

A Unique Model of Knowledge Translation for Introducing Hospital Standardized Mortality Ratios (HSMR) in Canada

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About CIHI

- The Canadian Institute for Health Information (CIHI) collects and analyzes information on health and health care in Canada and makes it publicly available.
- Canada's federal, provincial and territorial governments created CIHI as a not-for-profit, independent organization dedicated to forging a common approach to Canadian health information.
- CIHI's goal: to provide timely, accurate and comparable information. CIHI's data and reports inform health policies, support the effective delivery of health services and raise awareness among Canadians of the factors that contribute to good health.



What is HSMR?

- Hospital Standardized Mortality Ratios (HSMR) track **changes** in hospital mortality rates in order to:
 - Reduce avoidable deaths in hospitals
 - Improve quality of care
- Used in hospitals worldwide (i.e. UK, Sweden, Holland and US)
- Canadian version developed by CIHI at the request of hospitals and patient safety leaders



What is HSMR? (cont'd)

$$\text{HSMR} = \frac{\text{Observed deaths}}{\text{Expected deaths}} \times 100$$

- Based on diagnosis groups that account for 80% of deaths
- Adjusted for factors affecting mortality (e.g. age, sex, length of stay)



Key Objectives for Introducing HSMR in Canada

- Develop methodology useful in Canadian context
- Validate methodology
- Public reporting
- Develop and implement KT process prior to release

* No surprises to stakeholders! *



Key Challenges for Introducing HSMR in Canada

- New to Canada
- Mortality is a sensitive subject
- Hospital-level reporting
- HSMR is not a ranking tool



What is Knowledge Translation (KT)?

Knowledge translation is a dynamic and iterative process that includes synthesis, dissemination, exchange and ethically sound application of knowledge to improve the health of Canadians, provide more effective health services and products and strengthen the health care system.

- *Canadian Institutes of Health Research*



HSMR Project: KT Process

- 1) Methodology development
- 2) Validation phase
- 3) Pre-release communication
- 4) Public release



Four Key Elements

- Multi-level stakeholder engagement
- Multi-mode linkage and exchange strategy
- Sustained and evolving stakeholder engagement
- Extended interaction with stakeholders



(1) Methodology Development & (2) Validation Phase

- Engaged experts in the field (Summer 2005):
 - Pioneer Group hospitals
 - Canadian experts in quality measurement/patient safety
 - Sir Brian Jarman
- Invited eligible acute care hospitals/health regions to participate in validation of methods & results (October 2005)
 - Confidential reports sent to CEOs on a quarterly basis for validation purposes
 - Ministries of Health also involved



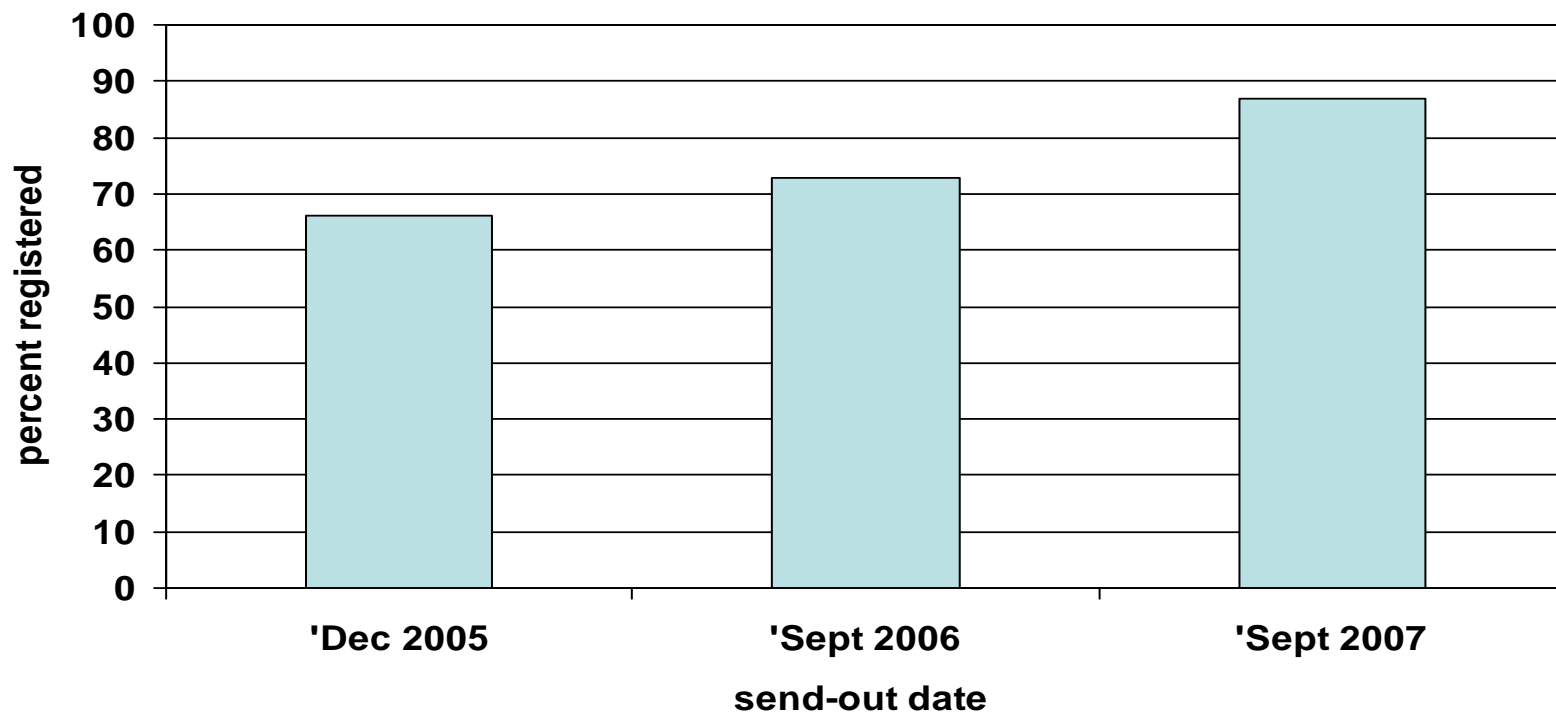
(1) Methodology Development & (2) Validation Phase (cont'd)

