

# **Canadian - Health Outcomes for Better Information and Care (C-HOBIC)**

## **Briefing for IHTSDO Nursing SIG**

**October 7, 2013**

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**C-HOBIC**

# Agenda

## 1. Introduction to C-HOBIC

- C-HOBIC Dataset

## 2. C-HOBIC Phase 1

- Objectives
- Mapping
- Implementation
- Lessons Learned

## 3. C-HOBIC Phase 2

- C-HOBIC Synoptic Report on Transitions

## 4. C-HOBIC and the Discharge Abstract Database

# Introduction to C-HOBIC

# C-HOBIC

- National initiative to advance the C-HOBIC dataset in Canada
- Funding contributions by Canada Health Infoway and the participating provincial jurisdictions
- Sponsored by the Canadian Nurses Association

# Underlying Principles of C-HOBIC

- Emphasis on data for which there is empirical evidence that nursing impacts 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 assessments
- Provide access to information for nurses, healthcare managers, researchers and ministry planners

# C-HOBIC Dataset

- A set of standardized evidence-based clinical outcomes collected systematically 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 MEASURES

Category	Sector			
	AC	CCC	LTC	HC
<b>Functional Status (ADL &amp; IADL)</b>				
- Bathing	√	√	√	√
- Personal Hygiene	√	√	√	√
-Walking	√	√	√	√
- Toilet Transfer	√	√	√	√
- Toilet Use	√	√	√	√
- Bed Mobility	√	√	√	√
- Locomotion on unit	√	√	√	√
- Locomotion off unit	√	√	√	√
- Locomotion in home				√
- Locomotion outside of home				√
- Dressing				√
- Eating	√	√	√	√
- Bladder Continence	√	√	√	√
- Meal preparation				√
- Ordinary Housework				√
- Managing IADLs				√
<b>Symptoms</b>				
Pain - Frequency	√	√	√	√
Pain - Intensity	√	√	√	√
Fatigue	√	√	√	√
Dyspnea	√	√	√	√
Nausea	√	√	√	√
<b>Safety</b>				
Falls	√	√	√	√
Pressure Ulcer	√	√	√	√

