Canadian Partnership Against Cancer
Forum on Surgical Synoptic Reporting

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E Tamano L Zitzelsberger C Heick
L Fairclough G Browman and Canadian Surgeons
31/01/11, Toronto
Presentation Objectives

• Describe the amazing success story of the pan Canadian CPAC Synoptic Reporting Tools Project, a giant leap forward in knowledge management

• Identify the enormous value of the operative synoptic report to generate relevant and efficient real time outcomes for the patient, the surgeon, and the health care organization

• Identify the business case supporting adoption of synoptic reporting as a standard for cancer surgery reporting and indeed ultimately all of surgery
Extensive literature identifies that outcomes of surgically treated cancer patients are significantly linked with the quality of surgery particularly as it relates to the adherence to guidelines. Incorporating guidelines in cancer surgical treatment increases survival by 10%, decreases morbidity by 30%, costs by at 20 to 30% and resource utilization by 25%.
## Effect of Guidelines Introduction in 1998 on Surgical Treatment of 7022 Breast Cancers in Manitoba

<table>
<thead>
<tr>
<th></th>
<th>1995</th>
<th>1998</th>
<th>2003</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axillary Dissection</td>
<td>89%</td>
<td>82%</td>
<td>87%</td>
<td>NS</td>
</tr>
<tr>
<td>Breast saving Surgery</td>
<td>40%</td>
<td>52%</td>
<td>55%</td>
<td>NS</td>
</tr>
<tr>
<td>Adequacy Axillary Dissection</td>
<td>26%</td>
<td>32%</td>
<td>26%</td>
<td>NS</td>
</tr>
</tbody>
</table>

Latosinsky et al. 2007
The electronic health record could be far more than a static ie view only repository of health information.

By creating a synoptic structured operative record that could be digitized and accessed on the WEB it would allow point of care entry throughout Alberta.

This provided the missing link for surgeons to generate outcomes so that one could analyze the complex interactions of biology of disease and surgical interventions on a real time basis.
A synoptic report is a structured abstract employing key words to record clinically relevant elements.
The operative procedure is the cornerstone of any quality assessment of surgical outcomes. It represents the crucible in which the surgeon’s judgment and skills is distilled, within the context of the patient’s health, the patient’s values, biology of disease, and resources at hand.
(Treatments for Breast Cancer)
Contraindications

* Contraindications to radiotherapy?
  - Yes
  - No

If yes, specify:

* Patient a candidate for breast-conservation surgery? (NCCN Guideline)
  - Yes
  - No

Why/Why not candidate for breast conservation:

Specify Other:

* Size of Breast:
  - Small (A)

* Method of detection
  - Diagnostic imaging

* Palpable
  - Yes
  - No

* Can be seen on mammogram?
  - Yes
  - No
Implicit Guidelines Embedded
Summary for Treatments for Breast Cancer

Breast Cancer Template

Date of Surgery: 2006-May-11
Was surgery delayed for any reason?: No delay
Were any elective patients bumped to complete this surgery?: No
Indicate Surgery: Left Breast

Preoperative Assessment

Past Personal History: None

Preoperative Assessment cont'd

Genetic testing: None
Current Diagnosis: Invasive left
Contraindications to radiotherapy?: No
Patient a candidate for breast conservation surgery?: Yes
Size of Breast: Large (C)
Method of detection: Diagnostic imaging
Palpable: No
Can be seen on mammogram?: Yes
Preop Biopsy:  Core Biopsy/Mammatome

TNM: Unifocal
Size of Tumor (cm): 1-1.9

Palpable Lesion

Distance from Nipple: Peripheral
Clock position: 8, 9

Clinical Axillary Node Status: Negative
Other Nodes: None

Preop Treatment

Preoperative Treatment: No

Metastatic Workup

Metastatic work up: negative
Tests done: Bloodwork, CXR

Breast Surgery

Breast surgery performed: Breast Conservation

Breast Conservation

Indications: Therapeutic
Specify Breast: Left Breast
Needle localization: Yes
If yes, specimen mammography?: No

Re-excision: Yes
Specify margin re-excised: Inferior
Margins re-checked by pathologist: Yes
Centimeters clinically negative margin: >1
Clips in segmental site: No

