Use of a Transition Synoptic Report of Clinical Outcomes to Inform Care Between Sectors

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C-HOBIC

Objectives

- Review C-HOBIC background
- Discuss findings from evaluation of the use of the C-HOBIC Transition Synoptic Report (TSR) in Ontario
- Identify recommendations and directions for the future

Acknowledgements:

- **Funder:** Canada Health Infoway
- **Sponsor:** Canadian Nurses Association
- **Partners:**
  - **Ontario**: Ministry of Health and Long Term Care
  - **Saskatchewan:** Saskatchewan Health - Health Information Solutions Centre and Health Human Resource Planning Branch
  - **Manitoba:** Winnipeg Regional Health Authority and Manitoba ehealth

C-HOBIC Dataset: Defined

A suite of evidence-based clinical concepts that can be collected systematically and standardized across the health care system

Acute Care and Home Care Measures

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

Long-term Care and 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

C-HOBIC Dataset: By Sector

C-HOBIC Concept	AC	CCC	LTC	HC
Functional Status (ADL & IADL)				
Bathing	√	√	√	√
Personal hygiene	√	√	√	√
Walking	√			
Toilet transfer	√			√
Toilet use	√	√	√	
Bed Mobility	√	√	√	√
Walk in room		√	√	
Walk in Corridor		√	√	
Locomotion on unit/home		√	√	√
Locomotion off unit/outside of home		√	√	√
Dressing	√	√	√	√
Eating	√	√	√	√
Bladder Continence	√	√	√	√
Meal preparation				√
Ordinary Housework				√
Managing finances				√
Managing medications				√
Phone use				√
Transportation				√

C-HOBIC Dataset: By sector

C-HOBIC Concept	AC	CCC	LTC	HC
Symptoms				
•Pain - Frequency	√	√	√	√
•Pain - Intensity	√	√	√	√
•Fatigue	√	√	√	√
•Dyspnea	√	√	√	√
•Nausea	√	√	√	√
Safety				
•Falls	√	√	√	√
•Pressure Ulcer	√	√	√	√
Therapeutic self-care				
•Knowledge of current medications	√			√
•Knowledge about why you are taking current medications	√			√
•Ability to take medications as prescribed	√			√
•Recognition of changes in body (symptoms) related to health	√			√
•Carry out treatments to manage symptoms	√			√
•Ability to do everyday things like bathing, shopping	√			√
•Someone to call if help is needed	√			√
•Knowledge of whom to contact in case of a medical emergency	√			√

C-HOBIC Dataset:

Endorsements

- Formally endorsed by the Canadian Nurses Association
- Formally endorsed by the Canadian Nursing Informatics Association
- In January 2012, approved as a Canadian Approved Standard
- In April 2012, HOBIC Dataset received Ontario Health Informatics Standards Council (OHISC) approval

Terminology Mapping

- 2012 C-HOBIC to ICNP mapping validated and international catalogue published
- 2015 C-HOBIC mapping to SNOMED-CT findings was completed and published as Reference Set

C-HOBIC Implementation: Guiding Principles

- Emphasis on data for which there is empirical evidence that clinicians impact patient care (outcomes).
- Focus on consistent collection of data electronically at the point of care – to provide *real-time feedback* of information that clinicians can use in planning for and evaluating care
- Avoid duplication - Integrate C-HOBIC data capture with existing assessments
- Maximize electronic capture through existing systems – work to build these questions into existing assessments
- Provide access to information for nurses and other clinicians, healthcare managers, researchers and ministry planners
- Work with clinicians regarding the value of this data to their practice

C-HOBIC Implementation: Phase 1 – 2007- 2009

- **Ontario** (funded by Ministry of Health and Long-term Care) **122** sites collecting the C-HOBIC suite of measures – database housed at Institute for Clinical Evaluative Sciences - real time database providing nurses with access to information about their patients and providing unit level reports for organizations

- **Saskatchewan**: Implementation in **30** facilities ranging from 17 to 237 beds for a total of 2131 LTC beds in Saskatoon Health Region

- **Manitoba**: Implementation in **2 l**ong-term care homes for a total of 1005 long-term care beds and **6** home care offices - approximately 3,300 clients in home care in Winnipeg Regional Health Authority

