The Canadian Patient Experiences Survey-Inpatient Care: Pilot Testing Lessons Learned

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Presentation Objectives

• Background

• Objectives and Overview of Survey Domains

• Pilot testing

• Findings

• Next steps
Background

- Performance measurement/quality of care is a key priority in health care.
- Quality in medical and health care has two distinct dimensions:
  - Quality of care from the perspective of professional and technical standards
  - Quality of care from the patient perspective
- Essential to understand how patients experience the care they receive.
- Can only obtain this information by asking patients themselves.
Current Context

• Long history of patient experience surveying in many jurisdictions in Canada (e.g. Ontario, Alberta, BC, etc.).

• No standardized Canadian patient experience tool that provides comparable measures across jurisdictions.

• Some jurisdictions do not have fully implemented surveys in place.

• Mandatory for accreditation as of January 2012.
Patient Experience Survey Development: Why CIHI?

- Experience in developing standards, methodologies, survey development and pan-Canadian health system performance analysis.

- Established relationships with key pan-Canadian organizations such as Accreditation Canada, Change Foundation.

- Part of CIHI’s Health System Performance (HSP) agenda
  - Health System Framework includes the standard measurement of patient experience
  - Hospital level reporting website (core component in facility level dashboard)
Objectives of this work:

1. Develop a standardized questionnaire
   - American Hospital Consumer Assessment of Healthcare Providers and Systems survey (HCAHPS) as a base.
     - 23 questions from Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS)
     - 26 items (new) relevant to Canadian context
     - Flexibility to add jurisdiction specific questions

2. Cognitive testing

3. Pilot test questionnaire

4. Implementation

Source: ¹Questions 1 to 22 and 43 are adapted from the HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) questionnaire.
Survey Benefits

• Access to comparable pan-Canadian data to identify and inform quality and efficiency improvements

• Better understanding of the patient experience and quality of care to better support integration of care and improved patient-centred care

• Ability to benchmark nationally and internationally for better evaluation of policies and programs

• Endorsed by Accreditation Canada

• Developed through pan-Canadian collaboration and rigorously tested

• Potential to link to other CIHI databases to understand patients journey across the continuum of care
## CPES-IC Domains

<table>
<thead>
<tr>
<th>HCAHPS Domains</th>
<th>Additional Canadian Domains</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication with nurses</td>
<td>Admissions</td>
</tr>
<tr>
<td>Communication with doctors</td>
<td>Internal coordination of care</td>
</tr>
<tr>
<td>Physical environment</td>
<td>Person-centred care</td>
</tr>
<tr>
<td>Responsiveness of staff</td>
<td>Discharge and transition</td>
</tr>
<tr>
<td>Pain control</td>
<td>Outcome</td>
</tr>
<tr>
<td>Communication about medications</td>
<td>Global rating</td>
</tr>
<tr>
<td>Discharge information</td>
<td>Demographic questions (Canadian context)</td>
</tr>
<tr>
<td>Ratings:</td>
<td>Patient Safety (removed following pilot)</td>
</tr>
<tr>
<td>• Rate hospital from worst to best</td>
<td></td>
</tr>
<tr>
<td>• Recommend to family and friends</td>
<td></td>
</tr>
</tbody>
</table>

Testing the Questions

• Cognitive testing: Ensure that new questions are being understood and interpreted as they were intended
  – January to May 2013
  – English: Ontario, Alberta
  – French: New Brunswick, Ontario

• Pilot: Test full questionnaire in several jurisdictions
  – July to September 2013 (AB: telephone), ON (telephone, mail), BC (mail only)
  – N=3300 mailed surveys (estimating ~20% response rate)

• Revise questions based on results
CPES-IC Pilot Test

• Who
  – British Columbia, Alberta and Ontario
  – Facility sample
    • Urban vs. rural
    • Organization characteristics to achieve diversity in patient population (e.g., ethnic groups, demographics and education status)
    • Population sample selection criteria

• Survey modes administered and methods
  – Mail and telephone from July to September 2013

<table>
<thead>
<tr>
<th>Province</th>
<th>Facility Sample</th>
<th>Patient Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alberta</td>
<td>3 facilities</td>
<td>☏ 406 English</td>
</tr>
<tr>
<td>Ontario</td>
<td>7 facilities</td>
<td>☏ 718 English 1,291 English 962 French</td>
</tr>
<tr>
<td>British Columbia</td>
<td>3 facilities</td>
<td>☑ 1000 English</td>
</tr>
</tbody>
</table>
## CPES-IC Pilot Test—Survey populations

<table>
<thead>
<tr>
<th>Province</th>
<th>Language</th>
<th>Mode</th>
<th>Service Line</th>
<th>Response Rate</th>
</tr>
</thead>
</table>
| British Columbia | English  | ✉️   | Medical/ surgical Maternity | • 32.7% (n=240)  
                                           • 10.9% (n= 29) |
| Alberta           | English  | ☏️   | Medical/ surgical Maternity | • 32.8%(n=111)  
                                           • n=68* |
| Ontario           | English  | ✉️   | Medical/ surgical Maternity | • 33.4% (n=301)  
                                           • 13% (n= 52) |
| Ontario           | English  | ☏️   | Medical/ surgical Maternity | • 13.1% (n=89)  
                                           • n=37* |
| Ontario           | French   | ✉️   | Medical/ surgical Maternity | • 21.1% (n=135)  
                                           • 21.2% (n=68) |

* Maternity patients were identified during the telephone interview; response rates could not be calculated because the original number of sampled maternity patients is unknown among the telephone samples.

