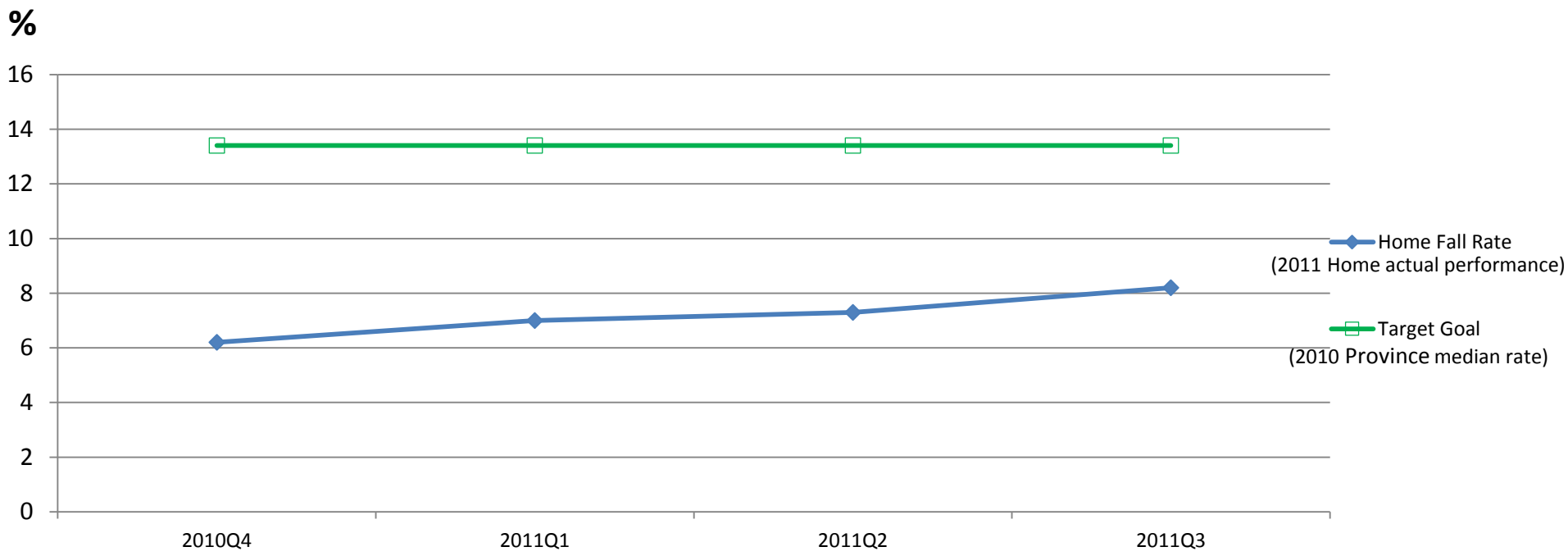
Industrial Reference

CIHI 2010 data on rate of fall

2010 Province median rate: 13.4 %

Set Your Benchmarks and Targets

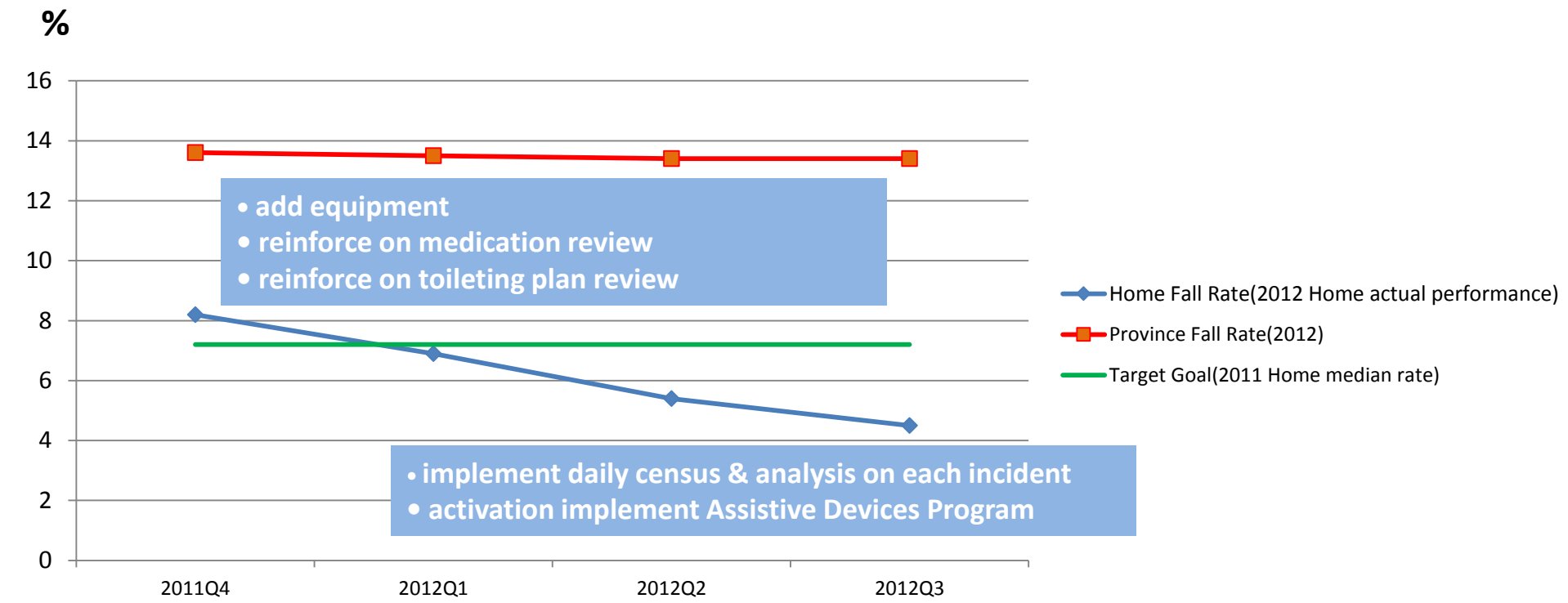
