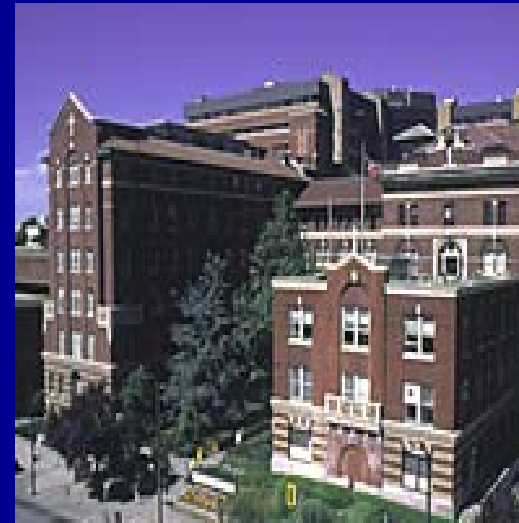


SON Research and Outcomes Evaluation Committee Report

Carl J. Brown, MD MSc FRCSC

Surgical Oncology Network, BCCA
St. Paul's Hospital
University of British Columbia
February 27, 2009



Research and Outcomes Evaluation (ROE) Committee

- Supports research and evaluation activities of the Network by providing guidance and assistance to surgeons with research and quality improvement projects

ROE Committee- Members

- Dr. Carl Brown, Chair
- Dr. Nadine Caron
- Dr. Noelle Davis
- David Gavin, Director of Data Integration, BCCA
- Dr. Andrew Gemino, Faculty of Business Administration, SFU
- Paul Mak, Outcomes Surveillance Analyst, SON
- Yasmin Miller, Committee Coordinator
- Colleen McGahan, Statistician, SON
- Dr. Sam Wiseman

ROE Project Guidelines & Application

- To assist with developing cancer surgery quality improvement projects.
- Support - research design, statistical analysis, administrative/organizational support.
- Two-stage application process:
 - Feasibility Application - reviewed by ROEC Chair and Coordinator
 - Full Proposal – for approved feasibility applications

SON-ROE Projects

- Support for Research in Surgical Oncology
 - PT Phang - Rectal Cancer Monitoring Study
 - Paul Clarkson - Sarcoma and Amputation
 - Sam Wiseman - Thyroid Cancer Pathology
 - Carl Brown - CRCOU Validation Study
 - Resident Research
 - Connie Chiu - Her-3 Expression and Breast CA

Cancer Surgery Registry



BC Cancer Agency
CARE & RESEARCH
An agency of the Provincial Health Services Authority

