Breast Cancer Surgery in Canada: What Do We Need to do and Document?

Geoff Porter MD FACS FRCSC

Vancouver, November 2009

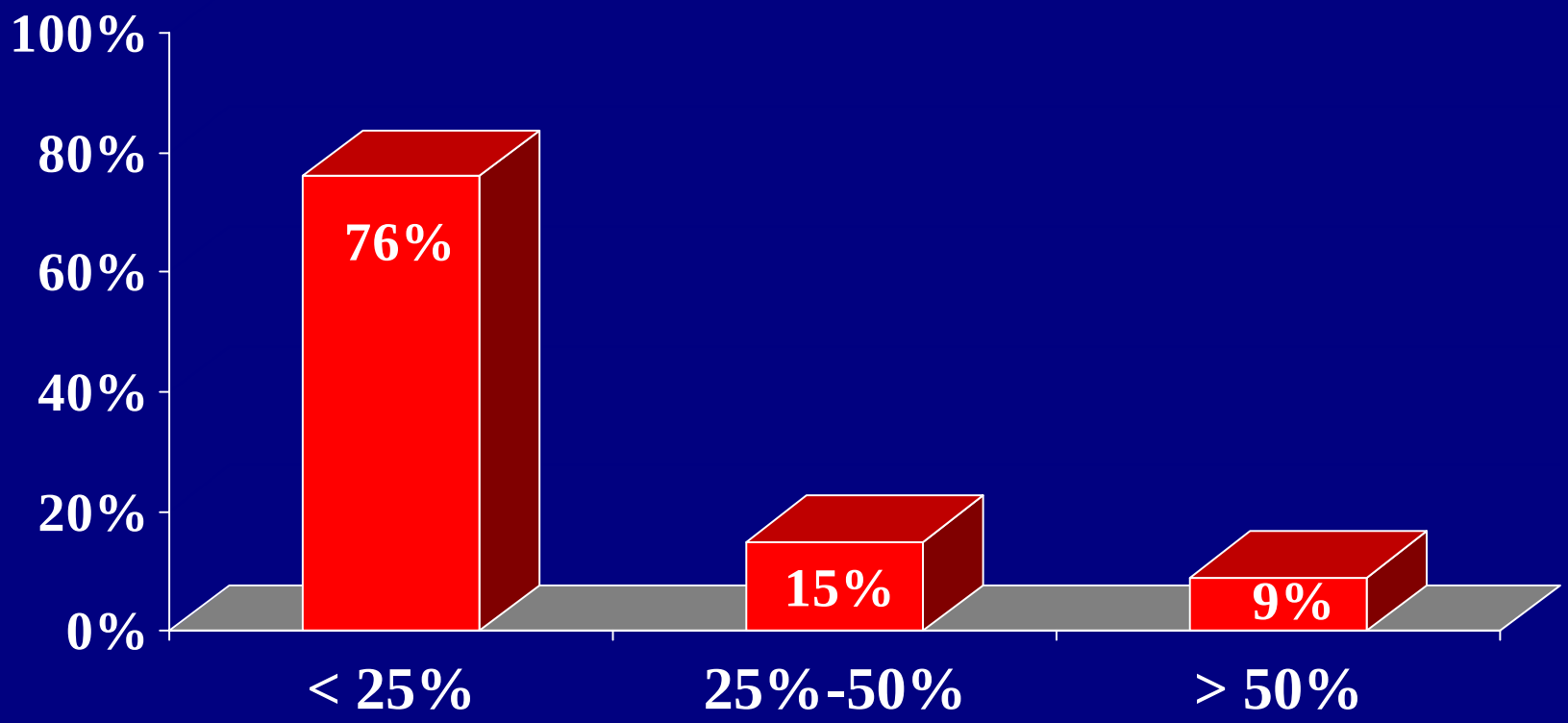
Disclosures

- None

Outline