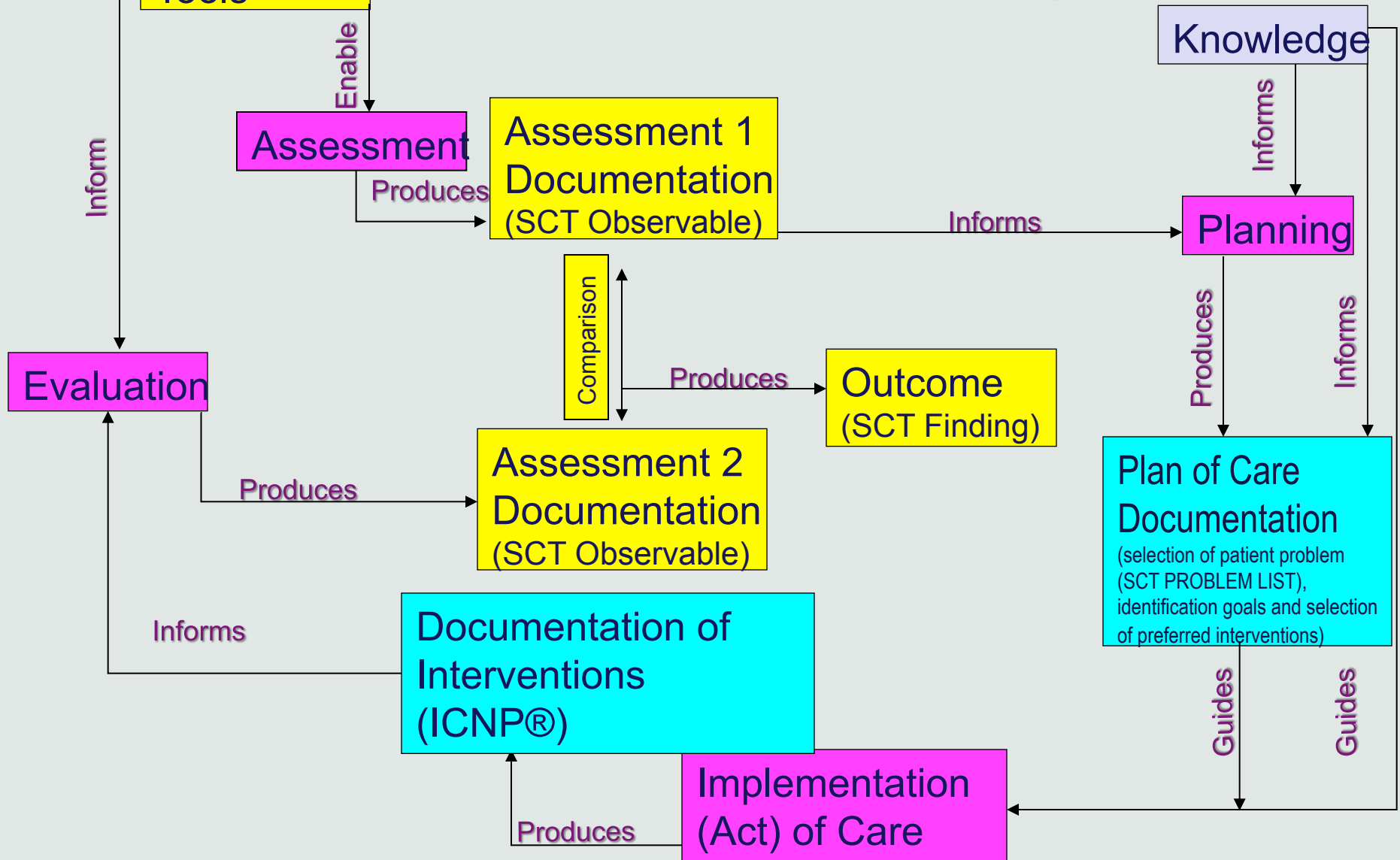
# C-HOBIC MEASURES *continued*

## **Readiness for Discharge captured in Acute Care and Home Care**

• Knowledge of 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
• Ability to carry out the treatments or activities as taught
• Someone to call if help is needed
• Knowledge of whom to contact in case of a medical emergency



# Relationship Between C-HOBIC and the Nursing Process



# C-HOBIC Phase 1 (2007-2009)

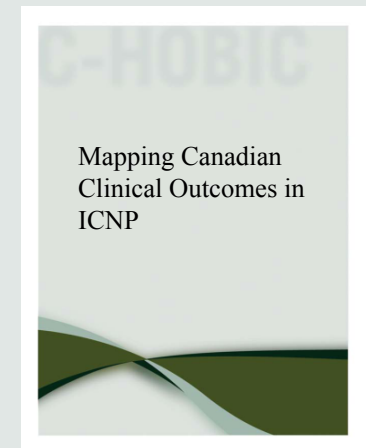
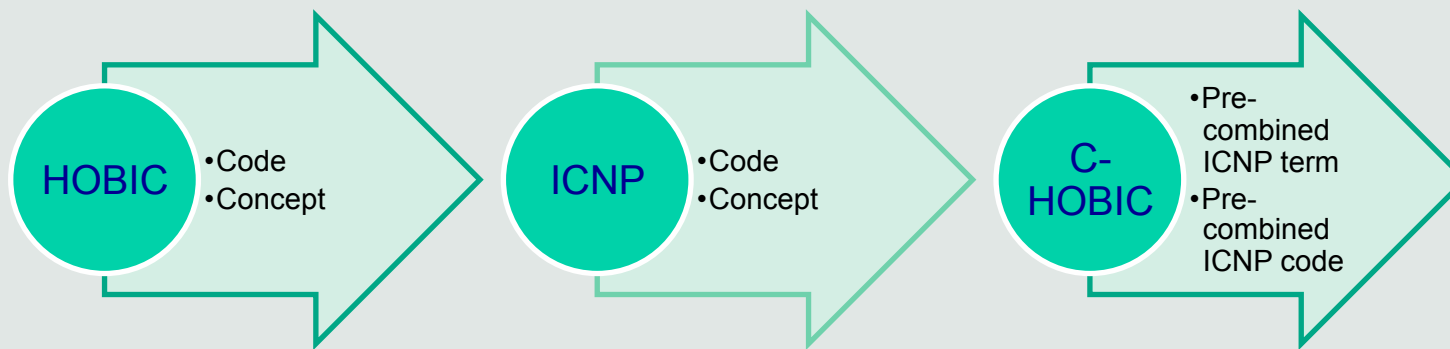
# C-HOBIC Phase 1- Objectives