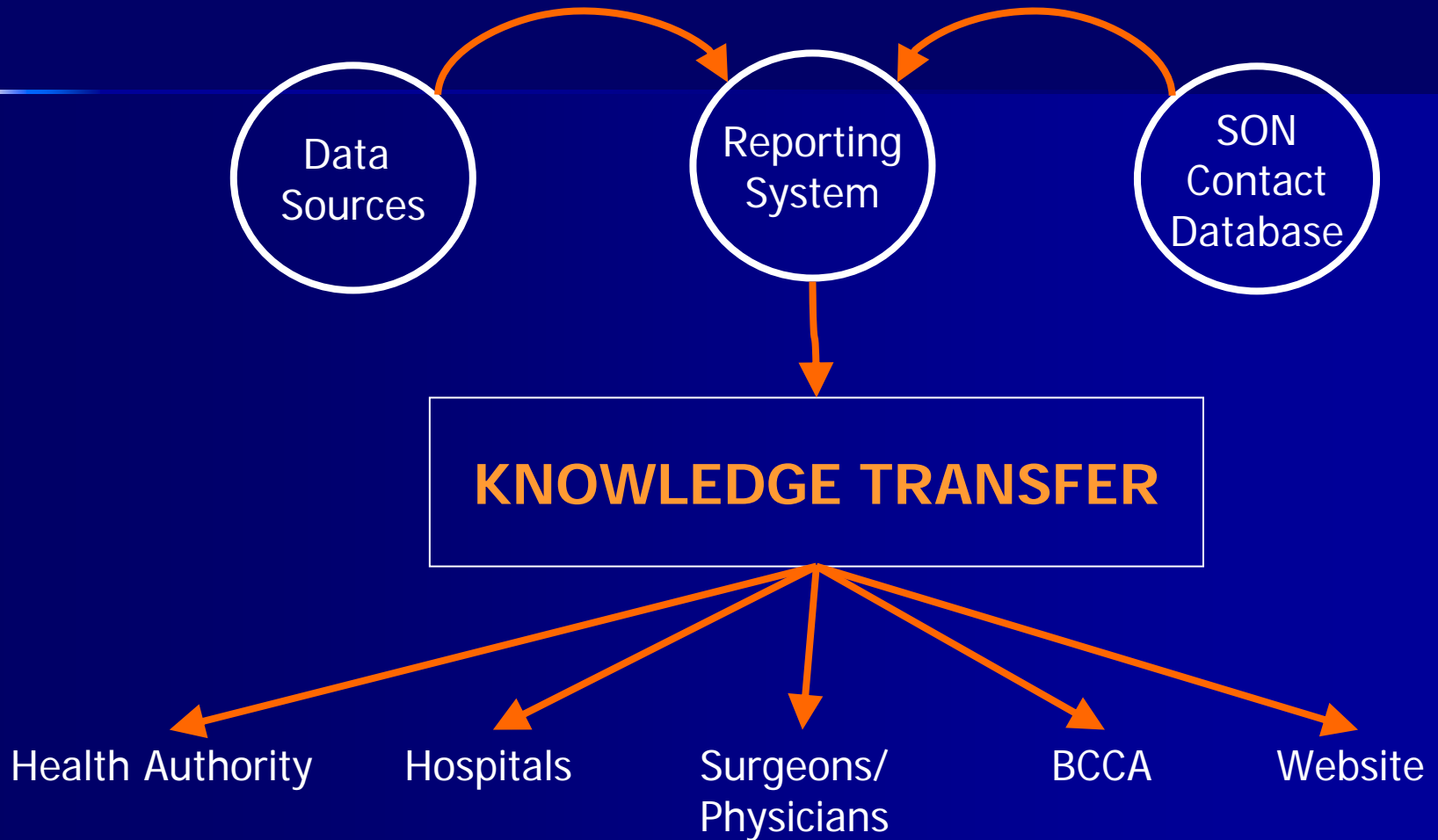


Vancouver Coastal Health
Promoting wellness. Ensuring care.

Cancer Surgery Registry

- Quality data required to identify areas where cancer surgery can be improved
- Administrative data can be one piece of the puzzle

Cancer Surgery Registry



Cancer Surgery Registry

- Canadian Institute for Health Information (CIHI)
 - Data collected regarding admission diagnosis, operative procedures, comorbid illness and some complications for each patient admitted to hospital
- Cancer Agency Information System (CAIS)
 - Data on all patients diagnosed with CA

Cancer Surgery Registry

Data Sources

CAIS		✓
Cancer Registry		✓
Rectal Cancer Outcomes Study Data		✓
Colorectal Cancer Outcomes Unit Data		✓
Breast Cancer Outcomes Unit Data		✓
CIHI	– DAD (ICD-9 1994-2002)	✓
	– DAD (ICD-10 2000 onwards)	✗
	– MSP Data	✗
	– Vital Statistics	✗
Synoptic Data	– Surgical	✗
	– Pathology	✗
	– Imaging	✗

Cancer Surgery Registry

- Legislative mandate to access data
- Comprehensive data acquisition and management proposal submitted to BC MOH (Chrystal Palaty)

Synoptic Reporting



BC Cancer Agency
CARE & RESEARCH
An agency of the Provincial Health Services Authority



Synoptic Reporting

- “Synoptic” describes a process of summarizing the important details of a report
- Pioneered in pathology
 - TNM classification
 - Important prognostic features

Synoptic Reporting

- Traditional Dictated Operative Reports
 - Official medical documentation of an operation
 - Content not standardized or regulated
 - Little or no formal teaching
 - Stanley-Brown et al. 1983

Synoptic Reporting

- Operative Report

- Patient Care
- Medico-Legal
- Research
- Quality Improvement

* Importance of accurate process data

Synoptic Reporting

- Edhemovic et al. 2004
 - Review of OR report data in 40 randomly selected rectal cancer patients
 - 70 data points evaluated
 - Completeness of Data:
 - Identifying Data - 69-97%
 - Surgical Data - 34-48%
 - Preop Data - 0-25%

Synoptic Reporting

- Scherer et al. 2003

Research Data Form vs. Dictation

- Similar for identifying & categorical data
- Differences noted in quantitative & qualitative data