- Prior to C-HOBIC, both Saskatchewan and Manitoba this information was being entered into a database and submitted to CIHI but the information was not provided back to clinicians at the bedside. As part of C-HOBIC nurses received reports on clinical outcomes

Phase II: *Focus on Care Transitions*

- Individuals with one or more conditions (eg: diabetes, congestive heart failure, coronary artery disease, stroke, COPD) have complex care needs, involving primary care, home care, hospitals, and specialists. Establishing smooth **transitions** between areas of care is critical to managing chronic conditions (bestPATH, HQO, 2013)

- Change Foundation (2010) survey:
  - 27% of the community-based service providers surveyed stated not satisfied with the information provided prior to the first visit with the client who was recently transferred out of hospital
  - more than one third of these providers regularly relied on the client and their informal caregivers to pass relevant information to other providers

C-HOBIC Implementation: Phase 2 – 2012 - 2014

- This phase included the design, development and implementation of synoptic transition reports to facilitate patient transition from one sector of the health care delivery system to another
- The summary is generated using the C-HOBIC data and the principles of synoptic reporting
- Focus was in MB and ONT

C-HOBIC Implementation: Phase 2 – 2012 - 2014

- **Manitoba**
  - St. Boniface Hospital - an acute care hospital - questions embedded into Allscripts system and collected on admission and discharge
  - In 2013, C-HOBIC Synoptic Transition Report to be shared with other sectors (long-term care and home care) as people move from one sector to another

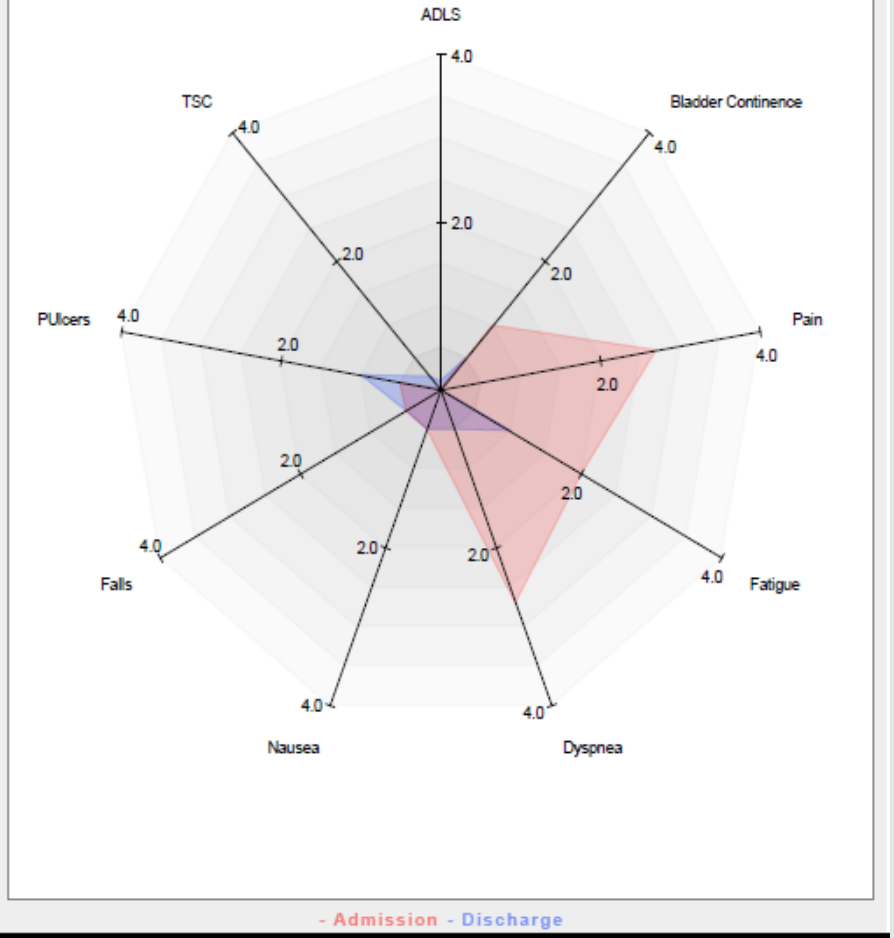
Evaluation completed fall 2013

- **Ontario**
  - HOBIC in 48 Acute Care; 2 Complex Continuing Care; Home Care 4 providers across 13 LHINs and 121 Long-Term Care homes
  - January 2014, C-HOBIC Synoptic Transition Report was made available to clinicians in the Hamilton Niagara Haldimand Brant and Waterloo Wellington Local Health Integration Networks through the ClinicalConnect™ Portal
  - Users of ClinicalConnect includes clinicians from acute care, primary care, long-term care, rapid response, and home care settings