- Standardize the language concepts used by HOBIC to the standardized clinical reference terminology of nursing, the International Classification for Nursing Practice (ICNP®)
- Capture nursing-sensitive, patient-centred, clinical outcomes data across 4 sectors (acute care, complex continuing care, long-term care and home care) sectors of the health system
- Store the captured and standardized data in relevant secure jurisdictional data repositories/databases in preparation for entry into provincial databases/electronic health records

# Phase 1: C-HOBIC Dataset

# Phase 1: C-HOBIC Dataset – Mapping concepts to standardized clinical terminology (ICNP® V 1)

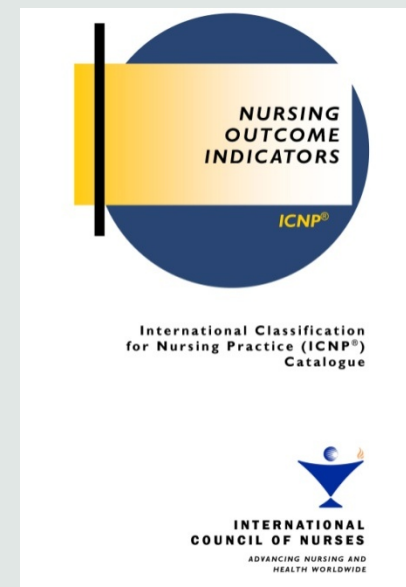
- Conceptual and semantic equivalency



- Consensus meeting
  - Review and validate expert mapping
- Draft report
  - Review and validation
- Final report

# Phase 1 C-HOBIC Dataset - Mapping Maintenance (update to ICNP® Version 2)

- With the release of ICNP® version 2 the C-HOBIC concepts were mapped to ICNP Version 2
- Mapping validated by international ICNP® experts and C-HOBIC team
- **Release of International Catalogue on March 6, 2012**



## C-HOBIC Dataset

- C-HOBIC Dataset formally endorsed by the Canadian Nurses Association
- C-HOBIC Dataset formerly endorsed by the Canadian Nursing Informatics Association
- On January 11, 2012 the C-HOBIC Dataset was approved as a Canada Approved Standard (CAS)
- On April 25, 2012 HOBIC Dataset received Ontario Health Informatics Standards Council (OHISC) approval

# C-HOBIC Data Set - Mapping to SNOMED-CT 2012-2013

- Draft document prepared in advance by the UK SNOMED-CT team
- 16 nursing terminology experts assembled in Montreal on June 22<sup>nd</sup> 2012 - 4 from the International Health Terminology Data Standards Organization (IHTSDO) Nursing SIG, 5 from the International Council of Nurses ICNP® Programme and 7 experts from Canada – first draft of C-HOBIC to SNOMED CT mapping
- Validation of second draft completed May 2013
- **Final document to be completed Fall 2013 for submission to SNOMED CT Nursing SIG and Content Committee**



# C-HOBIC Phase 1 - Lessons Learned

- Lack of devices at the bedside for clinicians to enter information – entering information on paper
- Current clinical information systems do not provide outcomes feedback information to clinicians in 'real time'
- Need nursing leadership to support nurses in incorporating this information into nursing practice
- Information is focused on one sector and does not follow the patient across the system