Clinical & administrative benefits of template driven documentation

- Marril et al. 1999
- van Walveran et al. 1999
- de Oria et al. 2002

St. Paul's Hospital Synoptic Report - Rectal Cancer Surgery

ST. PAUL'S HOSPITAL
PROVIDENCE HEALTH CARE

Colorectal Surgery

About Colorectal Surgery Info for Patients + Families Info for Health Professionals Info for Surgical Trainees

Referring Patients
Guidelines + Practice Parameters
Educational Opportunities
Synoptic Operative Reports

Search >>

Colorectal Surgery
At St. Paul's Hospital

Surgeons with subspecialty training work in collaborative patients with colorectal diseases at St. Paul's Hospital, a University of British Columbia teaching hospital, St. Paul's Hospital is a leading center for colorectal surgeons and is a leader in research and treatment of patients with colorectal diseases.

St. Paul's Hospital Synoptic Report - Rectal Cancer Surgery



About Colorectal Surgery



Referring Patients

Guidelines + Practice Parameters

Educational Opportunities

Synoptic Operative Reports

Rectal Cancer Surgery – Standardized Dictated Summary Guide

1. Procedure

1. Subtotal Mesenteric Excision (sTME) with Colo-Rectal Anastomosis
2. Total Mesenteric Excision (TME) with Colo-Anal Anastomosis
3. Hartman Procedure with TME and Stapled Anorectal Junction
4. Hartman Procedure with (sTME) and Stapled Rectum
5. Abdominoperineal Resection with Permanent Colostomy
6. Total Proctocolectomy
7. Diverting Loop Colostomy (no resection)
8. Diverting Loop Ileostomy (no resection)

2. Technique: Laparoscopic (no abdominal incision)
Laparoscopic Assisted
Laparoscopy Converted to Open
Open

3. Diverting Ileostomy: Yes
No

4. Height of Tumour (cm from anal verge on rigid or flex sig)

5. Height of Anastomosis (cm from anal verge on rigid sig in OR)

6. Anastomosis: None
Stapled
Handsewn

7. Reconstruction: None
Straight Anastomosis

St Paul's Hospital - Rectal Cancer Synoptic OR Report

23-Mar-07 1427 Operative Procedure

ST. PAUL'S HOSPITAL
1081 Burrard Street
Vancouver, B.C. V6Z 1Y6
(604) 682-2344

PROCEDURE REPORT

Name [REDACTED] DOB [REDACTED]
Care ACUT Ward 10A
Admit 22/03/2007 Discharge

PHN [REDACTED] Pt Phone

Date of Procedure: March 22, 2007 Performed by: D

Preoperative Diagnosis: Malignant rectal polyp.

Postoperative Diagnosis: As above.

Operation Performed: MIS assisted low anterior resection and c

PREAMBLE:

[REDACTED] is a very pleasant 52-year-old gentleman who w
Dr. Enns to have a mid rectal polyp. An excision of the polyp n
with lymphovascular invasion. Pathology of this was reviewed
and they agreed with the initial assessment. The risks, benefits
surgery were explained to [REDACTED] and he agreed to th

PROCEDURE:

The patient was prepped and draped in lithotomy positio
was applied. A supraumbilical 10 mm incision was made. Care
down through the abdominal fascia. A 10 mm Hassan port was
lower quadrant, 5 mm right upper quadrant and 5 mm left lower
inserted under direct visualization. A full abdominal laparoscop
metastatic lesions. The sigmoid colon was elevated and the inf
was dissected from a medial approach. The left lateral ureter w
this dissection. The IMA was isolated and clipped three times p
and transected. I then carried out a lateral mobilization of the si
pericolic gutter and careful to preserve the ureter throughout the
continued this dissection circumferentially around the rectum dc
Once this was nearly complete, we elected to create the lower m

SUMMARY:

1. Procedure - total mesorectal excision with coloanal anastomosis.
2. Technique laparoscopic assisted.
3. Diverting ileostomy - no.
4. Height of tumor - 8 cm from anal verge on sigmoidoscope.
5. Height of anastomosis 5 cm from anal verge.
6. Anastomosis - stapled.
7. Reconstruction - side to end anastomosis.
8. Multi visceral resection - none.
9. Preoperative radiotherapy - none.
10. Preoperative staging - CT abdomen and pelvis and chest x-ray.
11. Preoperative stage - T1NXMX.
12. TME specimen Grade II.
13. Residual cancer - none.
14. Operative urgency - elective.