Nipple removed: No
Skin excision with specimen: No
Depth of resection: To Fascia
Margins checked by pathologist: Yes
If yes: Positive
Lymph Node Surgery

Lymph Node Surgery: Sentinel Node

Uni Lateral Sentinel Node and Axillary Node Dissection

Preop Lymphoscintigraphy: Yes
Number of nodes seen (specify): 1
Site of nodes: Axilla
Dye localization used: Technetium
Sentinel Nodes: clinically positive
Node 1: radioactive
counts ex vivo: 1708
Intraoperative Pathology Assessment?: Yes
Intraoperative Path Assessment: Method: Frozen section
Result: Negative
Comments: Mobilized lateral breast flap to fill in large defect 8 by 8 cm

Closure

Closure by plastics?: No
Simultaneous contralateral surgery: None
Drains site:: None
Blood Loss (cc), specify:: 50
Blood replaced: No
Incision Closure: skin stitches buried, use of deep sutures
Sponge count completed and correct: Yes
Needle count completed and correct: Yes
Patient Status: stable
Unit transferred to:: Recovery room
Dressing applied:: Yes

CSA
Daily aggregate and personal outcomes reporting
### Breast Conservation Surgery

**Outcomes Report - Data as of 04JUN2009**

<table>
<thead>
<tr>
<th></th>
<th>Provincial 01APR2008 - 31MAR2009</th>
<th>Mean(%) ± S.D. 01APR2008 - 31MAR2009</th>
<th>Personal 01APR2008 - 31MAR2009</th>
<th>Provincial Upto Date</th>
<th>Mean(%) ± S.D. Upto Date</th>
<th>Personal Upto Date</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Invasive: # Cases</strong></td>
<td>1270</td>
<td>68.7 ± 16.6</td>
<td>70.9 ± 14.4</td>
<td>14</td>
<td>1792/2756 (65.0%)</td>
<td>52/72 (72.2%)</td>
</tr>
<tr>
<td># Candidates for BCS</td>
<td>815/1270 (64.2%)</td>
<td>11/14 (78.6%)</td>
<td>1359/1792 (75.8%)</td>
<td>72</td>
<td>72.8 ± 21.3</td>
<td>44/52 (84.6%)</td>
</tr>
<tr>
<td># Received BCS</td>
<td>603/815 (74.0%)</td>
<td>10/11 (90.9%)</td>
<td>464/712 (65.2%)</td>
<td></td>
<td>16/22 (72.7%)</td>
<td></td>
</tr>
<tr>
<td><strong>DCIS: # Cases</strong></td>
<td>335</td>
<td>74.0 ± 17.9</td>
<td>71.9 ± 17.9</td>
<td>22</td>
<td>81.1 ± 19.6</td>
<td></td>
</tr>
<tr>
<td># Candidates for BCS</td>
<td>208/335 (62.1%)</td>
<td>5/6 (83.3%)</td>
<td>16/22 (72.7%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td># Received BCS</td>
<td>161/208 (77.4%)</td>
<td>4/5 (80.0%)</td>
<td>362/464 (78.0%)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Evaluation of the Narrative Surgical Record

- Narrative reporting is unstructured and is missing over 50% of required information critical to subsequent care documented in many tumor site including gallbladder, thyroid, rectal, pancreas and breast cancer.
- View only text 1000 to 2000 words.
- Minimal to no quality check - rarely read by surgeon or by subsequent consultants.
- Minimal education value for the resident.
- Dictation often delayed after procedure and turn around ranges from an average of 15 to 90 days.
Synoptic Reporting Attributes

• Point of care entry by primary provider
• Electronic signature results in instant repository of report – path, ward, med records, cancer centre, referring Dr.
• 100% of mandatory data recorded
• 91% of records were completed in 1 hour and 97% in 1 day
• Median entry time for 600 reports < 5 minutes
• Saves multiple care providers’ time reading and interpreting document
• Elimination of transcription - 12 million words in Alberta per year and 250 million in Canada
• Real time outcomes
• Expanded capture of information about the preop assessment such as resource utilization, decision making, staging, patient function, QOL that is not captured in a standard report
Economic Benefits of Synoptic Operative Reporting