# C-HOBIC Phase 2 (2012-2014)

# C-HOBIC Phase 2 Objectives

- Increase clinicians' access to information that is of value to their practice
- Provide access to information across the continuum of care to support quality patient care
- Ultimately increase the productivity of clinicians through the provision of evidence-based standardized clinical outcomes information at the point of care



St-Boniface  
Hospitals and Health Services

### CHOBIC Transition Summary

CHOBIC, test2                      58y      05-Feb-1955      Female      MRN: 01501036  
 SBGH-A7SO-A7027-02            Attending MD: Galimova, Lena      Visit: 8001918      DSC  
 PHIN: 252452345                    Reg: 545234524

Language - Rajasthani                      Interpreter - No

This report provides a summary (i.e. a synoptic report) of the patient's C-HOBIC scores on admission and discharge.  
 The scores have been normalized to provide a quick visual snapshot.

C-HOBIC Scale Name	Admission	Discharge
<b>ADL Activities of Daily Living</b> - Higher score reflects greater need for assistance. Summary ability to bath, transfer to toilet, ambulate and feed. 0- independent                      1- set up help/supervision                      2- limited assistance 3- extensive assistance                      4- total dependence	1.24	Incomplete
<b>Bladder Continence</b> - Higher score reflects increasing incontinence 0 - Continent                      1 - Control with catheter                      2 - Infrequently incontinent 3 - Frequently incontinent                      4 - Incontinent	3.00	1.00
<b>Pain</b> - Higher score reflects greater intensity of pain 0 - No Pain                      1 - Mild                      2 - Moderate 3 - Severe                      4 - Worst Possible	Incomplete	1.33
<b>Fatigue</b> - Higher score reflects greater fatigue when performing normal daily activities 0 - None 1 - Minimal, diminished energy but completes normal day-to-day activities 2 - Moderate, due to diminished energy unable to finish normal day-to-day activities 3 - Severe, due to diminished energy- unable to start normal day-to-day activities 4 - Unable to commence any normal day-to-day activities due to diminished energy	4.00	3.00
<b>Dyspnea</b> - Higher score reflects increasingly greater levels of dyspnea 0 - Absence of dyspnea 1 - Absence at rest but present when performed moderate activities 2 - Absent at rest but present when performed normal day-to-day activities 3 - Present at rest	1.33	2.67
<b>Nausea</b> - Higher score reflects increasingly greater levels of nausea 0 - No nausea 1 - Mild nausea: occasionally experienced but does not interfere with eating and/or activities 2 - Moderate nausea: interferes somewhat with eating and/or activities most days 3 - Severe nausea: interferes daily with eating and/or activities 4 - Incapacitating: remains in bed part of each day due to nausea and interferes with eating	Incomplete	2.00
<b>Falls</b> 0 - No falls in the last 90 days                      1 - No fall in last 30 days but fell 31-90 days ago 2 - One fall in last 30 days                      3 - Two or more falls in last 30 days	1.33	0.00
<b>Pressure Ulcers</b> 0 - No pressure ulcer                      1 - Any area of persistent skin redness 2 - Partial loss of skin layers                      3 - Deep craters in skin 4 - Breaks in skin exposing muscle or bone                      5 - Unstaged	2.00	2.00
<b>Therapeutic Self-Care</b> - Higher score reflects the greater need for assistance. Summary of a person's knowledge and ability to take their medications, manage their symptoms and perform everyday activities and ability to contact someone if there is an emergency. 0 - Assistance not required                      1 - Minimal Assistance Required                      2 - Heavy Assistance required	Incomplete	Incomplete

#### Confidential Patient Information

Report Requested By: Fradkov, Marianna (Analyst)                      Printed From: SBGH-zNonpatient - EPRCIS  
 Printed On: 05-Jul-2013 9:18                      End of Report                      Page: 1 of 1

