CANADIAN PARTNERSHIP AGAINST CANCER | PARTENARIAT CANADIEN CONTRE LE CANCER

Canada Health Infoway | Inforoute Santé du Canada

# Electronic Synoptic Surgical Reporting –Implementation and Benefits Evaluation


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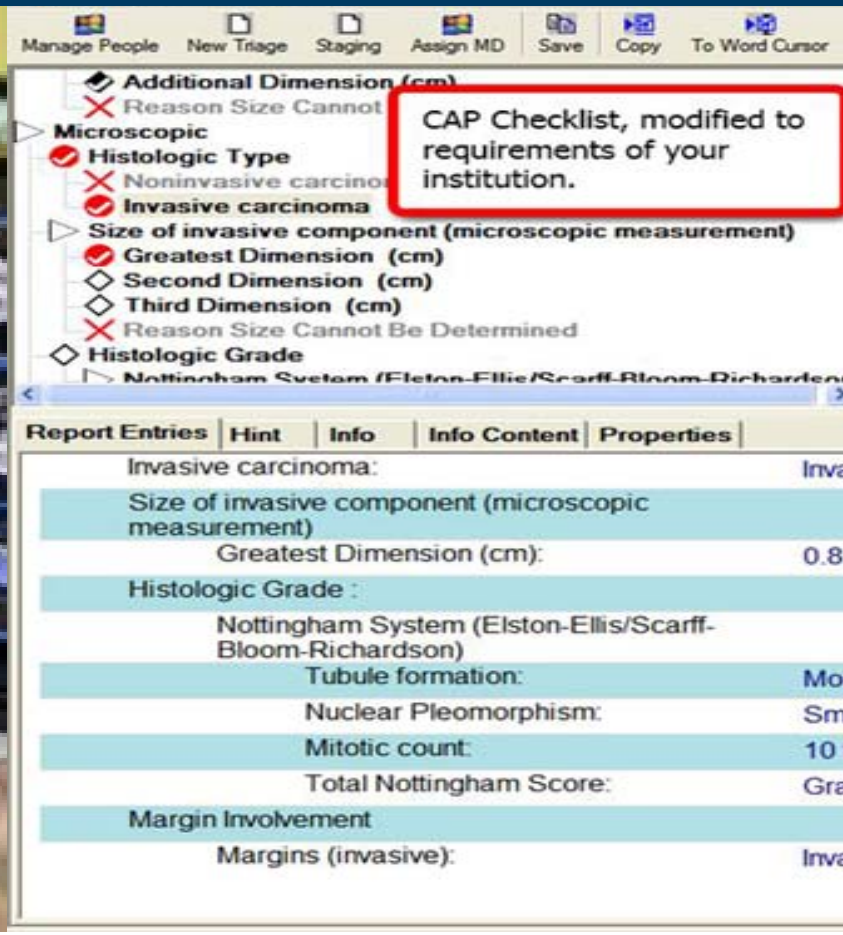
# Presentation Overview

- Background
- Pan-Canadian scope
- Method
- Key findings
- Clinical value
- Opportunities
- Future direction

# Accelerating Synoptic Reporting in Canada



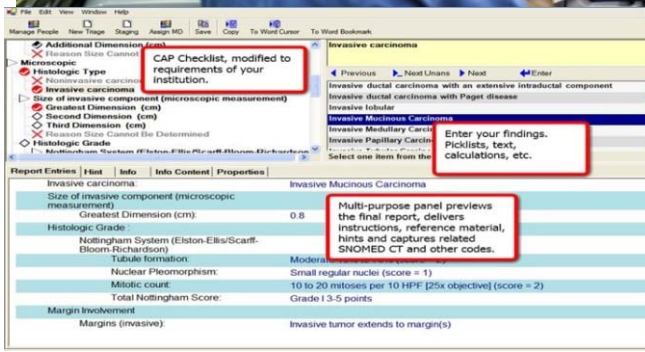
# Synoptic Reporting

## e.g. Structured Surgical Report

- Electronic capture of clinical information/documentation in a ***standardized, structured*** way
- Incorporates evidence-informed best practices and ***clinically validated*** data elements to facilitate clinical decision making to improve patient outcomes
- Enables clinicians to gain timely access to ***concisely-reported and clinically-relevant*** information

**Pre**


**Post**



# Synoptic Reporting - Infoway Projects (2014-2015)

Infoway invested with partners in synoptic reporting initiatives to establish pan-Canadian templates and demonstrate emerging benefits from early adoption

Screening

Surgery

Care Transition

Pathology

# Background

- Surgical information narrated, traditionally
- Synoptic surgical reporting (SSR) captures structured, evidenced-based operative data electronically
- Piloted in 2008, in 5 provinces (4 cancer surgery disease site)
- Pan-Canadian implementation in 4 provinces for eight cancer surgery sites
  - Breast, colon, rectal, ovarian, endometrial, thyroid, lung and prostate—60% of incident cancer cases in Canada
  - Advance the development and implementation of pan-Canadian standards for surgical cancer reporting and promote adoption
  - Facilitate clinical decision-making and improve outcomes

# Pan-Canadian Scope –SSR

## Implement and evaluate benefits

With funding from Infoway and through engagement with surgical clinical leaders and provincial partners:

- Integrated clinical guidelines and content standards into the development of data collection tools
- Alberta, Manitoba, Ontario and Nova Scotia used electronic surgical synoptic reporting
- Identified and measured indicators to support outcomes reporting at pan-Canadian and provincial levels
  - Areas: quality, access and productivity

# Method

- The Benefits Evaluation Framework, by Infoway, guided the data collection and analysis
- Data collection: October 2013 – April 2014
  - Clinicians collected surgical care data for 8 disease sites electronically
  - SNOMED CT International (v.2014) supported data extraction to analyze and measure clinical outcomes indicators
- Study design: mixed methods
  - Quantitative—descriptive statistics
    - Surgical care synoptic reporting—data on process and outcomes of cancer operations
    - Survey data: clinician satisfaction levels
  - Qualitative
    - Interviews and focus groups

# Key Findings

- Transitioning from narrative to synoptic surgical reporting: surgeons' satisfaction levels

| Indicator | Data accuracy | Data relevance | Data availability | Data timeliness | Data comprehensive | Ease of use | Improves patient care | Expedites clinical decision |
|---|---|---|---|---|---|---|---|---|
| Satisfaction scores (%) | **92%** | **89%** | **86%** | 71% | 68% | **86%** | 70% | 52%* |

| Indicator | Security | Coordinates care with health care team | Fits work flow | Improves patient safety | Discharge summary efficient |
|---|---|---|---|---|---|
| Satisfaction scores (%) | 89% | **78%** | 75% | 52%* | 71% |

* Score 52% reflects respondents' belief that their current practice, prior to synoptic reporting, was already at an acceptable level

# Key Findings

Discrete, consistent and comprehensive surgical operative data:

- 2941 synoptic surgical reports and 729 discharge summaries

| Disease site | Breast | Colon | Rectal | Ovarian | Endometrial | Thyroid | Lung | Prostate |
|---|---|---|---|---|---|---|---|---|
| Discrete data collection | 1702 | 168 | 123 | 185 | 149 | 392 | 104 | 118 |

- **Impact to clinical care and patient care**
  - Synoptic surgical reporting improves data timeliness and availability (82% - 100%), enables clinical investigations and informs treatment plans for 60% of incident cancer cases in Canada

- Turnaround times for discharge summaries to reach patient charts

| Median | Baseline (narrative) | Electronic Synoptic (discrete data) |
|---|---|---|
| 1.0 days | 15% of discharge summaries | 74.5% discharge summaries |

# Clinical Use and Value of SSR data

**Breast Cancer**

The proportion of patients with stage I or II breast cancer who underwent sentinel lymph node (SLN) biopsy

| **Indicator: Percent of stage I or II breast cancers undergoing sentinel lymph node (SLN) biopsy** | | | |
|---|---|---|---|
| Provinces | Total number of patients surgically treated for clinical stage 1 or 2 breast cancer | Sentinel lymph node biopsy done on patients who were surgically treated for clinical stage 1 or 2 breast cancer | Percent (%) |
| ***Provinces Combined*** | ***527*** | ***378*** | ***71.1*** |
| AB | 406 | 278 | 68.5 |
| MB | 28 | 24 | 85.7 |
| ON | 14 | 9 | 64.3 |
| NS | 79 | 67 | 84.8 |

# Clinical Use and Value of SSR Data

**Prostate Cancer**

The proportion of patients with complete removal of seminal vesicles, associated with improved outcomes

| **Indicator: Percent Complete removal of seminal vesicles** | | | |
|---|---|---|---|
| Provinces | Total patients who underwent surgery | Number of patients with complete seminal vesicle dissection | Percent (%) |
| **Provinces Combined (AB, MB, ON)** | **137** | **133** | **97.1** |

# Clinical Use and Value of SSR data

**Thyroid Cancer**

The proportion of patients who waited > 90 days for a surgical treatment

| **Indicator: Percent of patients waited >90 days for surgery, from the date the decision to treat was made to the date of surgery** | | | |
|---|---|---|---|
| Province | Total patients who underwent thyroid surgery | Number of patients who waited > 90 days for surgery | Percent (%) |
| ***Provinces combined*** | ***305*** | ***88*** | ***28.9*** |

# Opportunities: Expand SSR Adoption

- Leverage leading practices and clinical leaders across the country via a “network approach”
- Pan-Canadian endorsement—surgical synoptic reporting tools and indicators
- Governance
  - Content, informatics and technical standards
  - Implementation, change management and capacity building
- Provincial priorities and funding support:
  - IT infrastructure and support
  - Communication and education to manage change

# Summary

Users of the surgical synoptic reports reported…

- Positive clinical impact—improved quality
  - increased awareness of relevant guidelines, safety, quicker access to reports by health care teams
  - Results in better surgical care and is cost effective
  - Identified treatments that have better outcomes
  - Improved ability to analyze outcomes and compare nationally

# Future Direction –Build on the Success

The Partnership is working with a number of jurisdictions and clinicians:

- Measure a priority set of clinical indicators to further demonstrate the value of electronic synoptic surgical reporting
- Endorsement and adoption strategy for standards, indicators and reporting

# Questions?

Visit us
http://stg.cancerview.ca/cv/portal/Home/TreatmentAndSupport/TSProfessionals/TSDiagnosisTreatment/SynopticReportingMS/SRSurgery?lang=en

Email us surgery@partnershipagainstcancer.ca