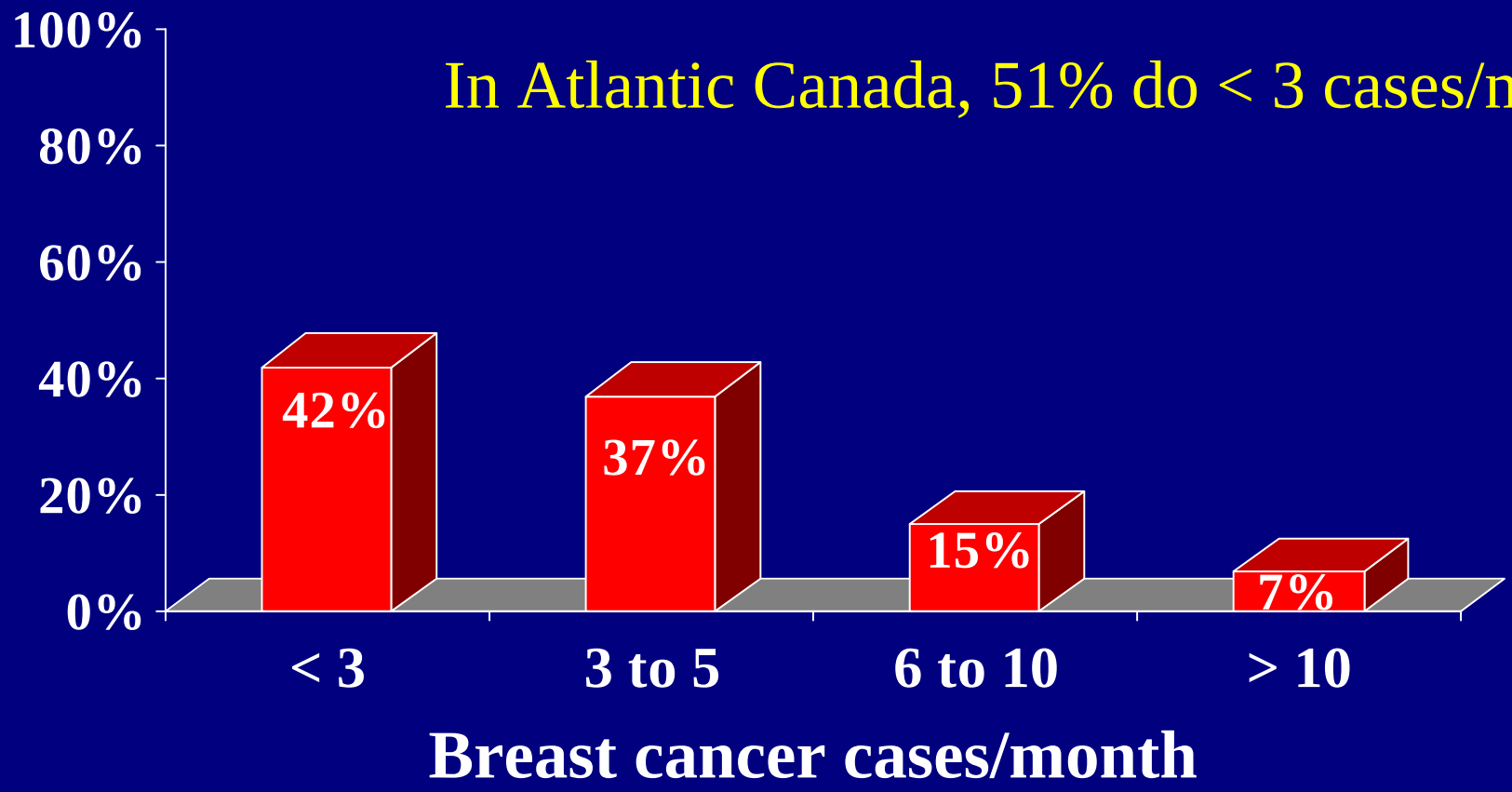
- Breast cancer surgery in Canada – current status
- Synoptic reporting
  - Pathology
  - Surgery
- Synoptic Reporting Tools Project (SRTP)
- Conclusions