Evaluation completed fall 2014

C-HOBIC Transitions Report

Scale Name	Admission	Discharge
Activities of Daily Living (ADL)	Missing	0.1
Bladder Continence	1.0	0.5
Pain	2.7	Invalid
Fatigue	2.0	1.0
Dyspnea	2.7	0.5
Nausea	0.5	0.5
Falls	0.5	0.5
Pressure Ulcers (PUlcers)	0.5	1.0
Therapeutic Self Care (TSC)	Missing	0.2



C-HOBIC TSR for Ontario

Based on Nightingale's Rose Diagram

C-HOBIC scores were normalized to represent all the concepts on admission and discharge

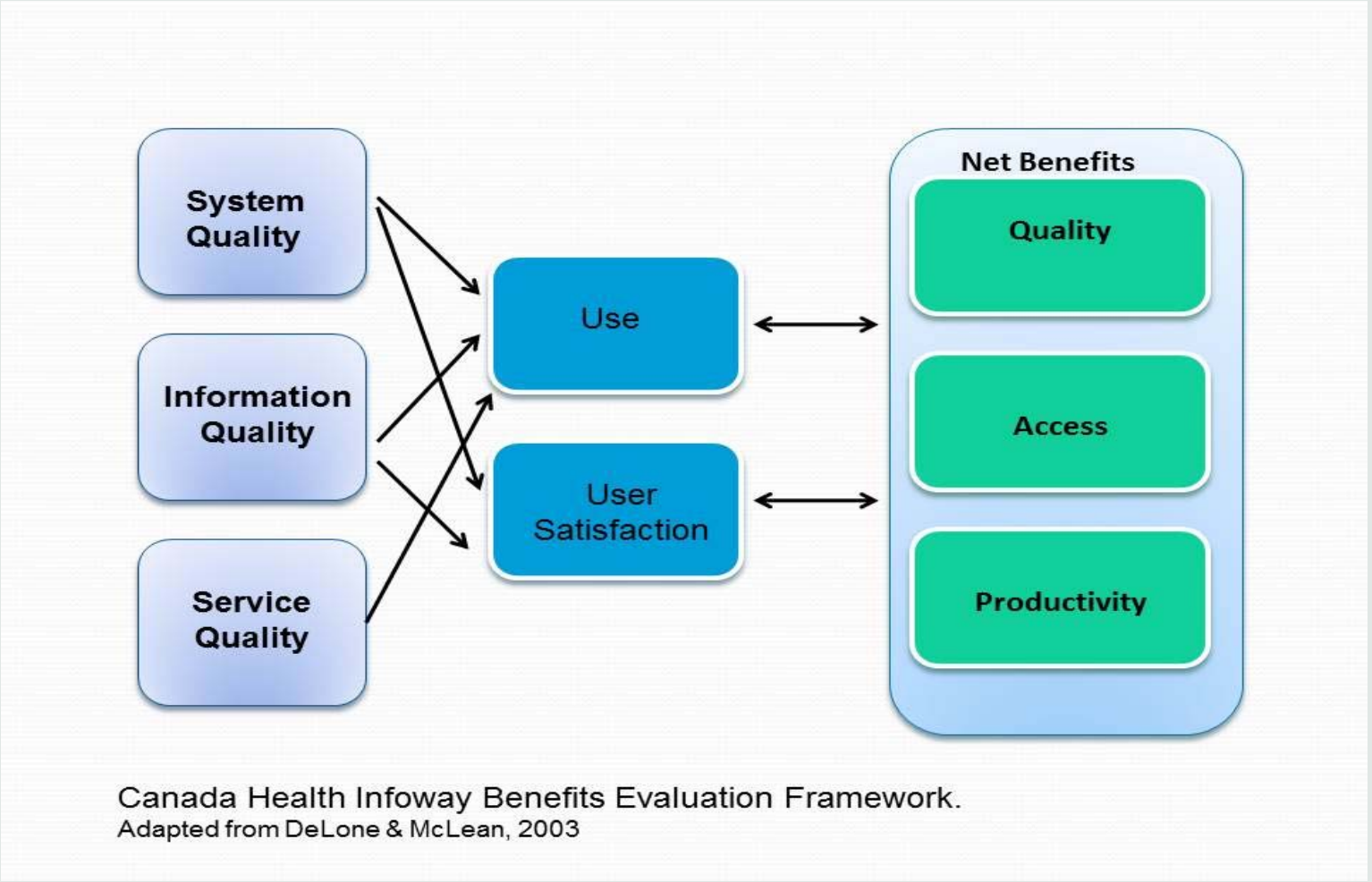
Encouraging TSR Awareness & Use:

- Fact sheets and Q&As posted on the ClinicalConnect webpage
- Video on using the C-HOBIC TSR posted on the ClinicalConnect website
- Notification about the availability and links to the video and fact sheets were provided in ClinicalConnect and Connecting South West Ontario newsletters.
- Meetings held with senior directors of both the HNHB and WW Community Care Access Centres (CCAC) as well as leads for HealthLinks teams

Evaluation was focused on:

- Understanding the impact of C-HOBIC assessments across sectors (i.e., from acute care to home care and long-term care) by making the C-HOBIC TSR available in the ClinicalConnect™ portal
- Identifying lessons learned to inform future implementations the C-HOBIC TSR.
- Identify opportunities for improving elements of design, implementation and support for clinicians.

Evaluation was guided by BE Framework:



Canada Health Infoway Benefits Evaluation Framework.
Adapted from DeLone & McLean, 2003

Questions related to:

Use and User Satisfaction

•What is the user experience in using the C-HOBIC TSR at the point of care?

•Do users derive value from C-HOBIC data and C-HOBIC TSR in their practice?

Quality, Productivity, Access

•Have the processes of clinical care changed post-implementation of the C-HOBIC TSR? How so?

•Is the C-HOBIC TSR useful? Usable?

Information, Service, and System Quality

•Do you have suggestions to improve the use of the C-HOBIC TSR?

Data Collection:

- 579 multi-sector users of ClinicalConnect™ invited to participate in the on-line survey between October 27, 2014 and November 25, 2014.
- Responses to the survey (n=183 - 31.6%). Reminders to participate were emailed to non-respondents twice during the survey period.
- Focus Group – December 2014 – n=3

Results:

The Sample

- Majority of respondents were female (90.7%)
- Roles:
  - Case managers (26.8%)
  - Registered Nurses (16%)
  - Family Physicians (7%)
  - Clinical care co-ordinators (5.5%)
  - Remaining respondents represented more than 15 other clinical and administrative roles
- Majority (54%) with more than 21 years of clinical experience
- Only 13.5% reported 5 or less years experience
- Most employed in a CCAC (30.3%), acute care (13.5%), primary care (12.9%), or ambulatory care (11.2%) setting
- Others identified more than 10 different clinical settings as their place of primary employment.

Results:

Use of ClinicalConnect™

–60.5% (n=177) more than once a week

Familiarity with C-HOBIC TSR

–13.6% (n=24)

Use of C-HOBIC TSR

-Easy to interpret (n=18)

-A good visual (n=20)

-Useful snapshot of patient status at discharge (n=19)

-Valuable in supporting patient care transitions (n=19)

Results:

Use of the C-HOBIC TSR has (n=23):

- Improved the continuity of care between care settings

  (Agree) 47.8% (Don't Know) 34.8%

- Improved the timeliness of communication to providers in post-discharge care settings

  (Agree) 39.1% (Don't Know) 43.5%

- Influenced care planning

  (Agree) 60.9% (Don't Know) 34.8%

- Influenced patient care decisions

  (Agree) 52.2% (Don't Know) 39.1%

- Influenced the provision of support to patients and families

  (Agree) 39.1% (Don't Know) 47.8%

Results:

Use of the C-HOBIC TSR has improved the QUALITY of the communication among members of the interprofessional team in relation to patients' (n=23):

- **Functional Status**

  Agree/Strongly Agree (47.8%) Don't Know (39.1%)

- **Symptom Management**

  Agree/Strongly Agree (47.8%) Don't Know (39.1%)

- **Readiness for Discharge**

  Agree/Strongly Agree (34.8%) Don't Know (52.2%)

- **Risk for Falls**

  Agree/Strongly Agree (43.5%) Don't Know (43.5%)