- Transcription  Manitoba and Alberta - $50 to $80
- Does not include corrections required in 10% of records
- Facilitates record accession by physicians nurses cancer centers, hospital , and registry
- Facilitates analysis of records by health care personnel- family physicians and radiation and medical oncologists , nurses, dietitians, physiotherapists, stomal therapists, psychosocial, health records, 2 minutes vs 5 to 20 minutes
- Estimate overall benefits of $100 to $150 per record
## Systems Measures of Breast Cancer Care in Alberta

<table>
<thead>
<tr>
<th>Region</th>
<th>Overall</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMI &gt;30</td>
<td>12%</td>
<td>9%</td>
<td>15%</td>
<td>8%</td>
<td>12%</td>
<td>14%</td>
</tr>
<tr>
<td>Stage 4</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>2%</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>Surgery Wait Times</td>
<td>37 days</td>
<td>44</td>
<td>29</td>
<td>38</td>
<td>38</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>2010 03</td>
<td>Total 2010 10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>---------</td>
<td>---------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Breast Cancer patients</td>
<td>1501</td>
<td>4734</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall rate BCS</td>
<td>52%</td>
<td>52%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Candidates for BCS</td>
<td>62%</td>
<td>64%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Received BCS</td>
<td>78%</td>
<td>77%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reconstruction rate</td>
<td>5%</td>
<td>5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Changing Patterns in the Treatment of Rectal Cancer in Alberta

<table>
<thead>
<tr>
<th>Year</th>
<th># Pts</th>
<th>APR %</th>
<th>TME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996-97</td>
<td>601</td>
<td>43%</td>
<td>20%</td>
</tr>
<tr>
<td>2003</td>
<td>407</td>
<td>35%</td>
<td>59%</td>
</tr>
<tr>
<td>02 2009</td>
<td>387</td>
<td>24%</td>
<td>98%</td>
</tr>
</tbody>
</table>
Initiation of the CPAC Synoptic Reporting Tools Project

• National consensus forum on synoptic surgical and pathology reporting Toronto 05/2007 – enthusiastic support for a pan Canadian project
• Surgical working group was convened to identify surgeon leaders - P Ghatage, R Nason, JF Ouelette, G Porter, B Rosen, A Smith - and to submit potential projects Toronto 09/2007
• Project plan submitted 11 2007 and approved for funding Banff 02 /2008
• National forum on IT issues- Montreal 04/2008
Vision

Synoptic reporting should be the national standard of data capture for surgery and pathology to optimize cancer outcomes

CPAC  Proposed Canadian Standard --- Infoway
National Synoptic Reporting Tools

Project Objectives

A functioning synoptic reporting system in multiple urban and rural centres

- 5 Provinces - Alberta, Manitoba, Ontario, Quebec, Nova Scotia
- 4 templates breast, colorectal, ovarian and create a new head and neck Websmr template, convert the E ovarian OR report to a synoptic reporting format
- Develop provincial and pan Canadian PIA
- Explore the potential for a national data base and national infrastructure for a Surgical Standards Committee
SRTP Deliverables

• Phase 1 - Create a Pan Canadian network for interprovincial collaboration in synoptic reporting tools development which included hiring and training support staff in each province and implement national tumor groups to standardize the 3 surgical templates – completed 09 2008

• Phase 2 – Implement 3 shared synoptic surgical templates utilizing the WEB SMR and E Ovarian software platforms, standardize existing surgical templates and create and implement a new template with a national tumor group - completed 06 2010

• Phase 3 – Develop common outcomes data that can be used to monitor and compare cancer surgical reporting across jurisdictions – pilot demonstration successful 10 2010
Head and Neck Template for Oral Cancer

- Pan Canadian clinical experts meeting 02 2009 in Winnipeg
- Contributors General and ENT surgeons
- New template developed based on draft by R Nason and Alberta modified delphi methodology
- Completed and in production 15 06 10
- Approved by the national Head and Neck Society
- Adopted in 3 provinces 1 2011
National Development