Breast Cancer Surgery in Canada
N=519 surgeons



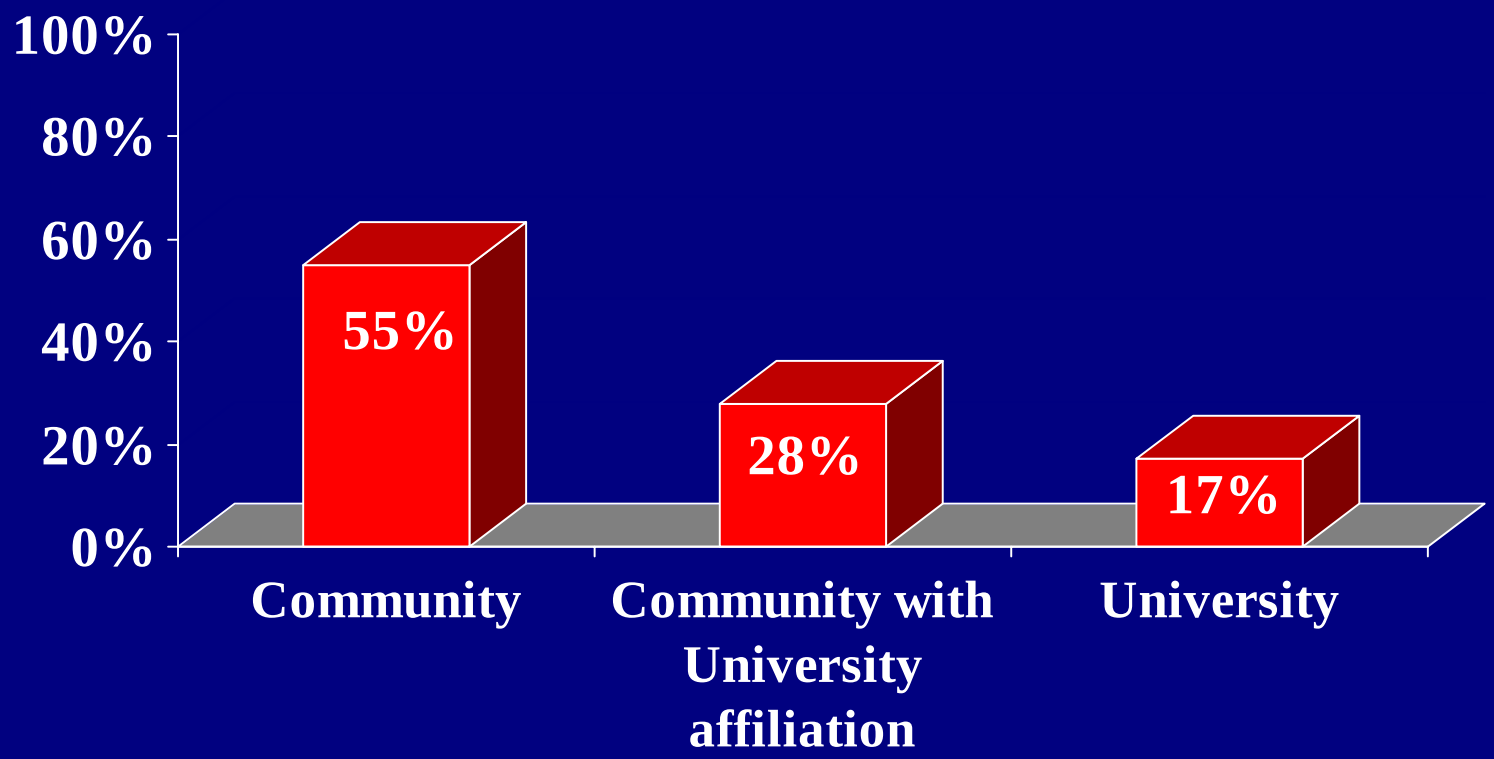
Porter and MacMulkin, World J Surg 2004

Breast Cancer Surgery in Canada N=519 surgeons



Porter and MacMulkin, World J Surg 2004

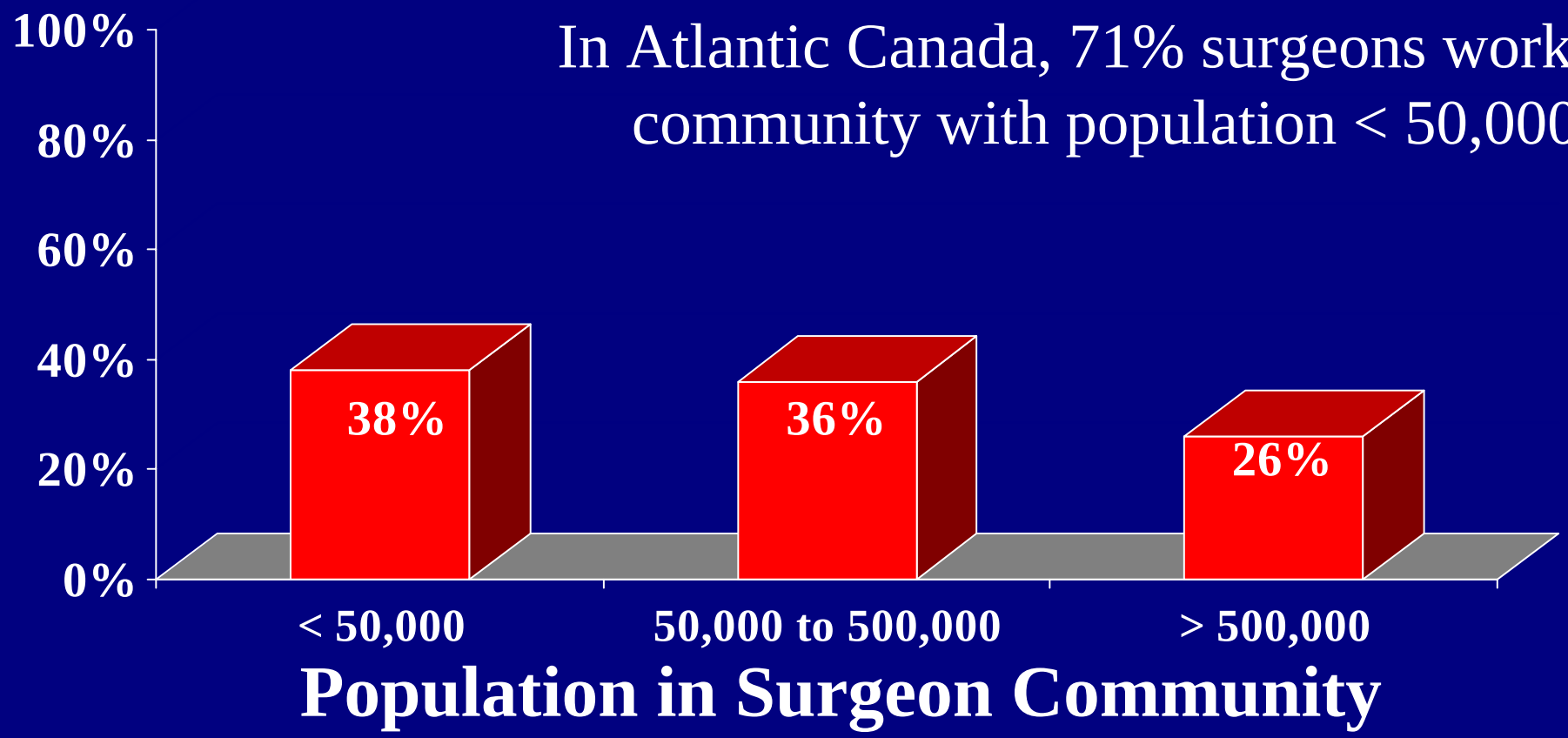
Breast Cancer Surgery in Canada
