

IMPLEMENTING EVIDENCE BASED OUTCOMES

The Opportunities and Challenges

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Objectives

- Background
- Achievements
- Where we are now
- Challenges
- Opportunities
- Future Directions
- Reports
- What's Next

Background

- Nursing Task Force established to recommend actions needed to improve nurses' work life & retention of staff, & to increase recruitment of students into nursing careers

Recommended:

- Development of an information system that reflects nurses' contribution to patient care and an improved method for funding nursing services that is:
 - responsive to the needs of the healthcare consumer
 - based on performance standards that provide high quality outcomes
 - based on health information systems that include data on nursing workload and productivity
- NHOP established in September 1999 in response to these recommendations

Achievements

- Set of evidenced-based health outcomes reflective of nursing care and can be collected across the acute care, complex continuing care, long-term care and home care sectors: *Functional Status, Bladder Continence, Pain, Nausea, Fatigue, Dyspnea, Falls, Pressure Ulcers and Therapeutic Self-Care*
- Set of evidenced-based nursing indicators (Staffing and Quality of Work Life)

Two published books:

- *Nursing Sensitive Outcomes- State of the Science*
- *Quality Work Environments for Nurse and Patient Safety*

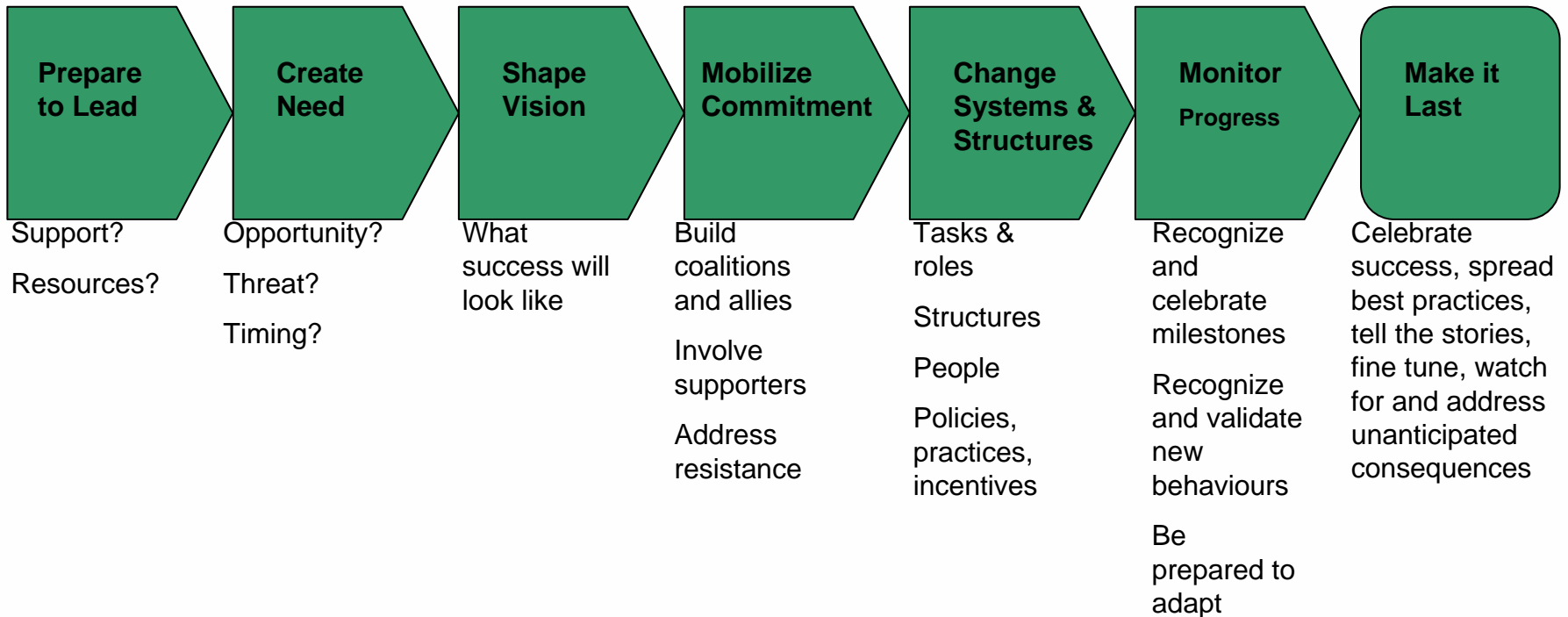
Implementation in early adopter sites

Acute Care	Complex Continuing Care	Long Term Care	Home Care Sector
Collingwood General & Marine	North Simcoe Health Alliance	John Noble Home	St. Elizabeth Home Care, Barrie
North Simcoe Health Alliance	Royal Victoria Hospital, Barrie	Bradford Valley	St. Elizabeth Home Care, Hamilton
Headwaters-Orangeville	Headwaters-Shelbourne	Woods Park	Bayshore, Barrie
Norfolk General	Orillia Soldier's Memorial	Victoria Village	Bayshore, Hamilton
Niagara Health Systems	Niagara Health Systems	St. Joseph's Villa	V.O.N., Hamilton
Joseph Brant Memorial	Southlake Regional Healthcare	Fairvern Nursing Home, Huntsville	
Orillia Soldier's Memorial		Leacock Care Center, Orillia	