- Ongoing validation process (completed Oct 2007)
- Updated quarterly reports & refined methodology based on feedback
- Engaged different levels of staff from hospitals, health regions, Ministries of Health
- Expert panel review

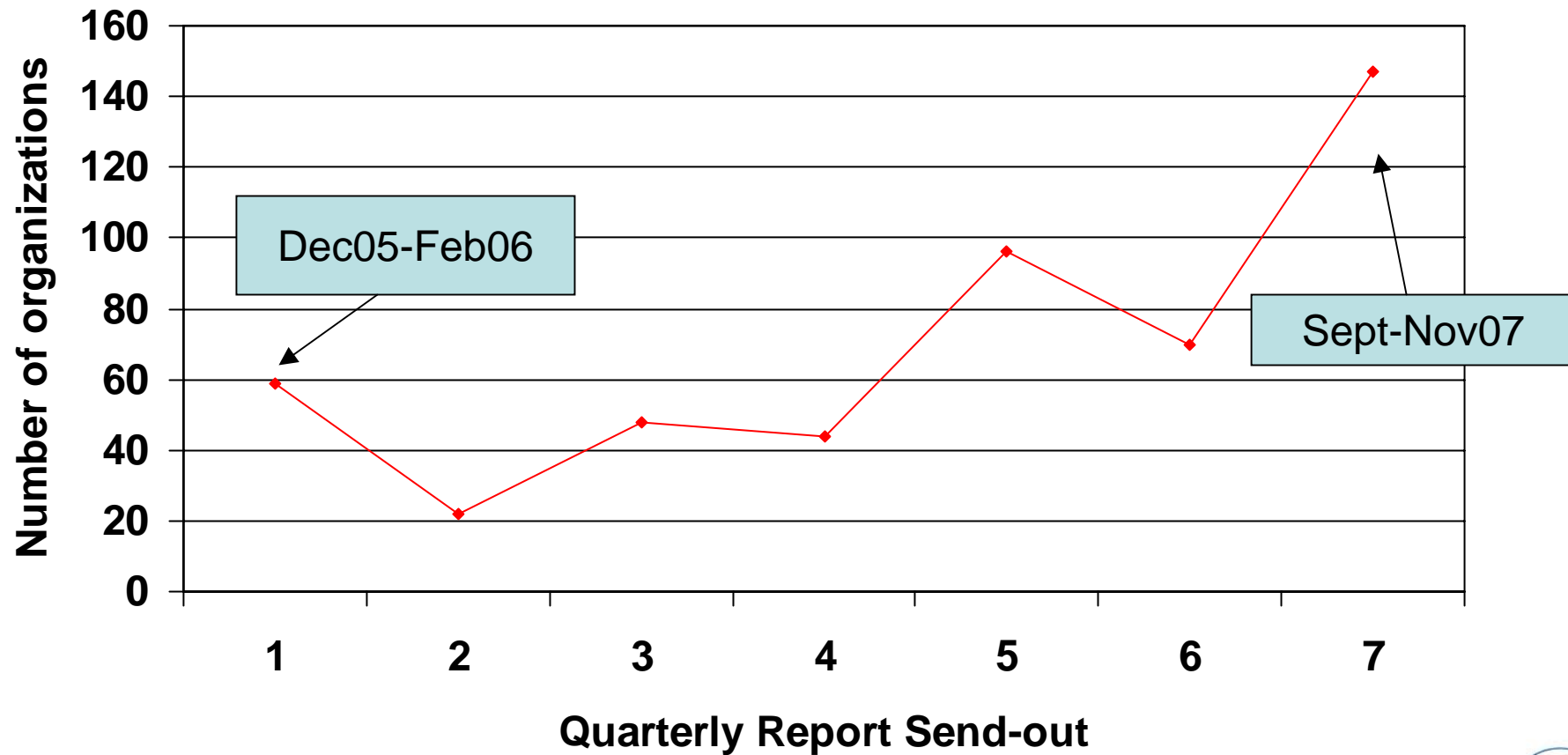


Participation

Percentage of organizations eligible to receive quarterly reports registered in validation process



HSMR Inquiries Leading Up to Nov 2007 Public Release



Impact of Engagement During Validation Phase

- Relationship building
- Acknowledge contributions of stakeholders
- Felt like they were part of the development process
- Broad consultation, including many regions across the country, provided many perspectives



(3) Pre-Release Communication

Multi-mode strategy:

- Presentations, letters, toolkit
- HSMR email
- Website resources
- Analytical tools such as “HSMR Case Validation Tool”
- Workshops
 - E.g. BC HSMR workshop



(3) Pre-Release Communication (cont'd)

Multi-mode strategy (continued):

- Web meetings
 - 2 sessions aimed at decision support staff to review methods & analysis
 - 2 sessions aimed at senior health care leadership to provide high-level overview
 - 2 sessions to review public release plans
- Personal contact with opinion leaders and partnerships with other organizations
 - E.g. Safer Healthcare Now, OHA, Quality Councils



(3) Pre-Release Communication (cont'd)

Multi-level strategy:

- Present at national & regional events
- Provide analytical support for hospitals/regions (e.g. data requests, supplementary analyses)
- Connect with patient safety experts & key stakeholder (e.g. Halifax 2007 conference, National professional association briefing)