Implemented WebSMR in % provinces as a result of the Canadian Partnership Against Cancer’s Synoptic Reporting Tools Project

<table>
<thead>
<tr>
<th>Technology / Tumour Group</th>
<th>AB</th>
<th>MB</th>
<th>ON</th>
<th>QC</th>
<th>NS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>WebSMR</td>
<td>WebSMR</td>
<td>WebSMR</td>
<td>WebSMR</td>
<td>WebSMR</td>
</tr>
<tr>
<td>Colorectal</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Breast</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Head and Neck</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Ovarian</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1 – Synoptic Reporting Pilot Projects in 4 Provinces (all “live” as of Sept 2010)
<table>
<thead>
<tr>
<th>Province</th>
<th>Date</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nova Scotia</td>
<td>09 2010</td>
<td>177</td>
</tr>
<tr>
<td>Ontario Sunnybrook</td>
<td>09 10</td>
<td>70</td>
</tr>
<tr>
<td>Ontario UHN and London</td>
<td>08 10</td>
<td>400</td>
</tr>
<tr>
<td>Quebec</td>
<td>09 2009</td>
<td>120</td>
</tr>
<tr>
<td>Manitoba</td>
<td>07 2010</td>
<td>402</td>
</tr>
<tr>
<td>Alberta</td>
<td>07 2009</td>
<td>4699</td>
</tr>
</tbody>
</table>
## Pan Canadian Rectal Cancer Outcomes

### CPAC 2011

<table>
<thead>
<tr>
<th>Quality Measure</th>
<th>Province 1</th>
<th>Province 2</th>
<th>Province 3</th>
<th>Province 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>No preop colonoscopy</td>
<td>4%</td>
<td>17%</td>
<td>20%</td>
<td>11%</td>
</tr>
<tr>
<td>TME</td>
<td>99%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Penetration of rectal fascia</td>
<td>19%</td>
<td>11%</td>
<td>60%</td>
<td>17%</td>
</tr>
<tr>
<td>Perforation</td>
<td>6%</td>
<td>17%</td>
<td>0%</td>
<td>6%</td>
</tr>
</tbody>
</table>
## Pan Canadian Breast Cancer Outcomes CPAC 2011

<table>
<thead>
<tr>
<th>Quality Measure</th>
<th>Province 1</th>
<th>Province 2</th>
<th>Province 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detection by patient</td>
<td>46%</td>
<td>47%</td>
<td>51%</td>
</tr>
<tr>
<td>Detection by mammograms</td>
<td>49%</td>
<td>48%</td>
<td>41%</td>
</tr>
<tr>
<td>Breast conservation *adjusted</td>
<td>78%</td>
<td>77%</td>
<td>88%</td>
</tr>
<tr>
<td>Patient Preference mastectomy</td>
<td>34%</td>
<td>8%</td>
<td>11%</td>
</tr>
</tbody>
</table>
Spin off benefits of the SRTP Project

- Documentation and testing of rigorous methodology for creating synoptic templates, validation of AB methodology
- National consensus on surgical management of 4 cancers endorsed by national organizations
- Successful sharing and implementation of other templates between provinces
- Opportunity to upgrade software to include the entire trajectory of care, care pathways – SGI
- International attention to the Canadian project in US, Europe, Asia, and Australias
- National momentum to coordinate with pathology synoptic reporting
- Opportunity to establish and standardize terminology-SNOMED CT and Medical Dictionaries
Conclusions
1. Point of care synoptic reporting for surgery is more accurate and efficient than narrative reporting allowing real time measurement of care processes and engages surgeons with outcomes feedback that are valuable for QI of the entire system.

2. It incorporates guidelines seamlessly into surgeons’ practices.

3. A number of surgical organizations across Canada have endorsed the 4 standard operative templates for reporting cancer surgery.

4. The computer generated report has immediate and significant economic benefits.
The CPAC SRTP project has confirmed that the voluntary adoption of the synoptic electronic health record can cross boundaries of medical specialties and other health care providers, 10 new IT systems, urban and rural regional jurisdictions, 5 provinces, and 2 languages.