Southlake Regional Healthcare			
Hamilton Health Science Centre			

ASSESS

INVOLVE

DO



Obtained from: Dorothy M. Wylie Nursing Leadership Institute
(Adapted from Richard Ivey School of Business, UWO)

Prepare to Lead

- Develop plans to enhance nurses' understanding of outcomes and outcomes evidence
- Information technology supports
- Clinical Informatics support
- Nursing Leaders support and commitment
- Professional Practice collaboration
- Allocated funding
- Organizational Readiness

Where We Are Now

- Conducting critical appraisals for additional disciplines (initially pharmacy, occupational therapy, physiotherapy) and other sectors (mental health, rehabilitation, primary health care and public health)
- Working with Early Adopter organizations and vendors to develop solutions for the electronic collection of outcome measures
- Technical specifications to support linking HOBIC database to other databases – financial, staffing

Where We Are Now (cont'd)

- Developing a *HOBIC eLearning Module* to teach about why we need to do standardized assessments, how to complete HOBIC standardized assessments and reorienting nurses to ‘outcomes focused care’
- Working with colleges and universities across Ontario to incorporate the *HOBIC eLearning Module* into nursing programs to support sustainability
- Linking with cross sector members to assess integration of measures across sectors
- Technical specifications to support linking HOBIC database to other databases i.e. financial and staffing

Challenges

- Information technology resources.
 - Overall, 38% of early adopter sites are using a clinical information system for nursing documentation.
 - Working with different systems: Meditech, PCC, Procura, Clinical Webware McKesson, Gold Care.
 - Develop an electronic process that meets the needs of the organization.
 - Meeting with vendors to develop solutions for ADT's and NPR report writers

Challenges – Information Technology

- Work with current tools to autopopulate HOBIC-limit duplication
- Limited Wireless capability
- Provision of devices for community sector
- Limited Resources in I.T.
- Build work to ensure foci and interventions are appropriate