Carl Brown, MD, FRCSC

DICTATED BUT NOT READ

CB:fp 167691

D: 23/03/2007

T: 23/03/2007

Canadian Partnership Against Cancer (CPAC)



- 5 year initiative by Federal Government in Feb 2006
- \$250 million funding

Objectives

- reduce the expected number of new cases of cancer among Canadians
- enhance the quality of life of those living with cancer
- lessen the likelihood of Canadians dying from cancer

National Cancer Operative Reporting Initiative

- National Conference, Toronto, May 2007
 - National and provincial leaders in cancer surgery, pathology, and administration
 - Agreement in principal to pursue improvements in cancer care reporting

National Cancer Operative Reporting Initiative

- Funding Meeting, Toronto, Sept 2007
 - CPAC funds available
 - Guidelines for applications set
 - Interprovincial collaboration
 - Tumour site specific
 - Synoptic reporting for operative procedures

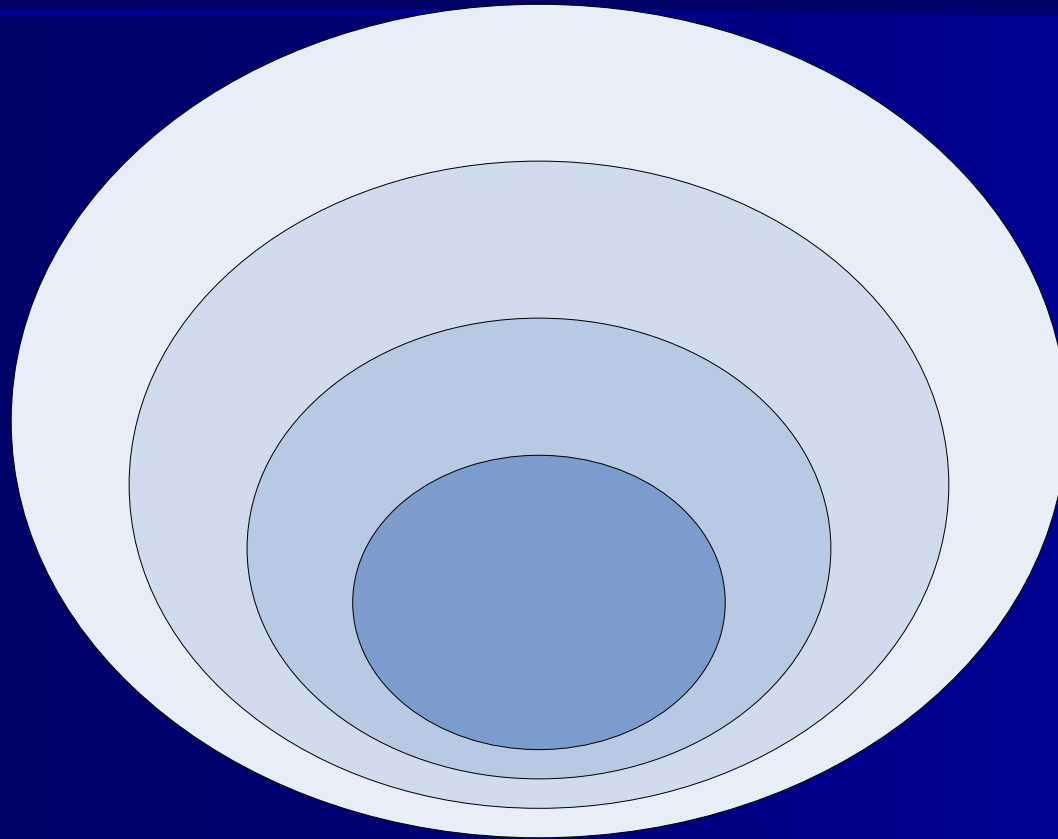
National Cancer Operative Reporting Initiative

- Jan 2008 - Approved Projects
 - Breast Cancer - BC, AB, NS, MB, PQ
 - Colorectal Cancer - BC, AB, ON (+/-), NS
 - Ovarian Cancer - AB, ON
 - Ontario using eCancer instead of webSMR
 - Head and Neck Cancer - MB