It provides credence for adopting synoptic reporting as a new knowledge transfer standard for QI in health care.
Future Prospects

- Seamlessly include all physicians in clinical research
- Create a living laboratory of cancer biology by integrating data from surgery pathology and all cancer disciplines
- Measure new technology and treatments real time with incredibly short evaluation time frames
- Integrate the discoveries in molecular genetics to maximize personalized medicine
Future prospects

- Integrate patient generated quality of life outcomes with the choices of treatment
- Monitor resource issues across Canada
- Engage the family physician with follow up guidelines, auto recall and test ordering, end of life support, and access to specialists
- Decrease incidence of cancer, prolong survival, increase quality of life and maximize end of life care
- Establish a data base for QI for personal, provincial, Canadian, and international outcomes
In essence, synoptic reporting will become a principle tool in knowledge management in all of medicine as it has the innate property of form driving function. It provides the highest level of knowledge transfer and interoperability with the transmission of structured messages containing standardized and coded data. Canadian physicians have been the first in the world to demonstrate this in surgical reporting. We are now in position to take full advantage of our pan Canadian success.
<table>
<thead>
<tr>
<th>Region</th>
<th>All</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Preop Antibiotic</td>
<td>6%</td>
<td>5%</td>
<td>4%</td>
<td>24%</td>
<td>31%</td>
<td>37%</td>
</tr>
<tr>
<td>No DVT prophylaxis</td>
<td>11%</td>
<td>23%</td>
<td>17%</td>
<td>68%</td>
<td>4%</td>
<td>19%</td>
</tr>
<tr>
<td>Safety check</td>
<td>98%</td>
<td>98%</td>
<td>99%</td>
<td>93%</td>
<td>100%</td>
<td>98%</td>
</tr>
</tbody>
</table>
Integrated Synoptic Clinical Documentation Systems: Data Sharing
Knowledge Management Strategy

The solution to the issue of inserting quality improvement using outcomes and embedding guidelines seamlessly into every surgeon’s practice was to create a synoptic operative template that could be digitized and accessed on the WEB and the data analyzed for real time feedback.
The view only electronic health record based on static text could be transformed into a dynamic and efficient synoptic format that could dramatically improve the value for improving the delivery and quality of health care incorporating both guidelines as well as providing real times feedback to create a point of care report that replaces a narrative document represents a huge culture shift in physician practice that will be a beacon for all types of medical records particularly in the complex cancer patient
<table>
<thead>
<tr>
<th>Tumour</th>
<th>#Surgeons</th>
<th># Reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adrenal</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Appendix</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Breast</td>
<td>41</td>
<td>6290</td>
</tr>
<tr>
<td>Cervix</td>
<td>4</td>
<td>25</td>
</tr>
<tr>
<td>Colon</td>
<td>40</td>
<td>911</td>
</tr>
<tr>
<td>Gallbladder/Bile Duct</td>
<td>7</td>
<td>21</td>
</tr>
<tr>
<td>Gastric</td>
<td>12</td>
<td>64</td>
</tr>
<tr>
<td>Head and Neck</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Liver</td>
<td>7</td>
<td>334</td>
</tr>
<tr>
<td>Melanoma</td>
<td>10</td>
<td>1134</td>
</tr>
<tr>
<td>Ovarian</td>
<td>7</td>
<td>537</td>
</tr>
<tr>
<td>Parathyroid</td>
<td>6</td>
<td>108</td>
</tr>
<tr>
<td>Periampullary/Pancreas</td>
<td>8</td>
<td>235</td>
</tr>
<tr>
<td>Rectal</td>
<td>29</td>
<td>736</td>
</tr>
<tr>
<td>Retroperitoneal</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Sarcoma</td>
<td>6</td>
<td>140</td>
</tr>
<tr>
<td>Thyroid</td>
<td>18</td>
<td>1070</td>
</tr>
<tr>
<td>Uterine</td>
<td>6</td>
<td>162</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>83</strong></td>
<td><strong>11782</strong></td>
</tr>
</tbody>
</table>
Implementation