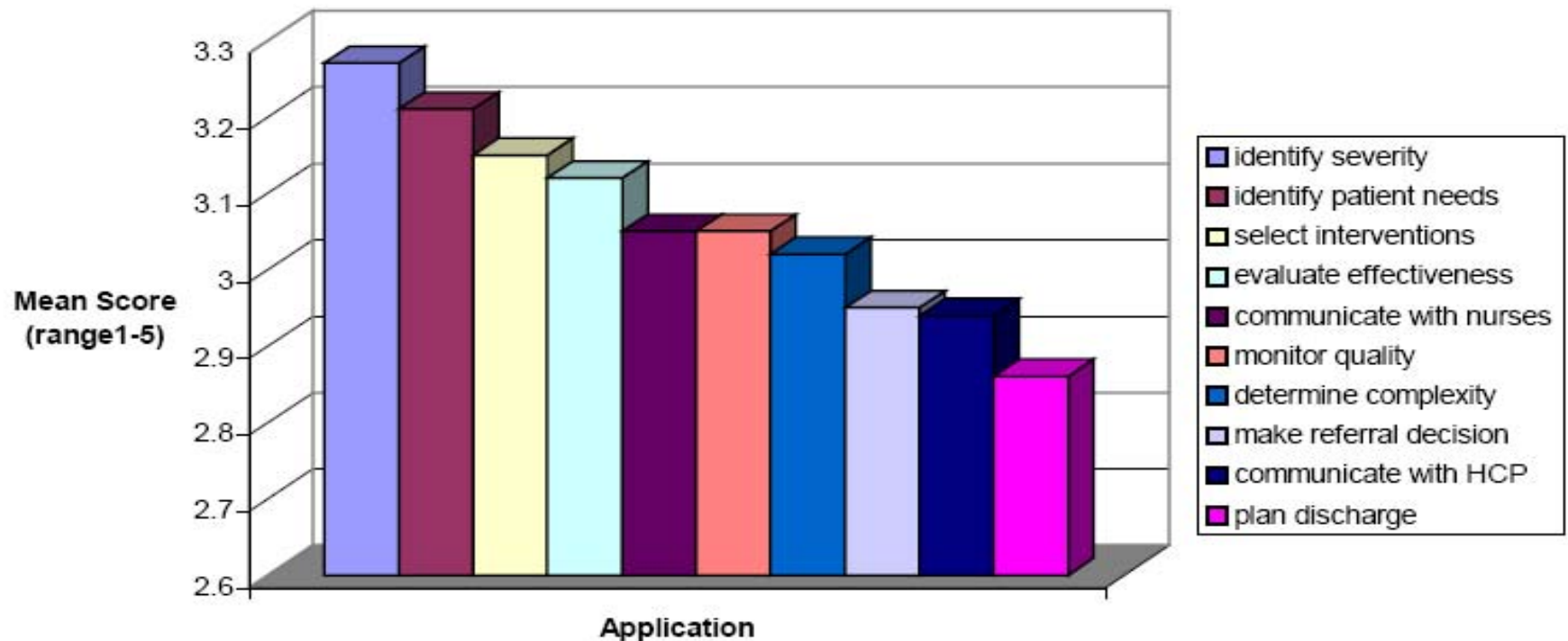
Challenges – Nurses/Nurse Executives

- Impact to nursing
- Compliance-sustainability
- Change process
- Scheduling education
- Supporting nurses in using outcome information to examine practice