N=519 surgeons



Porter and MacMulkin, World J Surg 2004

Breast Cancer Surgery in Canada
N=519 surgeons

In Atlantic Canada, 71% surgeons work in community with population < 50,000



Porter and MacMulkin, World J Surg 2004

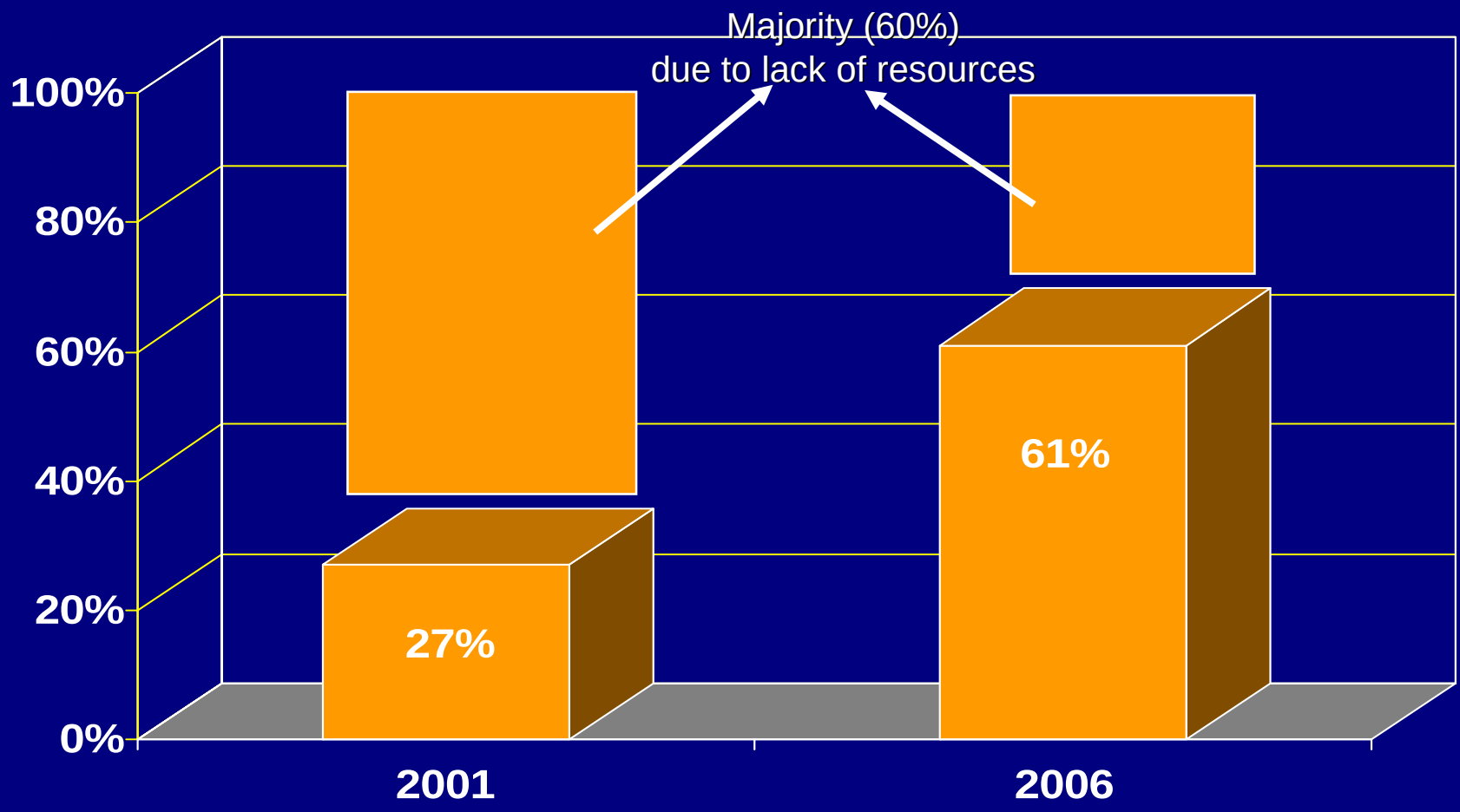
SLN Biopsy in Breast Ca – Fad or Fruit?