- Committed leadership
- Involvement of all affected systems
  - Medical records
  - Cancer Registry
  - PAR
  - Pathology
  - Admitting
  - OR staff
  - Physicians’ secretaries
  - Information systems
- Privacy impact agreement
- Information management agreement
- Interface with 4 IS systems
- Testing system
- Quality control of reports
Functionality of Synoptic Operative Reports for SRTP-CPAC

1. **Demographics**
   - Include postal code
   - ULI
2. **Epidemiology**
   - Risk Factors
3. **Resource Utilization**
   - Referral patterns
   - Preoperative workup
   - Waiting time delays
Functionality of Synoptic Operative Reports for SRTP-CPAC

4 Comorbidities

5 Function – quality of life
   - Body image
   - Sexual
   - Continence
   - Ambulation
   - Social

6 Symptoms and signs
Functionality of Synoptic Operative Reports for SRTP-CPAC

7 Biology – response to neoadjuvant treatments
8 Staging
  - Clinical
  - Imaging
9 Decision Making
10 Technical issues related to surgery
Functionality of Synoptic Operative Reports for SRTP-CPAC

11 Research
- Pattern of disease
- Tissue banking
- Clinical trials

12 Political
- Delays
- Regional or demographic inequalities of care or resources
Functionality of Synoptic Operative Reports for SRTP-CPAC

13 Legal components
14 Guideline access and adherence
15 Standard for operative report
16 Educational – critical components
17 Training of residents
18 Patient triage
19 Patient safety - preop checklist
20 Evaluation of Programs
- Screening – breast cancer, colorectal, prostate
- Health – obesity, BMI, diabetes, hypertension
- Measure interventions such as the impact of educational programs or of adding resources with rapid turnaround
Function within AHS

- Tumor group committees semiannual
- Outcome committee semiannual
- Educational committee ongoing
- Provincial steering committee
- Monthly reporting outcomes to EVP and VP cancer care Alberta
- Quarterly reporting to Zonal heads of surgery
- Real time sharing of data with breast health program
- Participation in data warehouse
- Provincial committee on performance measurement and reporting
Economic Benefits

• Eliminate 15,000,000 transcribed words per year
• Canada Health Infoway $1.4 million, 9 million applied for
• Canadian Partners Against Cancer 7 million – 2 million - Alberta
• Beta test site for new software 1 million
Next Steps

1. Approval by the Surgical Clinical Network to integrate with AHS health information network to transfer day to day record creation and distribution so that we can work with CDTU

2. Consider making standard synoptic reporting when templates are functional for various care processes with economic and QI justification. This is already a national proposal.

3. CSA [KNOW]
   a. Institute a standardized discharge summary
   b. Institute other surgical templates, i.e., Appendix
   c. Institute care plans and longitudinal care process measurements with new software
“There is an ulcerated tumour 4cm in diameter arising in the anterior wall of the rectum. Grossly, the resection margins appear uninvolved. Microscopic appearance: well-differentiated adenocarcinoma, broaching the muscularis propria and extending into the subserosal fat in multiple locations. In several locations there is extensive tumour necrosis and pooled mucin. The distal resection margin is approximately 2cm, the proximal resection margin is approximately 15cm, the radial margin is 0.5cm at the closest approach. Of 20 lymph nodes examined, 2 appear to be involved by adenocarcinoma.”
Synoptic Reporting - Rectal Cancer

- T stage: T3
- Radial margin: 0.5cm
- Well differentiated adenocarcinoma
- Distal margin: 2cm
- 2 of 20 lymph nodes involved
- pT3N1 (adjuvant therapy indicated)
## Decision Making for Mastectomy WebSMR 10 2010

<table>
<thead>
<tr>
<th>Invasive Breast Ca</th>
<th>716 pts 2010 03</th>
<th>Total 2268 pts</th>
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Guidelines interpretation into practice
Structured Surgical Synoptic Reporting

The development and implementation in Alberta by surgeons demonstrating voluntary adoption and transportability across multiple jurisdictions successfully completed the deliverables of a CHI funded project. The key factor for its success was the ability to provide real time feedback that can impact the quality of patient care as well as one’s practice. This work provided the stimulus for the pan Canadian SRTP and was assisted by Ontario’s E Cancer.