Opportunities - Nurses

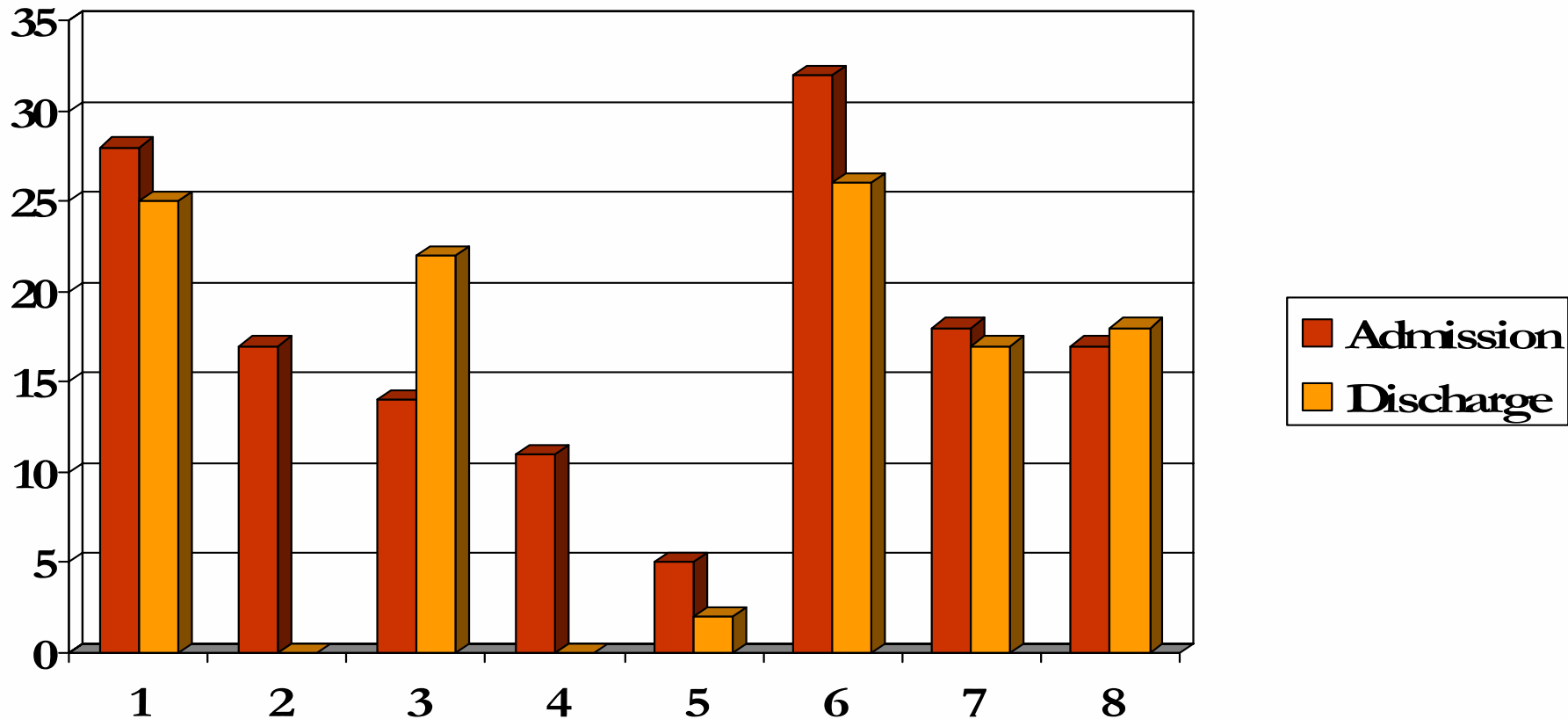
- Identify how nursing practice impacts patient health outcomes - quality indicators
- Identify trends/changes in patient outcomes over time
- Increase awareness of patients' symptoms and needs - Link HOBIC measures with nursing interventions
- Promote reflective practice and evaluate different approaches to care
- Improve patient teaching – related to 'readiness for discharge'
- Move the profession to 'outcomes focused care'