Use CIHI 2010 province median rate (13.4%) as home target goal for 2011



Outcome: 2011 home median rate: 7.2%

Target Goals VS Historical Data

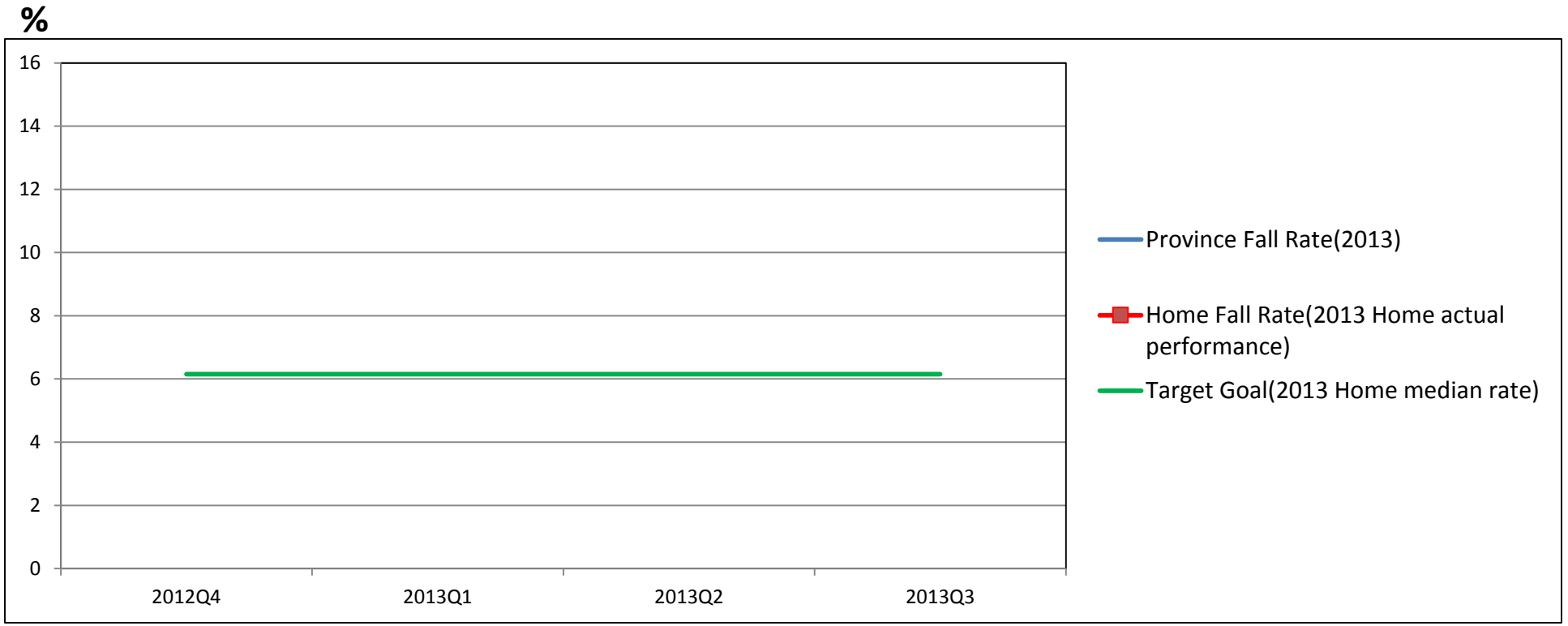
Based on 2011 home median rate (7.2%) to set 2012 target goal for home CQI