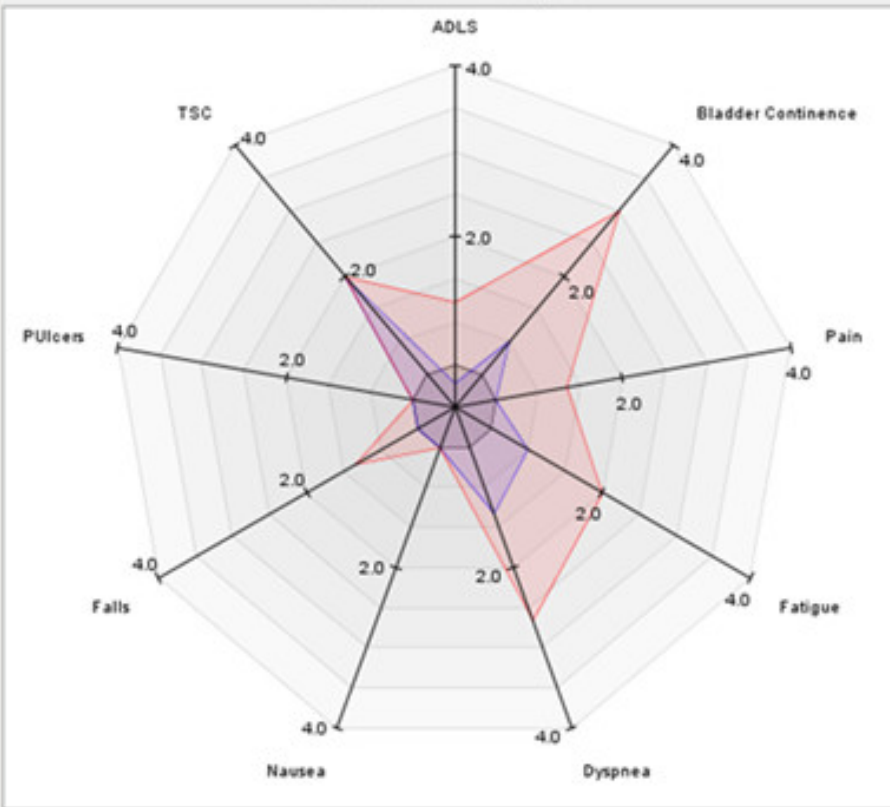
# C-HOBIC Transition Synoptic Report (TSR): OPTION 1

### Transitions Report

Scale Name	Admission	Discharge
A. <a href="#">ADL - Activities of Daily Living</a>	<a href="#">1.2</a>	0.3
B. <a href="#">Bladder Continence</a>	<a href="#">3</a>	1
C. <a href="#">Pain Scale</a>	<a href="#">1.3</a>	0
D. <a href="#">Fatigue</a>	<a href="#">2</a>	1
E. <a href="#">Dyspnea</a>	<a href="#">2.7</a>	1.3
F. <a href="#">Nausea</a>	<a href="#">0</a>	0
G. <a href="#">Falls</a>	<a href="#">1.3</a>	0
H. <a href="#">Pressure Ulcers</a>	<a href="#">0</a>	0
I. <a href="#">Therapeutic self-care scale - revised</a>	<a href="#">2</a>	2

All scale values are normalised (out of 4)

### C-HOBIC Transitions Report



- Admission - Discharge

## C-HOBIC Transition Synoptic Report (TSR): OPTION 2

# C-HOBIC Dataset and the Canadian Institute for Health Information

## C-HOBIC Dataset in the D.A.D.

- Agreement and support for the value of these data being included in the D.A.D
- Support from interRAI for including C-HOBIC DATA in the D.A.D.
- Model with funding requirements developed

## The Model:

### C-HOBIC Dataset in the D.A.D.

- April 2014 – 2 pilots sites to identify the resources required to submit the C-HOBIC Data to the D.A.D.
- April 2015 – other sites that are collecting C-HOBIC Data allowed to submit data to the D.A.D.
- C-HOBIC Dataset part of D.A.D. core submission and available on CIHI portal to support Health System Use



# The Vision for C-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 health 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

# Questions Comments

# C-HOBIC webpage

[http://www2.cna-aiic.ca/c-hobic/about/default\\_e.aspx](http://www2.cna-aiic.ca/c-hobic/about/default_e.aspx)