- The overall response rate for the mail mode survey was 25.3% (n=825) and telephone mode survey was 27.1%.
- A total of 1,130 completed surveys through mail and telephone.
- This analysis highlights the importance of doing a follow-up mailing.
CPES-IC Pilot Test—Results

• Overall the analysis suggested that the tool performed well.
  – Questions measuring independent items (.1 to .5 correlation)
  – Top box and bottom box distribution normal

• Few questions were modified
  – Addressing skip patterns, response item bias, and low correlations with overall questions

These findings were discussed with experts. Consequently, survey design and content were enhanced (only Canadian questions). To view the survey, visit www.cihi.ca.
CPES-IC Pilot Test - Findings

Hospital Admission Questions (Skip questions)

- Skip questions address the two entry pathways into inpatient care via ED and direct admission and their related wait time

Survey Enhancement Post Pilot

- Formatting changes were made to place skip questions on the same page
- Changes were made to organize the flow of questions resulting in a shift in the order of the two admission questions (via ED prior to direct admission question)
- Cues refined and arrows added
## CPES-IC Pilot Test Findings

### Wait Time Questions (Correlations)

<table>
<thead>
<tr>
<th>Survey questions</th>
<th>Q21 Best to worst HCAHPS hospital rating question?</th>
<th>Q22 Would you recommend this hospital to your friends and family?</th>
<th>Q46 Overall rating</th>
<th>Q45 Overall, do you feel you were helped by your hospital stay?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q26 After you knew that you needed to be admitted to a hospital bed, did you have to wait too long before getting there?</td>
<td>-.236</td>
<td>-.272</td>
<td>-.307</td>
<td>-.321</td>
</tr>
<tr>
<td>Q28 Did you have to wait too long from the time when you first knew you needed to go to the hospital until your admission day?</td>
<td>-.127</td>
<td>-.098</td>
<td>-.071</td>
<td>-.093</td>
</tr>
<tr>
<td>Q30 From the time you arrived at the hospital, did you feel that you had to wait too long to get to your bed in the hospital?</td>
<td>-.099</td>
<td>-.120</td>
<td>-.098</td>
<td>-.078</td>
</tr>
</tbody>
</table>

### Analysis
- Q26, Q28 & Q30 were negatively worded (directionality) in the questionnaire.
- Q26 had 12% missing, Q28 and Q30 had low correlations with the overall questions.

### Enhancements
- Q28 and Q30 were dropped from the questionnaire.
- Q26 answer scale was changed:
  - Replaced (not at all, partly, quite a bit, completely) with (Yes/No).
CPES-IC Pilot Test Additional Findings

- Items dropped from the survey
  - Patient Safety Questions
  - Questions with non-applicable responses were dropped

- Items reworded
  - Demographic question
Three methods were used to explore preliminary patient experience indicators:

<table>
<thead>
<tr>
<th>Analysis Method</th>
<th>Results</th>
<th>Comment</th>
</tr>
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<tbody>
<tr>
<td><strong>Correlation analysis</strong></td>
<td>High correlation (&gt;0.5) between 5 Canadian questions with HCAHPS measures; but face validity is weak because aligned to multiple HCAHPS measures. Low correlation (&lt;0.5) between 7 Canadian questions with HCAHPS measures.</td>
<td>Results provided little guidance regarding 1:1 relationship between Canadian questions and HCAHPS measures. This method suggests that 7 Canadian questions are stand-alone items.</td>
</tr>
<tr>
<td><strong>Factor analysis</strong></td>
<td>Over-emphasis on nursing care measure</td>
<td>Unable to measure specific aspects of nursing care such as medication and pain management, and responsiveness of staff.</td>
</tr>
<tr>
<td><strong>Index model of Canadian items</strong></td>
<td>Canadian questions align to Canadian domains</td>
<td>Potentially this method can be used to determine measures related to Canadian domains.</td>
</tr>
</tbody>
</table>
CPES-IC Pilot Test—Conclusions

• Reinforced the quality of the survey tool
• Offered opportunity to enhance survey design, flow and content
• Survey pilot data provided preliminary analysis to derive at CPES-IC measures
• Established pre-implementation knowledge base
Next Steps

• Implementation
  – Alberta, British Columbia (BC), Manitoba and Ontario implementing CPES-IC in 2014-2015

• Development of Patient Experience Collection and Reporting System

• Development of Core Set of Measures and Comparative Reports

• Additional testing:
  – Conduct mode testing in 2014 and field test in 2015 with operational database

• Explore opportunities for linking patient experience data to administrative data
Questions?

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