Advancing the Uptake and Perceived Value of Standardized Clinical Data

Lynn M. Nagle, RN, PhD
Peggy White, RN, MN

June 2, 2014

C-HOBIC

C-HOBIC Dataset

A set of standardized evidence-based clinical outcomes collected systematically across the health care system

Acute Care and Home Care Measures	Long-term Care and Complex Continuing 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**	• **Functional Status**: ADL* & Bladder Continence* • **Symptom management**: Pain*, Fatigue*, Dyspnea*, Nausea • **Safety Outcomes**: Falls*, Pressure Ulcers*
• Collected on admission & discharge * interRAI measures	• Collected on admission, & quarterly/client condition changes * interRAI measures

---

Agenda

- **C-HOBIC Dataset**

- **Phase 2 Implementation**

- **Evaluation**

- **Lessons Learned**

- **Next steps**

2

C-HOBIC Dataset

- Formally endorsed by the Canadian Nurses Association (CNA) and the Canadian Nursing Informatics Association

- Selected C-HOBIC data elements are being included in the National Nursing Quality Report for Canada (NNQR-C), work that is being lead by the Academy of Chief Executive Nurses and CNA

- On January 11, 2012 the C-HOBIC data set was designated as a Canada Approved Standard (CAS)

- C-HOBIC Dataset has been mapped to ICNP and SNOMED CT

4

C-HOBIC Phase 2

Partners
- Funded by contributions from Infoway and participating provincial partners
- Manitoba: Boniface Hospital, Winnipeg Regional Health Authority and Manitoba ehealth
- Ontario the participating provincial partners are: ClinicalConnect™, HINext and the Institute for Clinical Evaluative Sciences

Methodology and Deliverables
- This phase includes 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

5
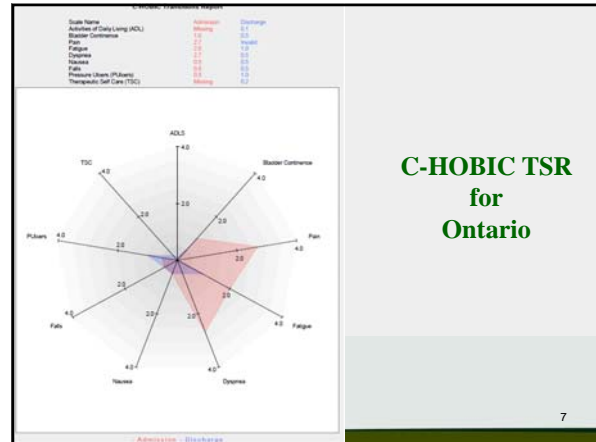
C-HOBIC TSR for Ontario

7

Ontario

- Clinicians in Ontario have been collecting the C-HOBIC dataset since 2007 - currently approximately 186 organizations across the province submitting this data to a database that is housed at the Institute for Clinical Evaluative Sciences

- C-HOBIC Transition Synoptic Report (TSR)
  - a 'snapshot' so that clinicians can quickly look at the report and identify patient needs
  - C-HOBIC scores were normalized to represent all the concepts on admission and discharge
  - available on ClinicalConnect™ in the Hamilton Niagara Haldimand Brant and Waterloo Wellington Local Health Integration Networks - over 7000 users on desktops and mobile devices such as Family Health Teams, Nurse Practitioner Led Clinics, Community Health Centres, Community Care Access Centres
  - C-HOBIC TSR went live on ClinicalConnect™ on January 21, 2014

6

Ontario...*continued*

- Communication/education
  - Conference calls, meetings and presentations to user groups
  - Updates on the ClinicalConnect webpage
  - Updates in ClinicalConnect newsletters
  - Taped webex about how to access the C-HOBIC TSR and use it in practice
  - Meetings with Health Links teams regarding value of C-HOBIC TSR for high users of health care

8

Manitoba

- 2 components
  - C-HOBIC dataset included in the clinical documentation functionality of Allscripts™ Version 5.5 at St. Boniface Hospital
  - St. Boniface version of the C-HOBIC TSR

- Education was provided to 800 clinicians about the need to standardize clinical outcomes information, the use of C-HOBIC and how to use the information to support evidence-based practice