Utility of Data for Nurses



Obtained from: Doran, D. et. al., 2004

Changes in ADL from Admission to Discharge

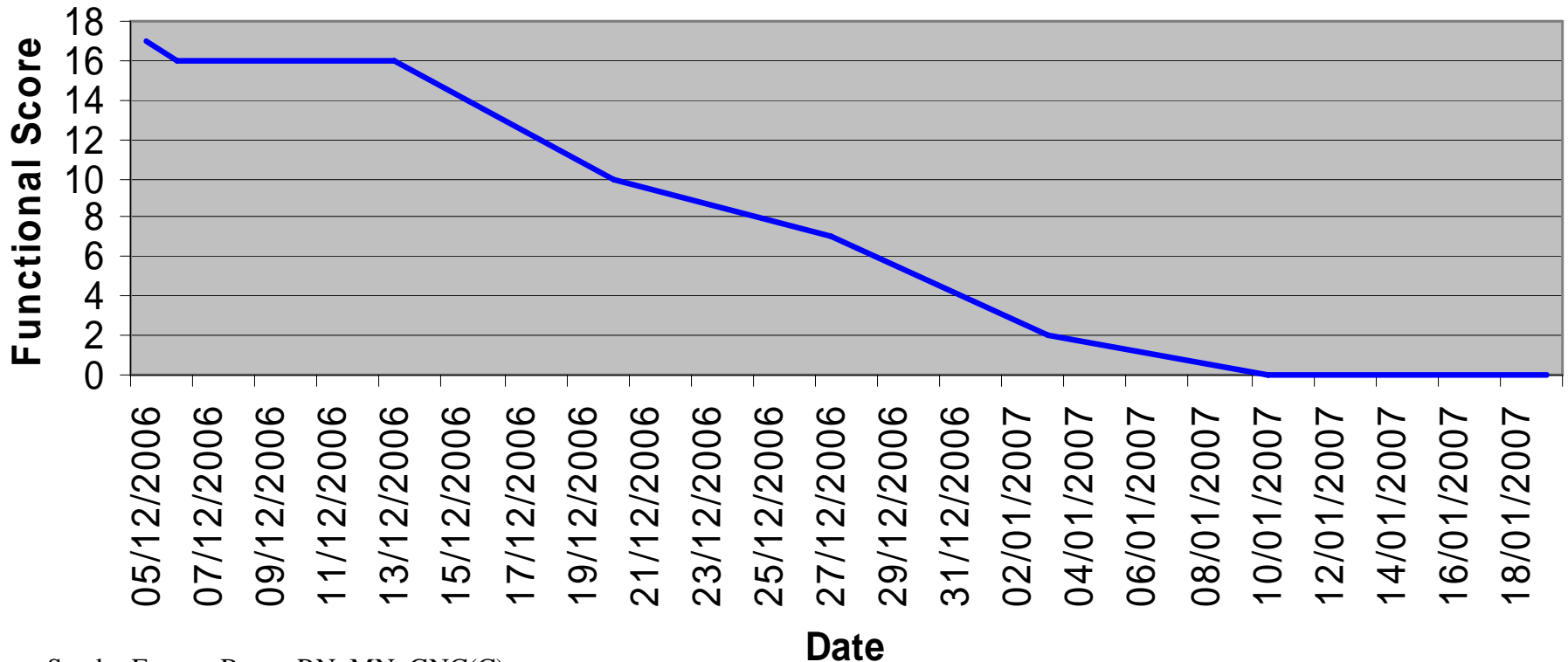


Opportunities – Health Care Teams

- Inform and support care planning and decision-making by incorporating outcomes information into team meetings and patient rounds-identify trends
- Common language among health care members – standardized language across disciplines and sectors

Patient Trend

**Functional Scores from Admission to Discharge
(Patient V000064685)**



Opportunities - Nurse Executives

- Developing “nursing” quality indicators
- Linking HOBIC information to other information – staffing, financial to inform decisions regarding staffing and resource allocation
- Utilization and analysis of HOBIC measures from “bedside to Boardroom”
- Inform clinical practice and facilitate benchmarking and sharing of best practices with other health settings
- Making nursing visible – ensuring accountability

Opportunities – academic curriculum

- Introduced into the nursing curriculum at Universities and Colleges
- eLearning Module
 - Self Directed learning module involving patient/resident/client case study within each sector (can be downloaded to the organizations to their intranet for educational opportunities)
 - Interactive learning with an extensive case study in progress

Opportunities - LHINs

- Integration and tracking of health information across sectors - Utilization of measures for integrated health care across sectors.
- Improved information flow and continuum of care
- Integrate HOBIC with eHealth planning initiatives
- Support planning and decision-making for integrated service delivery
- Inform health human resources deployment – right staff mix for right patient population