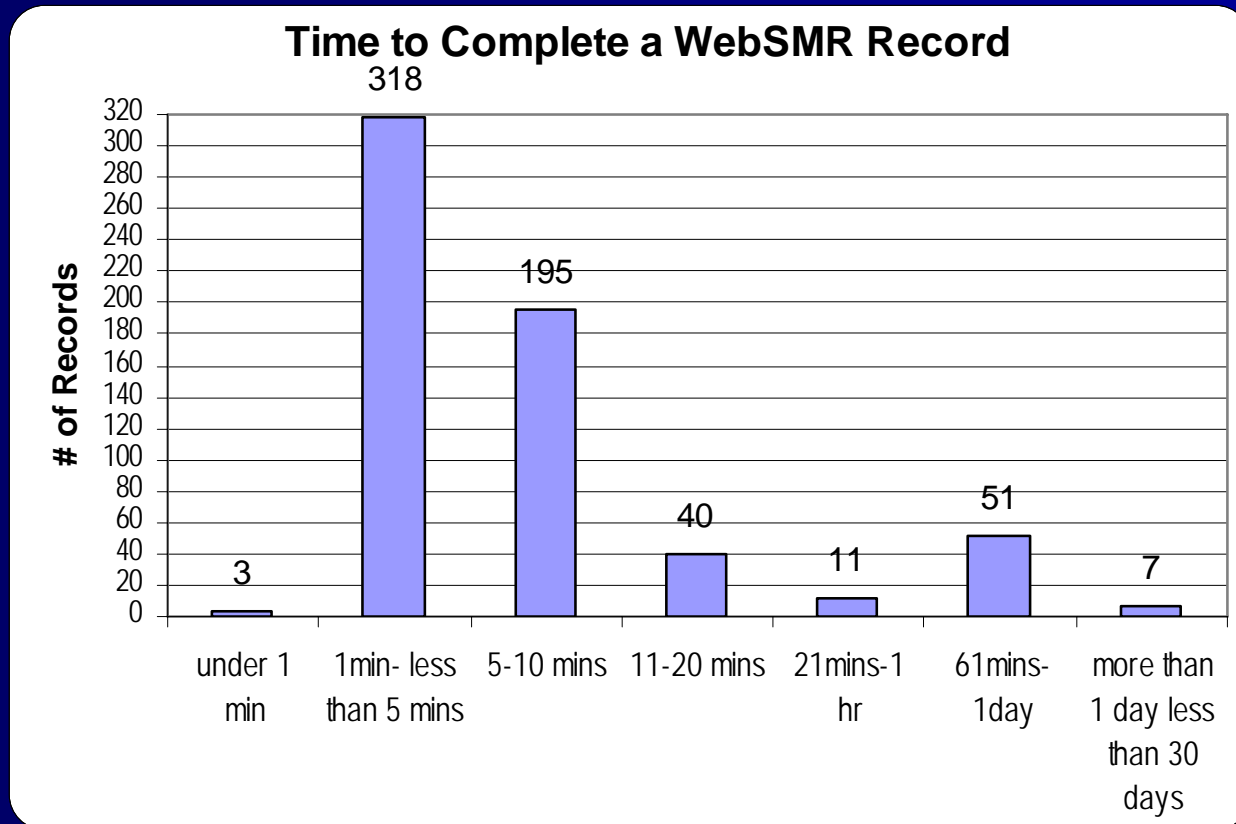
Web Synoptic Medical Report (WebSMR)

- Joint venture of Softworks Inc. and the Alberta Cancer Board
- Software engine created to facilitate online “tick box” operative reports
- Developed in Alberta
 - Led by Dr. W Temple
 - Currently two templates - breast and colorectal
 - Further cancer sites under development (e.g. gynecology, head and neck cancer)
- Replaces dictated OR reports
- Surgeons can query their own data

Web Synoptic Medical Report (WebSMR)



Web Synoptic Medical Report (WebSMR)



Web Synoptic Medical Report (WebSMR)

Calgary Region Analysis

of Cancer Surgeries – CIHI Count (Jan – June 2007)*

of Cancer Surgeries Entered into WebSMR (Jan – June 2007)

	# of Cancer Surgeries – CIHI Count (Jan – June 2007)*	# of Cancer Surgeries Entered into WebSMR (Jan – June 2007)	
		#	%
Tumor Group Analysis			
Breast	348	194	56
Rectal	115	25	22
Colon	102	40	39
Total**	565	259	46***

