



HOBIIC

Health Outcomes for Better Information and Care

Standardized Clinical Outcomes: Information to Support Accountability and Inform Quality Care

*Enhancing the effectiveness of health care
for Ontarians through research*

ICES Institute for Clinical
Evaluative Sciences

Twenty Years • 1992-2012

Overview

- **The Vision**
- **What is HOBIC and how is this program is being implemented in Ontario**
- **Working with sites around use of HOBIC data**
- **Hamilton Health Sciences Centre approach to using HOBIC data**
- **Benefits and opportunities**

The Vision for Use of HOBIC Data

Patients

- Facilitate communication
- Identify safety risks
- Inform proactive care
- Determine discharge readiness

Clinicians

- Improve communication within the team
- Enhance satisfaction by demonstrating measureable results
- Identify how clinical practice leads to improved outcomes
- Shift clinicians from task focused care to 'outcomes focused care'
- Clinical Accountability

Healthcare Executives

- Standardized information for comparative analysis within organizations and industry benchmarking
- Information to evaluate operational decisions and resource allocation
- Information to identify areas for quality improvement
- Information to support accreditation surveys
- Information to support continuity of care across the continuum

Health Care System

- Information to support results driven patient focused care
- Public reporting – measurable results
- Standardized information for electronic health records

Health System Use

- More timely information and better data to address research questions to inform clinical program management, health system management

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Standardized Clinical Outcomes

Acute Care & Home Care Measures

- **Functional Status***: ADL (IADL for home care) & Bladder Continence
- **Symptom management**: Pain*, Fatigue, Dyspnea*, Nausea
- **Safety Outcomes**: Falls*, Pressure Ulcers*
- **Therapeutic Self-care**
- Collected on admission & discharge

*interRAI measures

Long-term Care & Complex Continuing Care Measures

- **Functional Status***: ADL & Bladder Continence
- **Symptom management**: Pain*, Fatigue*, Dyspnea*, Nausea
- **Safety Outcomes**: Falls*, Pressure Ulcers*
- Collected on admission, quarterly, & client condition changes

*interRAI measures

- **A suite of clinical concepts that can be collected systematically and standardized across the health care system**
- **Valid and reliable measures – evidence that they are sensitive to change (Doran 2006)**
- **HOBIC dataset approved by OHISC April 2012**

Implementation in Ontario

	AC / CCC	LTC	Home care providers/ LHINs
As of March 31, 2012	62	123	16
Assessments in database	630,530	258,573	30,930

Implementation - Guiding Principles

- **Integrate outcomes capture with existing nursing assessments - avoid duplication**
- **Maximize electronic capture through existing systems**
- **Provide access to information for nurses, healthcare managers, researchers and ministry planners**
- **Provide scalability for future parameters such as nursing interventions and additional measurable outcomes**
- **Strategy to support sustainability – working with colleges and universities to incorporate education about HOBIC in nursing programs**

Working with sites around use of HOBIC data

- **Site Engagement - Created groups of HOBIC users with regular calls to discuss HOBIC and learn from each other**
 - Discussed completion rates and strategies to improve these
 - Reinforced the value and importance of the discharge assessment – this is new for acute care sites
 - Identified the need for inclusion of HOBIC information sessions within hospital orientation

- **HOBIC reports**
 - Initially the sites had to go in and ‘pull’ reports from the HOBIC database – now we are able to “push” reports out to sites on a monthly basis so that the information is available to nurse managers, nursing advisory, quality, others