Outcome: 2012 home median rate: 6.15%

Continuous Quality Improvement on Benchmarking

Use 2012 home median rate (6.15%) as target goal for 2013



Health Quality Transformation 2013
Qualité de la santé

The O'Neill Centre

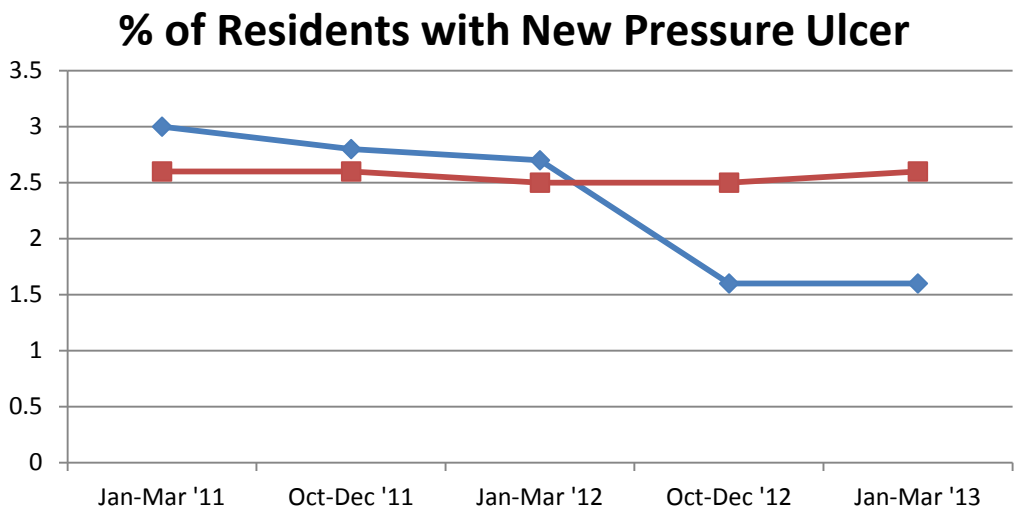
Cathy Fiore

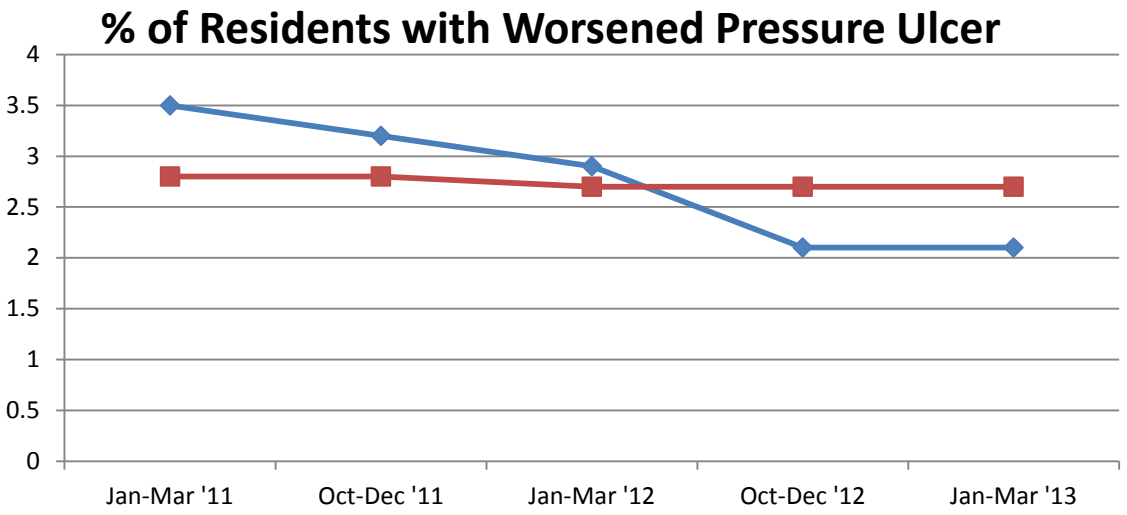
Administrator
(The O'Neill Centre Long Term Care and Retirement Home)