*Alberta WebSMR Final Evaluation, Praxia Information Intelligence, March 2008

WebSMR - Barriers

- Integration with other hospital systems
- Costs
- Scalability
- Timeline (for CPAC project)
- Leadership

mTuitive - A Possible Alternative



The image shows a screenshot of the mTuitive website. The header features the mTuitive logo with the tagline 'Future of Clinical Data Capture' and a navigation menu with links for HOME, ABOUT US, PRODUCTS, PARTNERS, CLIENTS, and CONTACT US. A list of solutions is provided: Pathology, Cancer Care, Murine Pathology, Clinical Staging, and EMR. The main content area is divided into four columns: News, mTuitive in Healthcare, Technology, and White Papers. The News column contains several articles with titles like 'TBRHSC Cancer Care Leads Nation in Synoptic Pathology Reporting (video)'. The mTuitive in Healthcare column features a video thumbnail and a list of services including Synoptic reporting and Structured data capture. The Technology column discusses 'The Pathology Report: Reducing Malpractice Risk' and includes a quote from Jules Berman. The White Papers column lists 'Read Jules Berman's new book: Neoplasms: Principles of Development and Diversity' and 'Downloads PDF's Introduction to mTuitive'. The footer includes logos for BC Surgical Oncology Network, Sunquest CoPathPlus 4.0, and Oshawa Health.

mTuitive
Future of Clinical Data Capture

Solutions
Pathology
Cancer Care
Murine Pathology
Clinical Staging
EMR

HOME ABOUT US PRODUCTS PARTNERS CLIENTS CONTACT US

News

[TBRHSC Cancer Care Leads Nation in Synoptic Pathology Reporting \(video\)](#)

[Reporting system may cut hospital wait times](#)

[Cambridge Memorial Hospital Chooses mTuitive's xPert for Pathology™ to Meet CCO Standard. CMH becomes the ninth Ontario hospital to implement xPert for Pathology. December 2008](#)

[Two More Ontario Hospitals Choose mTuitive's xPert for Pathology™ to Meet CCO Standard. December 2008](#)

[Sunquest and mTuitive Integrated Anatomic Pathology/Synoptic Reporting Solution Receives Certification from Cancer Care Ontario. November 2008](#)

mTuitive in Healthcare

[CLICK HERE TO SEE SCREENCASTS](#)

- Synoptic reporting
- Structured data capture
- Knowledge distribution
- Best practice compliance

[xPert for Pathology™](#)
[xPert for Staging™](#)
[xPert for Cancer Care™](#)
[xPert for Murine Pathology™](#)
[xPert for EMR™](#)

mTuitive creates solutions that combine structured

Technology

[The Pathology Report: Reducing Malpractice Risk](#)

"Medical malpractice claims can be won or lost based on the quality and content of the medical record. It is essential that the pathology report accurately document everything that a pathologist does with regard to evaluating and diagnosing a specimen..."

These guidelines are designed to help you accurately document your reports:

[1. Issue synoptic reports.](#)

They make the pathology report clinically relevant, assure that important diagnostic criteria are considered, and provide essential therapeutic and prognostic information.

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White Papers

[Read Jules Berman's new book: Neoplasms: Principles of Development and Diversity"](#)

[Downloads PDF's Introduction to mTuitive](#)

[mTuitive in Healthcare: An Overview](#)

[mTuitive: An Idea Explained](#)

[Synoptic Reporting and Structured Data Capture](#)

[Healthcare Market](#)

BC Surgical Oncology Network

Sunquest CoPathPlus 4.0
CARE & RESEARCH
An agency of the Provincial Health Services Authority

Oshawa Health
Promoting wellness. Ensuring care.

Minimum Data Sets

- Similar to pathology synoptic
- Does NOT replace operative report
- Improves collection of important clinical information

Minimum Data Sets for BC

- Breast Cancer
- Colon Cancer
- Rectal Cancer
- Prostate Cancer
- Gyne Oncology
- Sarcoma

Criteria for OR Data

- Surgeon should not need a chart
- Should be generally accepted (face validity) as an important part of the operation
- Should not be available in other clinical documents (eg radiology reports)
- Should have a reasonable assumption of validity

Criteria for OR Data cont'd

- Should have some relevance to present or future care by:
 - Surgeon
 - Oncologist
 - Radiologist
 - GP
 - Pathologist
 - Other Tumour Specific Clinicians (e.g. Gastroenterologists)

Proposal

- Identify surgeries for minimum data set creation
- Develop minimum data sets
 - Include categorical data, where appropriate
 - Utilize current national data sets if available
- Publish sets and advocate their use for improved operative reporting in BC