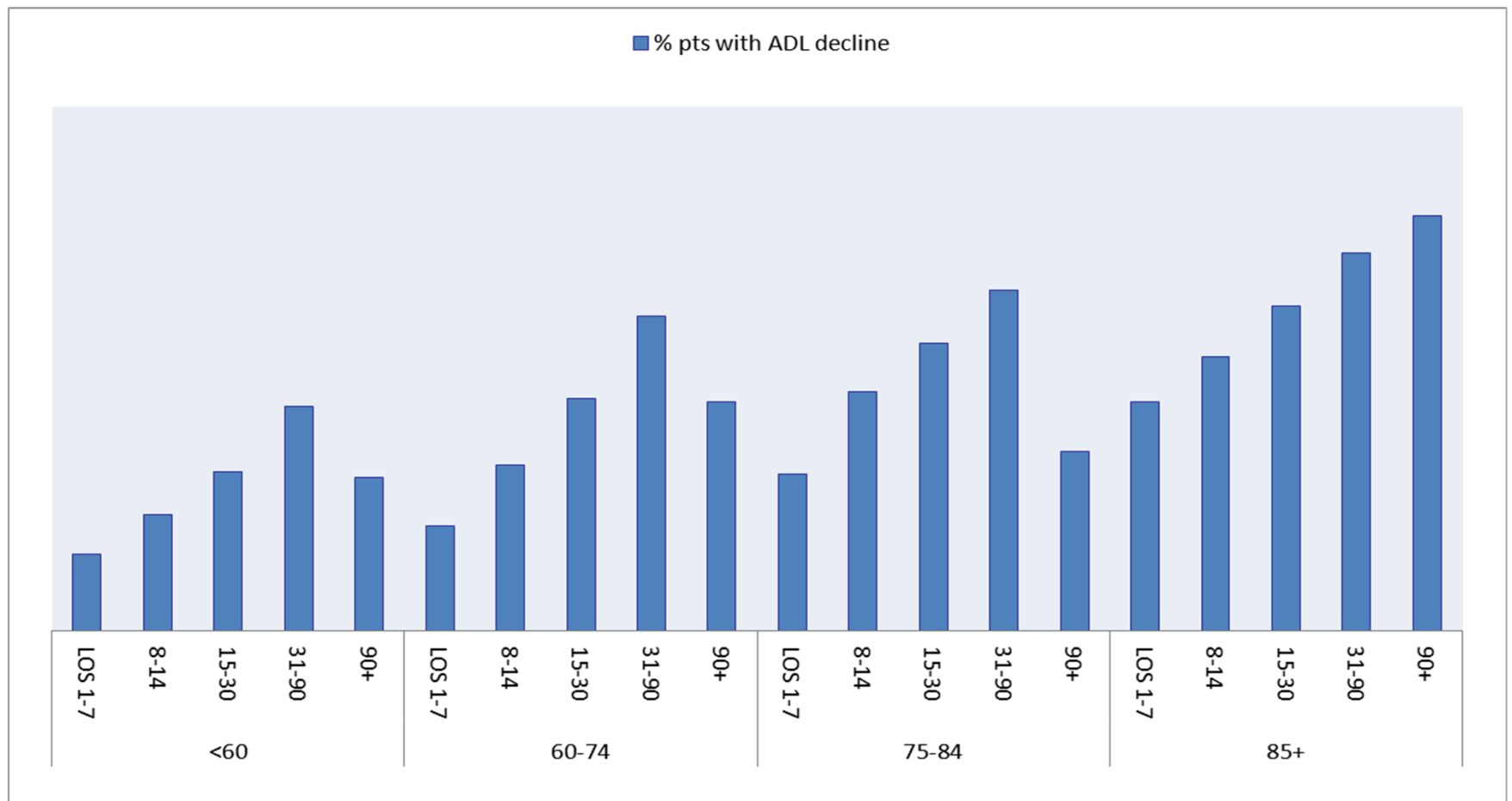
Working with sites around use of HOBIC data...

continued

- **Annual Acute Care Site Reports** - linking HOBIC data to Ontario health data - 52 customized site-specific reports

- Four sections of Report:
 1. Hospital coverage – shows uptake/representativeness of site specific data since the start of HOBIC data collection
 2. Assessment completeness – proportion of patients with complete and incomplete assessments at admission and/or discharge for each measure.
 3. Score changes – admission and discharge assessment scores using data from Jan-Mar 2011
 4. ADL Decline – shows the % of patients who experience a decline in ADLs during the course of their hospital stay, by age and length of stay

Figure 3: Percent of Patients with a Decline in ADL Across All Participating Sites by Age and Length of Stay, from December 1, 2006 to March 31, 2011



Note: pts stands for patients; ADL stands for activities of daily living; LOS stands for length of stay.