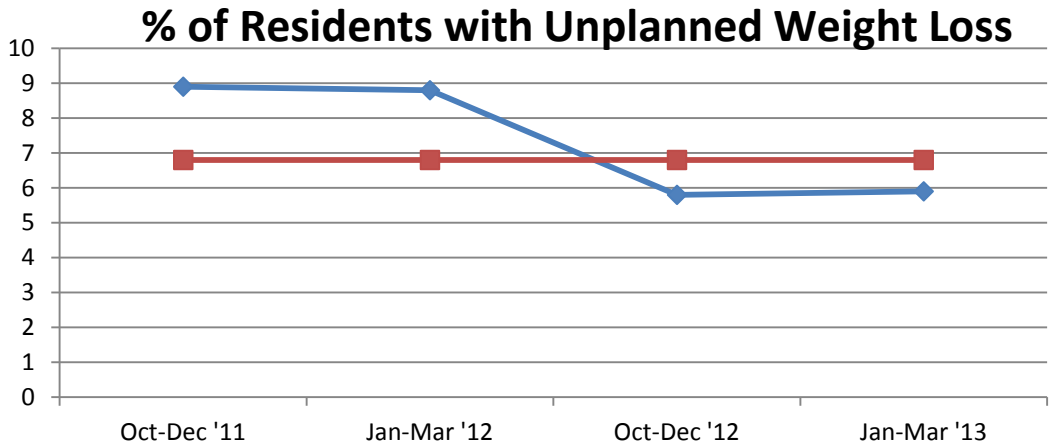
Indicator	The O'Neill Centre					Ontario			
	2011 Q4	2012 Q1	2012 Q2	2012 Q3		2011 Q4	2012 Q1	2012 Q2	2012 Q3
Worsened late-loss ADL	14.30%	13.60%	14.40%	13.00%		17.50%	17.60%	17.30%	17.20%
Improved mid-loss ADL	33.50%	32.70%	31.80%	32.50%		31.30%	31.20%	31.30%	31.30%
Improved early-loss ADL	21.60%	18.90%	17.50%	17.90%		21.40%	21.10%	21.20%	21.10%
Improved late-loss ADL	10.30%	11.00%	11.00%	10.20%		11.30%	11.10%	11.20%	11.20%
Worsened mid-loss ADL	31.60%	30.50%	31.00%	28.80%		35.30%	35.60%	35.50%	35.70%
Worsened early-loss ADL	30.80%	30.20%	31.00%	27.40%		34.40%	34.10%	33.40%	32.90%
Worsened ADL	27.80%	27.50%	27.50%	24.00%		32.90%	33.20%	32.90%	33.20%
Worsened locomotion	15.30%	13.90%	16.50%	14.60%		16.40%	16.60%	16.50%	16.70%
Improved locomotion	14.80%	11.80%	11.40%	12.70%		13.10%	13.10%	13.30%	13.40%
Worsened behavioural symptoms	7.50%	6.50%	6.90%	5.90%		13.40%	13.50%	13.50%	13.30%
Improved behavioural symptoms	11.40%	9.90%	9.00%	9.40%		12.20%	12.10%	12.30%	12.90%
Worsened cognitive ability	7.50%	6.80%	7.30%	6.20%		10.00%	9.90%	9.90%	9.80%
Improved cognitive ability	10.30%	9.40%	7.60%	8.60%		5.80%	5.70%	5.90%	6.20%
Worsened communication ability	7.20%	7.50%	7.90%	6.70%		8.80%	8.80%	8.80%	8.80%
Improved communication ability	21.30%	19.10%	16.60%	16.80%		7.60%	7.60%	7.70%	8.10%
Has delirium	8.80%	10.80%	11.70%	11.20%		19.20%	18.90%	18.70%	18.70%
Worsened mood - symptoms of depression	7.10%	8.30%	7.50%	7.20%		25.50%	25.50%	25.40%	25.10%
Taken antipsychotics w/o relevant diagnosis	32.50%	33.00%	34.30%	29.90%		33.00%	32.60%	32.30%	31.90%
Fallen	6.80%	8.10%	8.60%	8.50%		13.60%	13.50%	13.40%	13.40%
Has an infection	10.60%	8.40%	6.90%	6.90%		11.30%	11.20%	11.20%	11.30%
Has a pressure ulcer stage 2-4	9.40%	9.20%	9.30%	9.10%		6.70%	6.60%	6.50%	6.50%
Worsened pressure ulcer stage 2-4	2.90%	2.70%	2.50%	2.10%		2.70%	2.70%	2.70%	2.80%
Has a new pressure ulcer stage 2-4	2.70%	2.00%	1.90%	1.60%		2.50%	2.50%	2.50%	2.50%
Daily physical restraints	1.50%	2.40%	2.40%	2.70%		13.70%	12.90%	12.30%	11.60%
Worsened/unchanged respiratory infection	4.50%	4.80%	4.00%	3.80%		13.30%	13.20%	13.10%	13.00%
Has an indwelling catheter	2.60%	3.50%	3.60%	3.70%		3.70%	3.70%	3.70%	3.80%
Worsened bowel continence	9.80%	8.50%	8.70%	9.40%		16.40%	16.60%	17.00%	17.70%
Worsened urinary continence	11.80%	11.70%	12.00%	12.80%		19.30%	19.10%	18.90%	18.90%
Has urinary Tract Infection	3.40%	2.70%	2.50%	2.60%		5.90%	5.90%	5.90%	5.90%
Improved bowel continence	9.80%	6.20%	6.20%	5.30%		14.30%	14.30%	14.50%	14.90%
Improved bladder continence	8.30%	6.40%	4.40%	4.00%		9.70%	9.80%	10.00%	10.20%
Has a feeding tube	6.90%	7.30%	6.20%	6.60%		4.80%	4.70%	4.80%	4.80%
Has pain	5.20%	3.90%	4.80%	4.50%		10.40%	10.10%	9.70%	9.40%
Worsened pain	7.90%	8.00%	8.40%	8.70%		11.10%	11.00%	11.00%	11.10%
Has had weight loss	8.80%	8.60%	7.40%	5.70%		6.80%	6.70%	6.70%	6.70%