- The collection of the C-HOBIC dataset went live in Allscripts on November 27, 2012 with final roll-out completed in March, 2013

- C-HOBIC TSR is being produced on discharge and included as part of discharge package

9

Evaluation

The goals of the evaluation were to:

- evaluate the experience of a C-HOBIC implementation within one acute care organization and the use and utility of a C-HOBIC TSR received by affiliated home care and long-term care settings in Manitoba

- For Ontario the evaluation will be done in fall of 2014 as implementation of the C-HOBIC TSR in Ontario was delayed.
  - Evaluation will examine the use and utility of the C-HOBIC TSR received from acute care by primary care providers, nurse practitioners, emergency room nurses, and Community Care Access Centre case managers within 2 Ontario Local Health Integration Networks

C-HOBIC TSR for Manitoba

10

Evaluation...*continued*

- An on-line survey
  - targeting direct care providers and/or users of the C-HOBIC TSR
  - made available on September 30, 2013 and remained open until November 29, 2013
  - total of 115 responses to the survey
  - Approximately 800 clinicians within St. Boniface had been trained in the completion and use of C-HOBIC in conjunction with their clinical documentation training (14% response rate)

- Two focus groups were conducted at St. Boniface Hospital on December 11, 2013

- Senior nursing leaders (n=4) participated in an interview with the evaluator

12

Evaluation...*continued*

Questions focused on the following:

- **Use and User Satisfaction**
  - What is the user experience in using C-HOBIC at the point of care?
  - Do users derive value from C-HOBIC data in their practice?
  - Are clinicians using the C-HOBIC dataset to inform their practice?

- **Quality, Productivity, Access**
  - Have the processes of clinical care changed post-implementation of C-HOBIC? How so?
  - Have communication processes among care providers changed with the use of the C-HOBIC TSR? If so, how?
  - Has clinical documentation changed with the use of C-HOBIC? If so, how?
  - Is C-HOBIC being used to inform care transitions between sectors?
  - Is the C-HOBIC TSR useful? Usable?

13

Evaluation – Survey Results...*continued*

Survey Results – Familiarity with C-HOBIC And C-HOBIC TSR

"Need to determine some "standard work" to ensure the C-HOBIC outcome information is incorporated into the decision-making, planning and delivery of interventions to best meet patients' needs and support high quality care"

- 85% familiar with the C-HOBIC outcomes and only 12.5% indicated that they had not had an opportunity to review patients' C-HOBIC outcomes

- 75% had reviewed C-HOBIC within an acute care setting; other settings included long-term care (n=2), home care (n=2), palliative care (n=4), rehab (n=1) and an assortment of medical surgical specialty areas (n=11)

- Only 28.6% (n=28) of respondents were familiar with the C-HOBIC TSR, but few (n=16) had actually reviewed it

15

C-HOBIC Phase 2: Evaluation...*continued*

- **Information, Service, and System Quality**
  - Is the application/system used for the capture and transmission of C-HOBIC and the C-HOBIC TSR easy to use, access, stable, and useful? If yes, why? If not, why not?
  - What is working and what is not?
  - What else would be useful – functionality (e.g., access to other information)?

14

Evaluation – Survey Results...*continued*

Survey Results: Collection and Use of C-HOBIC

- More than 54% (agreed or strongly agreed) indicated that the dataset was relevant to the care of their patients

"Not for the ICU, but can see how it would be helpful as the patient improves post-ICU"..."may be an indicator of the patient not being discharged in a timely manner"

- Respondents identifying their primary work area as a critical care unit (n=12) offered additional comments that C-HOBIC had limited relevance to their patients because they are typically highly dependent during their intensive care stay. However, comments also supported the use of C-HOBIC pre-operatively and following a stay in the intensive care unit

- More than 50% agreed that C-HOBIC informed their clinical practice and supported clinical decision-making but only 48% indicated agreement that C-HOBIC provided valuable insights to support care transitions

16

Evaluation – Survey Results *...continued*

Use of the C-HOBIC TSR

- While 28.6% (n=28) of respondents were familiar with the C-HOBIC TSR, only 16 respondents indicated that they had reviewed a patient's C-HOBIC dataset using the C-HOBIC TSR