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Kirsten Krull, VP Inter-Professional Practice and CNE



How Are We Performing Today?



DAILY CARE REPORT

7 West HOBIC Daily Manager Report --MAR 3, 2013

SAMPLE REPORT

Name	Room	Adm. Date	LOS	Adm. Complete?	ADL	Bladder Continenence	Pain 0-10	Fatigue	Dyspnea	Nausea	Falls	Pressure Ulcers	Discharge Prep. Complete?	Total TODAY	Total 7 days ago	Total ADMISSION	Change Since Admission	Change Past 7 Days	Fall in Hospital Since Admission
Mr. A. Jones	734-1	Jan 8 2013	21	Y	23	2	0	4	0	0	1	0	Y	30	33	20	10	0	
Mr. B. Busy	734-2	Jan 20 2013	9	Y	8	1	0	3	4	0	2	0	Y	18		15	3		1
Mrs. C. Castillo	735-1	Dec. 29 2012	31	Y	40	4	4	0	2	0	3	0	N	53	55	60	-7	-2	1
Mrs. K. Flowing	735-2	Jan 16 2013	13	N	48	4	9	2	1	4	3	0	N	71	81	90	-19	-10	1
Ms. J. Stryker	735-3	Nov 30 2012	60	N	24	2	3	3	1	3	3	0	N	39	39	50	-11	0	
Mrs. T. Hillrom	735-4	Jan 25 2013	4	Y	NV	NV	NV	NV	NV	NV	NV	0	N	0		40	NV		
Ms. Z. Drager	736-1	Jan 23 2013	6	N	24	2	2	1	2	3	3	3	Y	40		29	11		2
Mr. E. Bear	737-1	Jan 28 2013	1	Y	40	3	3	0	3	4	3	2	N	58		55	3		
Mr. T. McKesson	738-1	Jan 17 2013	12	Y	26	2	8	0	4	1	2	2	N	45	52	60	-15	-7	
Mr. S. Meditech	738-2	Jan 22 2013	7	Y	30	4	0	0	2	2	1	2	N	41	41	45	-4	0	
Mrs. V. Valley	739-1	Jan 2 2013	27	N	10	4	3	3	0	1	4	2	Y	27	27	36	-9	0	1
Ms. A. Gee	740-1	Jan 19 2013	10	N	28	3	0	2	0	2	4	3	N	42	42	50	-8	0	4
Ms. F. Friendly	741-1	Dec 22 2012	37	N	14	2	2	2	3	1	3	1	Y	28	28	34	-6	0	3
Ms. G. Grieg	741-2	Jan 20 2013	9	Y	48	4	8	4	4	2	2	1	N	73	76	80	-7	-3	
Mr. S. Smurff	742-1	Jan 25 2013	4	Y	8	0	1	4	2	3	4	1	Y	23		30	-7		1
Mr. L. Lilo	742-2	Jan 20 2013	9	N	36	1	0	4	4	4	3	1	N	53	53	50	3	0	2
Ms. M. Manners	743-1	Jan 23 2013	6	Y	24	1	2	4	1	2	0	0	N	34		33	1		
Mrs. W. Lee	743-2	Jan 6 2013	23	N	10	2	NV	NV	NV	3	0	NV	Y	NV	21	40	NV	NV	
Ms. U. Antonio	744-1	Jan 27 2013	2	Y	18	1	1	2	2	0	3	0	N	27		60	-33		
Ms. J. Jamieson	744-2	Dec 5 2012	53	N	28	1	0	1	4	0	4	0	Y	38	48	55	-17	-10	1
Mr. C. Cato	745-1	Dec 30 2012	29	Y	38	2	5	3	0	3	2	2	N	55	55	62	-7	0	
Mr. M. Shortt	745-2	Jan 14 2013	15	N	28	1	2	2	0	2	1	0	Y	36	34	28	8	2	
Mr. D. Dennis	745-3	Jan 28 2013	28	Y	16	2	2	4	2	4	1	1	Y	32	32	34	-2	0	1
Mr. F. Fizz	745-4	Jan 27 2013	2	Y	40	4	4	0	1	1	1	1	N	52		50	2		1