- Axillary node sampling
- High dose chemo and BM transplant

or

- Breast conserving surgery
- Hormonal therapy

Breast Cancer Surgery in Canada: Uptake of SLN Biopsy



% Canadian surgeons performing SLN Biopsy

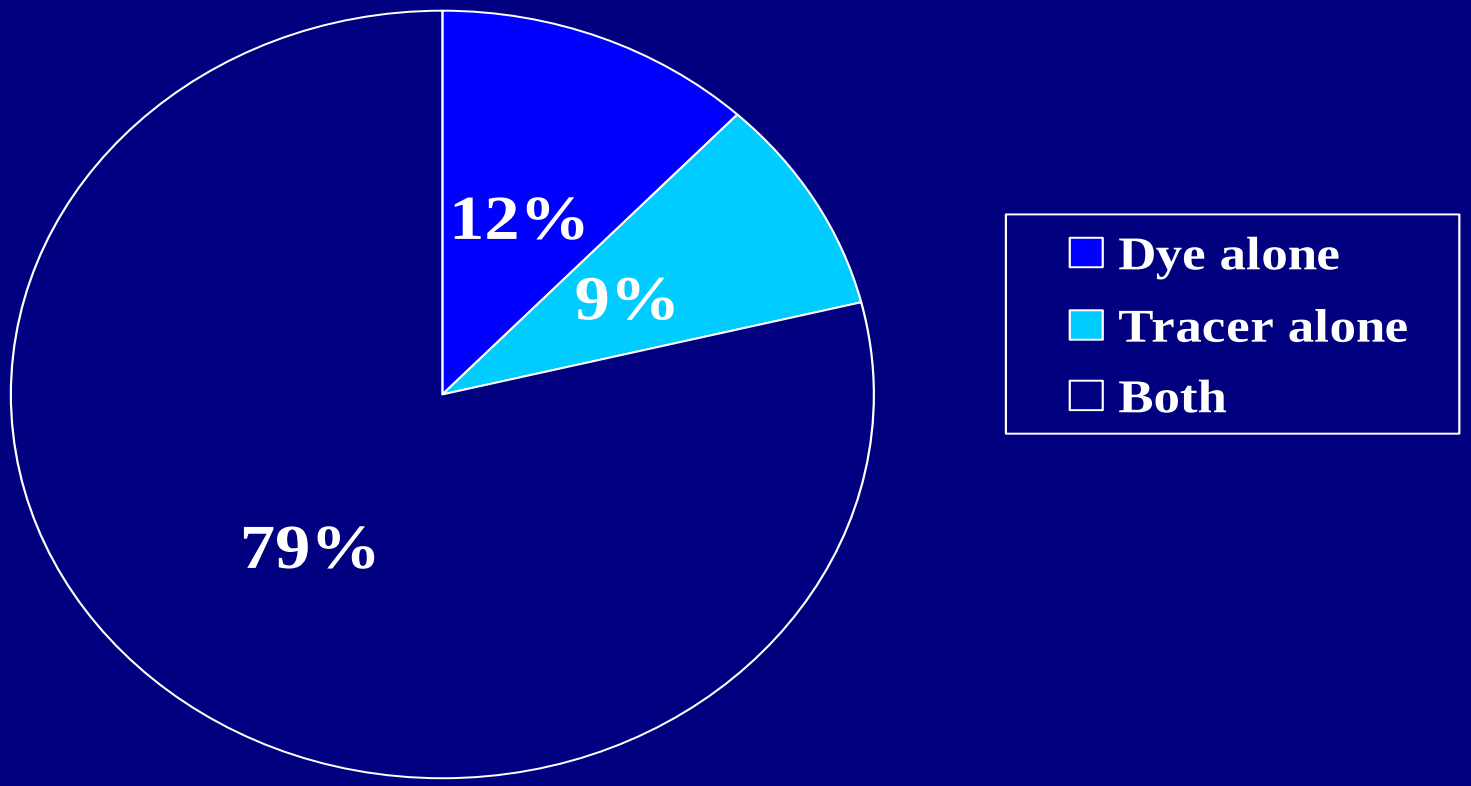
Porter et al. Annals Surg Oncol 2004; Quan et al. Breast J 2008