> *"The report is easy to use and provides a quick overview of the patient's status but has not been built into the processes for planning patient discharge to Long Term Care Facilities and the use of Home Care Services*

- A majority of those who had reviewed a patient's C-HOBIC TSR agreed that it was easy to use (n=9) and interpret (n=10)

- In addition, there was agreement that it was a useful snapshot (n=9) and visual (n=10) of a patient's status

17

Evaluation - Senior Leaders Interview

- Revisit the purpose of C-HOBIC with all nurse users

- Review the current design of C-HOBIC within the St. Boniface electronic patient record

- Review opportunities to streamline documentation tools and reduce duplication of assessments

- Review the applicability of the C-HOBIC dataset to clinical populations (e.g., critical care, select surgical populations)

- Connect with relevant home care and long term providers to review the use of C-HOBIC and the C-HOBIC TSR

- Identify consistent processes for sharing and using C-HOBIC information

- Identify opportunities and strategies to further derive and demonstrate the value of C-HOBIC to staff and middle-management

19

Evaluation - Focus group findings

- Current documentation application design necessitates duplicative documentation creating additional workload

- Organizational requirement for concurrent use of other risk and quality tools in conjunction with C-HOBIC also creates duplicative work effort

- Questionable applicability and timing of assessments for specific patient populations (e.g., surgical, critical care)

- Need for clear accountability and consistency of processes of documentation completion, timing and expectations of C-HOBIC and C-HOBIC TSR use

- Need to revisit LTC and Home Care use of C-HOBIC and opportunities for use of C-HOBIC TSR

- Need for additional education and training on C-HOBIC

18

Evaluation – Key Recommendations

Application Design
- Identify opportunities for the elimination of redundant clinical documentation.
- Provide guidelines regarding the integration of C-HOBIC into clin-doc systems

Other Assessment Tools
- Identify the tools which best serve clinicians in the determination of clinical outcomes

Use of the C-HOBIC TSR
- Re-evaluate the usability and impact of the C-HOBIC TSR on practice in one year
- Identify clear and consistent processes and accountabilities for the generation and use of the C-HOBIC TSR
- Review the education component of C-HOBIC related to the use of the C-HOBIC TSR to support care transitions

Applicability of C-HOBIC
- Implementation site should review the applicability of the entire C-HOBIC dataset for different types of medical-surgical patients
- C-HOBIC implementation guidelines should clearly identify the intended clinical populations for use

Key Recommendations…*continued*

- **Consistent Use of C-HOBIC and C-HOBIC TSR**
  - Review options to increase the completion of C-HOBIC for clinical comparability
  - Review timing of C-HOBIC completion for surgical patients to optimize usefulness
  - Discuss opportunities to use C-HOBIC as a basis for discussions and discharge planning with patients and families

- **LTC and Home Care use of C-HOBIC and C-HOBIC TSR**
  - 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 C-HOBIC in supporting care transitions

- **Education and Training**
  - Provide opportunities to learn about the C-HOBIC initiative and its use separate from the training provided on the use of the clinical information system
  - 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

Next Steps

- Manitoba:
  - Development of compliance report to monitor completion of assessments
  - Engage home care and long-term care organizations in discussions about the value of the C-HOBIC TSR in supporting transitions
  - Longer-term – examine changes to clin-doc assessments

- Ontario:
  - Ongoing communication and education regarding the C-HOBIC TSR: how to access it and how to use it in practice
  - Continue to connect with Health Links in the Hamilton Niagara Haldimand Brant and Waterloo Wellington LHINs

Lessons Learned

1. Leadership is key – need leaders at all levels of the organization that recognize the value of standardizing data and the benefits of standardized information to examine practice within the organization and the value of sharing standardized clinical information across the health care system to support patient care and patient transitions

2. Impact on clinician workflow needs to be considered – when introducing new assessments into clin-doc need to assess what information is already asked, where to include standardized questions

3. Change management is an ongoing process

4. Communication with healthcare providers/organizations about the value of standardized data: clinical accountability, evidence-informed care

Questions

C-HOBIC webpage
http://www2.cna-aiic.ca/c-hobic/about/default_e.aspx