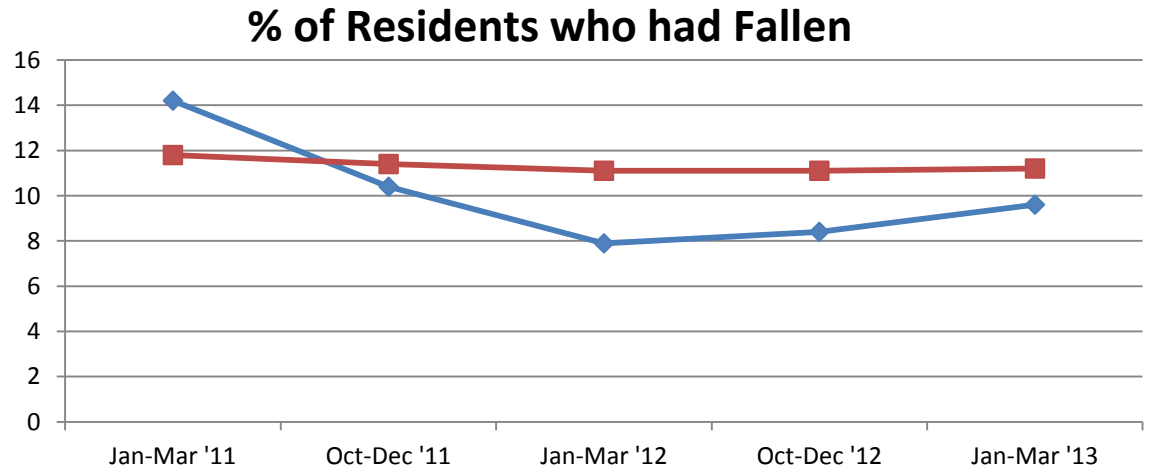
Run Charts

O'Neill Centre
Provincial Avg.










Rolling q2hr

Health Quality Transformation 2013
Qualité de la santé

Closing Remarks

Dr. Michael Schull

Health Quality Transformation 2013
Qualité de la santé

Questions & Answers

HQO and Links to Provincial, Federal and International Tools & Resources

- Quality Compass
- QI Reporting Platforms
- EDS/OHTAC Recommendations & Supporting Resources
- Quality Improvement Tools & Resources
- Print and Web-Based Public Reporting Resources

www.hqontario.ca