- **Risk for Skin Breakdown**

  Agree/Strongly Agree (34.8%) Don't Know (52.2%)

Results:

Use of the C-HOBIC TSR has improved the TIMELINESS of communication among members of the interprofessional team in relation to patients' (n=23):

- **Functional Status**

  Agree/Strongly Agree (41.5%) Don't Know (43.5%)

- **Symptom Management**

  Agree/Strongly Agree (47.8%) Don't Know (39%)

- **Readiness for Discharge**

  Agree/Strongly Agree (34.9%) Don't Know (52.2%)

- **Risk for Falls**

  Agree/Strongly Agree (34.8%) Don't Know (47.8%)

- **Risk for Skin Breakdown**

  Agree/Strongly Agree (30.5%) Don't Know (52.2%)

Results:

Would recommend the use of the C-HOBIC TSR (n=23):

- To colleagues (n=14)
- Across clinical settings (n=14)
- In other provinces (n=8),
- As informational support to patients and families (n=11)

Results:

Comments from the participants were resoundingly positive:

- "so much faster to interpret"
- "it's intuitive"
- "it can be used with other assessments like the RAI for care planning"
- "enhances communication"
- "C-HOBIC TSR is a 'nice visual'"
- "helpful in 'knowing' the patient"
- "it's another layer of knowing"
- "it would be great to have it integrated with CHRIS for dissemination to the community"
- "it could be helpful to geriatricians, physiatrists, GPs, GEM nurses, OT's, PTs, SWs, primary care and the healthlinks"

Results:

Overall, limited response to the C-HOBIC TSR questions and the responses received suggests the need for:

a) more awareness and education regarding the potential of the C-HOBIC TSR, its uses and potential benefits, and

b) more time to utilize the tool and identify opportunities for use in care transitions.

Recommendations:

Awareness of C-HOBIC and the C-HOBIC TSR to support care transitions

- Provide users with information regarding the value and use of the C-HOBIC TSR when given initial access to the portal.
- Emphasize the benefits of the C-HOBIC TSR as it supports care transitions;
- Leverage the Healthlinks initiatives as a means to convey the value of the C-HOBIC TSR to all sectors and clinical users.
- Consider bundling C-HOBIC data with other discharge planning and follow-up care reports.
- Within 6-12 months, re-evaluate the frequency of use and ClinicalConnect users' perceptions of the value of the C-HOBIC TSR in a variety of clinical care settings.

Recommendations:

C-HOBIC and the C-HOBIC TSR Beyond Acute Care

- Continue the pursuit of cross sector flow of C-HOBIC information as clients move between sectors of care.
- Engage in multi-sector discussions regarding the potential value of the C-HOBIC TSR in supporting care transitions.
- Continue to identify opportunities for the adoption and integration of C-HOBIC in other care settings within each LHIN.

Recommendations:

Education and Training

- Provide post go-live follow-up education and support, including a multi-sector workshop for the sustainable and effective use of C-HOBIC outcomes and reports including the C-HOBIC TSR.
- Revisit the potential to have undergraduate curricula incorporate the concepts of clinical data standards and application of C-HOBIC in practice.

"These are simple concepts to convey and demonstrate the informational value to clinicians"

"This is important information regarding the patient. If we are going to develop care plans we need to 'know the patient."

"This process needs to continue to be worked on with the other facilities and departments to see how the outcome information could be best utilized to support care

Value: to the Health System

- Patient safety – standardized *clinical* information at the point of care (falls, symptoms, pressure ulcers)

- Standardized *clinical* information across the continuum – improved continuity & *coordination of care for the patient during transitions*

- Better Information on patient needs … *the right information at the right time*

- Better information on *clinical* patient outcomes … *ability for facilities to use in benchmarking and to compare effectiveness of treatments*

- Opportunity to ***transform*** the delivery of care through use of standardized *clinical* patient outcomes to support evidence-based practice

The Vision for C-HOBIC Data

Patients

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

Clinicians

- Improve communication within the team – standardized data
- 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 benchmarking
- Information to evaluate operational decisions and resource allocation
- Information to identify areas for quality improvement
- Information to support accreditation surveys - ROPs
- 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

Questions?

For more information

C-HOBIC webpage

http://c-hobic.cna-aiic.ca/about/default_e.aspx

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