- Hold a communications roundtable
 - national teleconference aimed at health system communications staff to review release plans/provide Q & A support



(4) Public Release

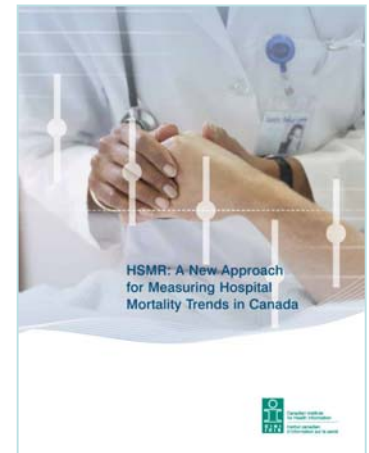
Nov. 29 – HSMR Release Media Event at University Health Network, Toronto, Ontario

HSMR telephone line day of release:

- No calls from hospitals/regions

Media coverage:

Time Period	Print articles	Broadcast mentions	e-mentions
Nov 29, 2007	52	64	12
Up to Jan 2008	160	102	53



Lessons Learned: *What Worked*

- Internal collaboration and teamwork
- Regular communication with stakeholders
- Ongoing feedback throughout validation process
- Learning from the experts
- Going out into the field
- Extensive consultation/communication efforts set the stage
- Transparency on method development and reporting process



Lessons Learned: *What Could Be Improved*

- Getting the right audience for information /education sessions
- Providing more advance notice for information /education sessions
- Improve clarity of reporting HSMRs for small hospitals



Next Steps/Future KT activities:

- Ongoing reporting
- Continue to provide technical support to hospitals/regions
- Develop further analytical tools to support organizations in understanding and using their HSMR



Next Steps/Future KT activities:

(cont'd)

- Outreach activities:
 - Update website
 - Workshops
 - e-learning modules

- Learning from the experiences of hospitals and health regions about:
 - Lessons learned
 - Improvement efforts
 - Resources to build capacity for quality improvement efforts



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Thank you.

Questions?

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