Opportunities - Health Care System

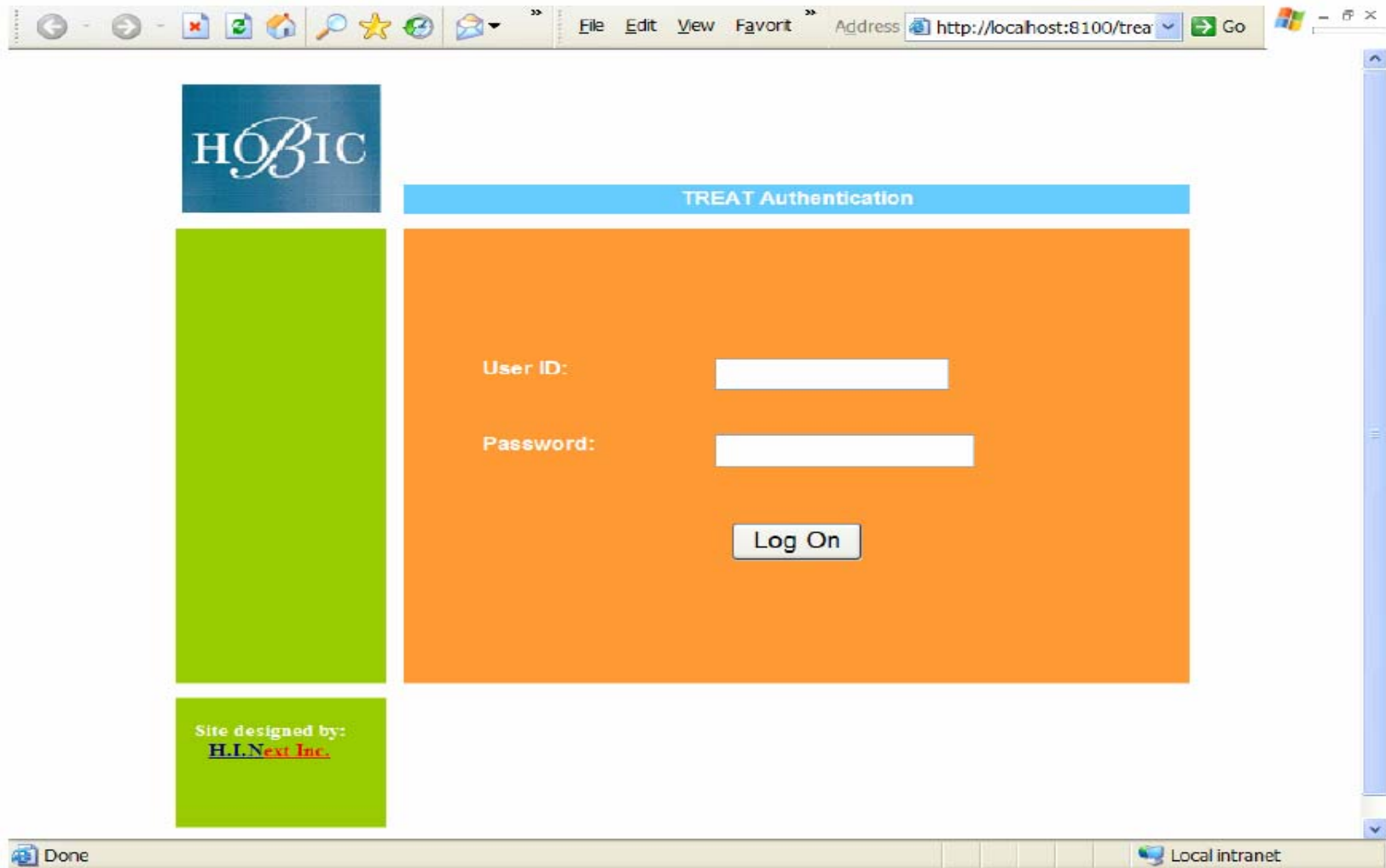
- Provide a foundation piece (common data elements across health settings) to inform the electronic patient record
- Inform public reporting on health system performance
- Accountability agenda
- Making nursing visible on administrative databases

Future Directions

- Tier 1 approval for ICNP and Tier 2 approval for HOBIC terminology from Ontario Health Informatics Standards Council (OHISC)
- Canadian Nurses Association working to implement HOBIC in other provinces

What's Next

- Expand to other LHINs beginning in April 2007
- Provincial roll-out across all four sectors for nursing component by 2009
- Data repository for health outcomes that can be linked to other information/other databases



Explanation: User is presented with authentication screen and must provide user ID, password and organization ID before entering HOBIC application. Application client (browser) transmissions are secured by SSL-128 bit encryption.