HOBIC's Appeal

- Standardized taxonomy
- Holistic, integrated and important to the patient
- Quality of life
- SEE the system; visual triggers; WHY
- Influences care; not a debate about the validity of the score
- Reflective of several processes of care
- Changes how we think and communicate about the patient
- Engages team members
- Drives accountability of the team and the care providers



Production System

Practice Councils

Program Quality Councils

Models of Care

Interprofessional Team Productivity

Patient Activation

Electronic Systems Working

Safety Crosses

Safety Huddles

Hourly Rounding

Transfer of Accountability

Team Bullet Rounds

Transitional Care Bundle

for Us

v

Patient Goals & Experience —Creating a Value Stream Across the Continuum



How We'll Use It—Phase I

- Data harvested within the EMR
 - Documentation completeness
- Daily team bullet rounds
- Visuals trigger discussion
- Manager or Team Leader facilitates
- Look alongside workload measurement data, adverse events, key process indicators



How We'll Use It—Phase II

- Clinical Connect™—the bigger patient picture
- Staff use during transfer of accountability
- Patient and family use (like ESAS for cancer patients)
- Population needs and priorities
 - Recurring trends
 - Predicting care needs and outcomes
- Process improvements--opportunities for improvement
- Add costs to the quality debate –cost-benefit curve



Evaluation

- Patient picture
- Engagement of staff
- Value and meaning to the provider
- Team conversation and relationships
- Ease of use
- Decision making by the team
- Documentation completion
- Process improvements



**Did we really add value to
patients' care & experience?**



Better has no limit

Brent James, Intermountain Medical Centre & and an old Yiddish proverb



HOBIC data and Health System Use

- **Dr. Walter Wodchis and Dr. Linda McGillis Hall**
 - Examining changes in admission and discharge scores for acute care
 - HOBIC measures on discharge related to readmission rates

- **Dr. Lianne Jeffs – St. Michael's data**
 - Predictive ability of HOBIC re: ALC status and LOS

- **Team of scientists from Queen's University:**
 - Dr Kevin Woo – Pressure ulcers
 - Dr. Joan Almost – Staffing and patient outcomes in long-term care
 - Dr. Kim Sears – Medication errors
 - Dr. Rosemary Wilson – Pain and nausea

Benefits & Opportunities

➤ **Nurses & other clinicians**

- **Identify how nursing practice/interprofessional practice impacts patient health outcomes - quality indicators**
- **Identify trends/changes in patient outcomes over time**
- **Promote reflective practice and evaluate different approaches to care – clinical accountability**

➤ **Nurse Executives**

- **Reports available in real-time at the unit level – able to link HOBIC information to other information – staffing, financial, to inform decisions regarding staffing and resource allocation**
- **Inform clinical practice and facilitate benchmarking and sharing of best practices**

Benefits & Opportunities...*continued*

➤ Health system

- Data stored in single repository, can be de-identified and linked to other data
- Evidence for health system outcomes and effectiveness of care; policy, planning and decision-making

➤ Patients

- Standardized information that is patient-centred and can follow the patient across sectors and be available over time – improved patient care