Surgeons **Not** Performing SLN Bx N=381

- Reasons for not performing SLN Bx:
  1. Lack of adequate resources (64%)
  2. Insufficient evidence for SLN Bx (29%)
  3. Lack of comfort with technique of SLN Bx (22%)

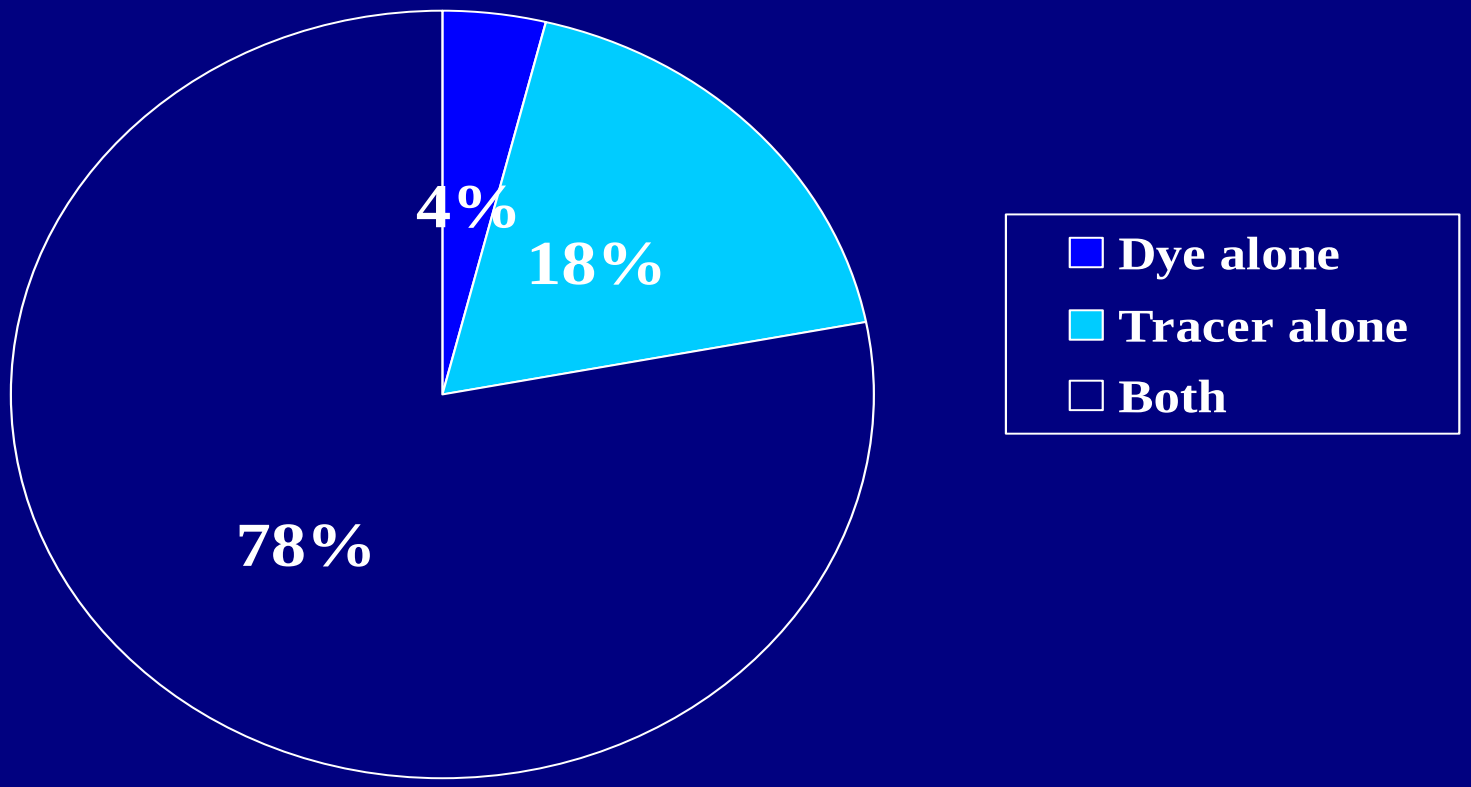
Porter and MacMulkin, Ann Surg Onc 2003

SLN Bx Technique in 2001
N=138



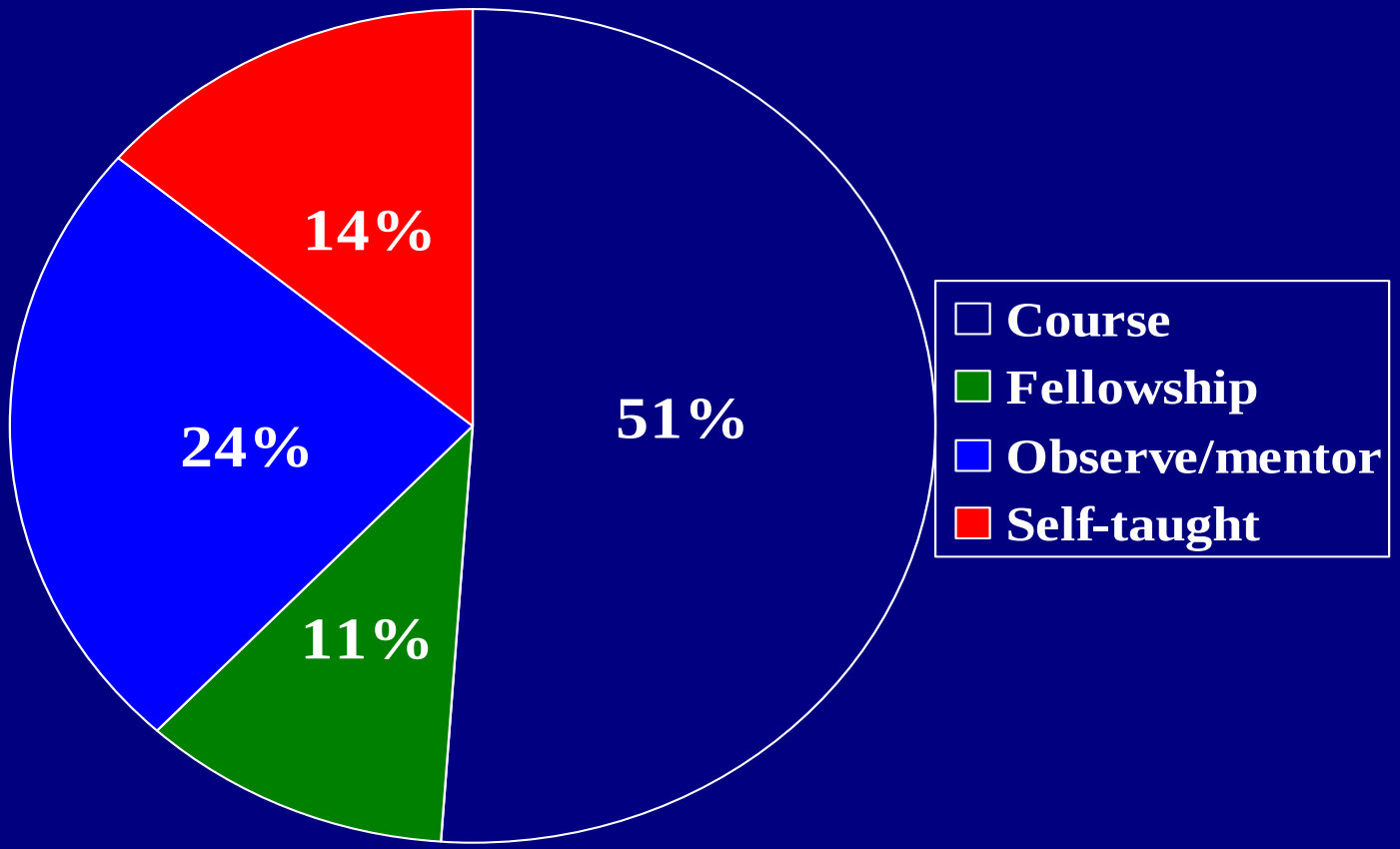