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HOBIC Indicator Reports
Report 2 - YTD Facility Mean Indicators By Discharge Diagnosis, Age

Facility Name: RVH Period: JULY 2006

CHF	18 - 25			26-40			41-55			56-65			>65			Total		
	Admit	DC		Admit	DC		Admit	DC		Admit	DC		Admit	DC		Admit	DC	
ADL	6.8	5.7	(1.1)	7.2	6	(1.2)	6.9	4.7	(2.2)	6.8	5	(1.8)	6.8	5	(1.8)	6.8	5	(1.8)
Bladder Continence																		
Therapeutic self care																		
Pain Frequency																		
Pain Intensity																		
Fatigue																		
Dyspnea																		
Nausea																		
Falls																		
Pressure Ulcers																		
Total Discharges	2			6			12			20			43			83		
ALOS	7			5			7			9			21			0.2		

MI	18 - 25			26-40			41-55			56-65			>65			Total		
	Admit	DC		Admit	DC		Admit	DC		Admit	DC		Admit	DC		Admit	DC	
ADL	6.8	5.7	(1.1)	7.2	6	(1.2)	6.9	4.7	(2.2)	6.8	5	(1.8)	6.8	5	(1.8)	6.8	5	(1.8)
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Explanation: Clinical managers and privileged users may generate summary and patient-specific reports to understand outcomes, compliance and statistics for their practice and staff.

Adobe Reader - [Draft Report 1 MTD by Unit Ver 1.2.pdf]

File Edit View Document Tools Window Help

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HOBIC Indicator Reports
Report 1 - YTD Mean Indicators By Unit

Facility Name RVH Period JULY 2006

	3 North		Facility	
	MTD	YTD	MTD	YTD
Total New Records	30	245	200	900
Admission Assessments				
Quarterly Assessments				
Discharge Assessments				

	3 North						Facility					
	MTD			YTD			MTD			YTD		
	Admit	D/C		Admit	D/C		Admit	D/C		Admit	D/C	
ADL Composite	6.8	5.7	(1.1)	7.2	6.0	(1.2)	6.9	4.7	(2.2)	6.8	5.0	(1.8)
ADL - 1												
ADL - 2												
ADL - 3												
ADL - 4												
ADL - 5												
ADL - 6												
ADL - 7												
Bladder Continence												
Ther. Self-Care Composite												
TSC - 1												
TSC - 2												
TSC - 3												
TSC - 4												
TSC - 5												
TSC - 6												
TSC - 7												
TSC - 8												
TSC - 9												
TSC - 10												

1 of 2

Explanation: Clinical managers and privileged users may generate summary and patient-specific reports to understand outcomes, compliance and statistics for their practice and staff.

The screenshot displays the HOBIC application interface. On the left is a green navigation menu with the following items: Data Centre, Alerts, Grant Access, Help, and Logoff. The main content area features a horizontal tab bar with four tabs: Scoring, Interpretation, Raw Results, and Access. Below the tabs is a 3x3 grid of nine thumbnail graphs. Each graph compares 'Interpretation' (blue bars) and 'Change' (maroon bars) across various categories. The categories for the graphs are:

- Top-left: Multiple categories including 'Selling', 'Personal System', 'History', 'Teacher', 'Teacher Job', 'New', and 'Rating'.
- Top-middle: 'Water column 1'.
- Top-right: 'Map'.
- Middle-left: 'Cage'.
- Middle-middle: 'Dipnet'.
- Middle-right: 'Honey'.
- Bottom-left: 'Vale'.
- Bottom-middle: 'Barn'.
- Bottom-right: '2007 Case' through '2011 Case'.

 Each graph includes a legend for 'Interpretation' and 'Change'. The browser's address bar shows 'http://localhost:8100/trea' and the taskbar at the bottom indicates 'Local intranet'.

Explanation: The HOBIC application will present thumbnail graphs to the user for at-a-glance review of the patient's measure. Clicking on these thumbnails will present detailed full-page graphs for in-depth review.

For further information visit our web page

<http://www.health.gov.on.ca/hobic>

References

- Brown, G.S., Burlingame, G.M., Lambert, M.J., Jones, e., Vaccaro, J. (2001). Pushing the quality envelope: A new outcomes management system. *Psychiatric Services* 52(7) p.925-934.
- Doran, D. (2003). *Nursing-Sensitive Outcomes State of the Science*. Jones and Bartlett Publishers. Sudbury, Massachusetts.
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