Porter and MacMulkin, Ann Surg Onc 2003

SLN Bx Technique in 2006
N=306



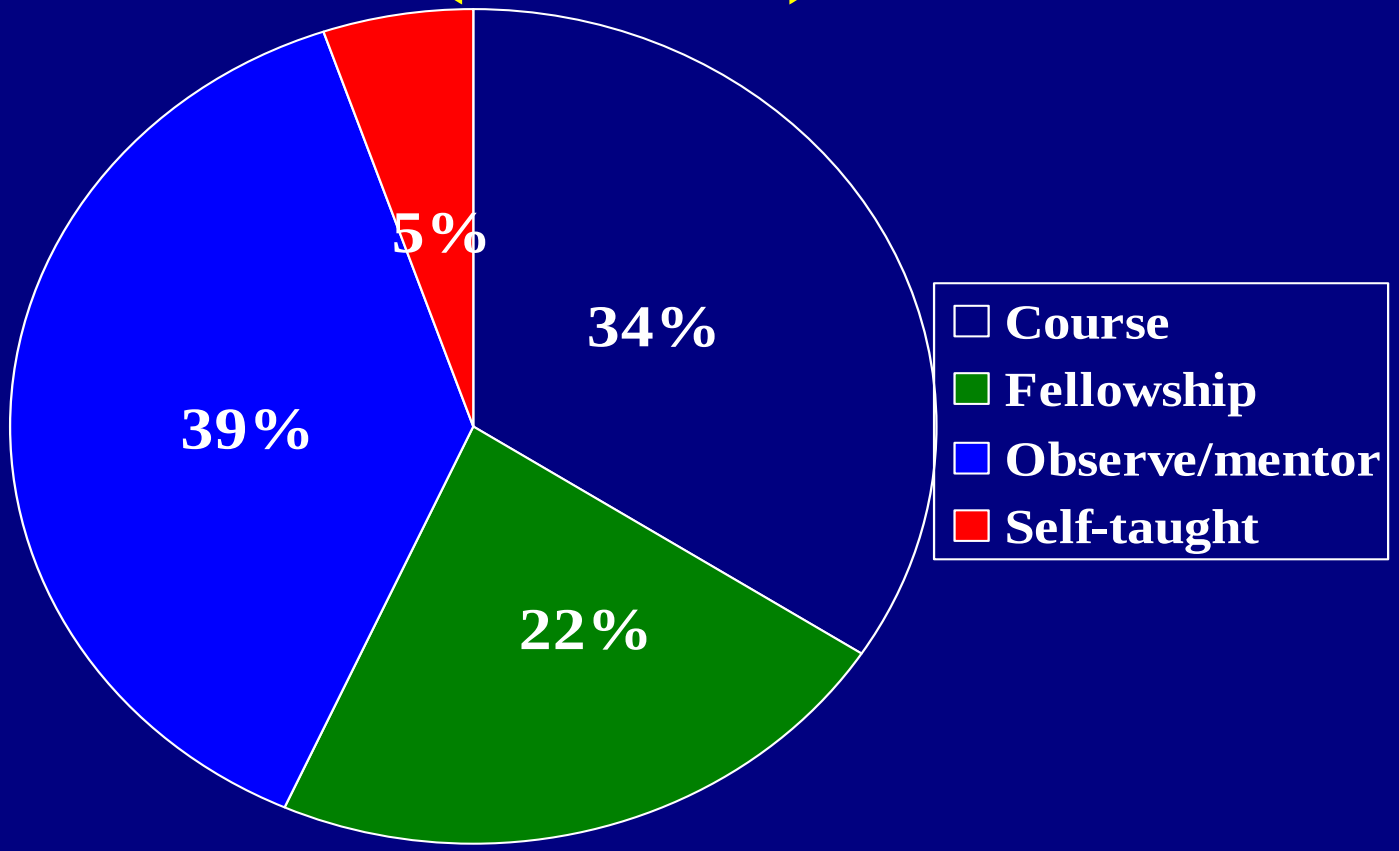
Quan et al. Breast J 2008

Method Of Learning SLN Bx
N=138



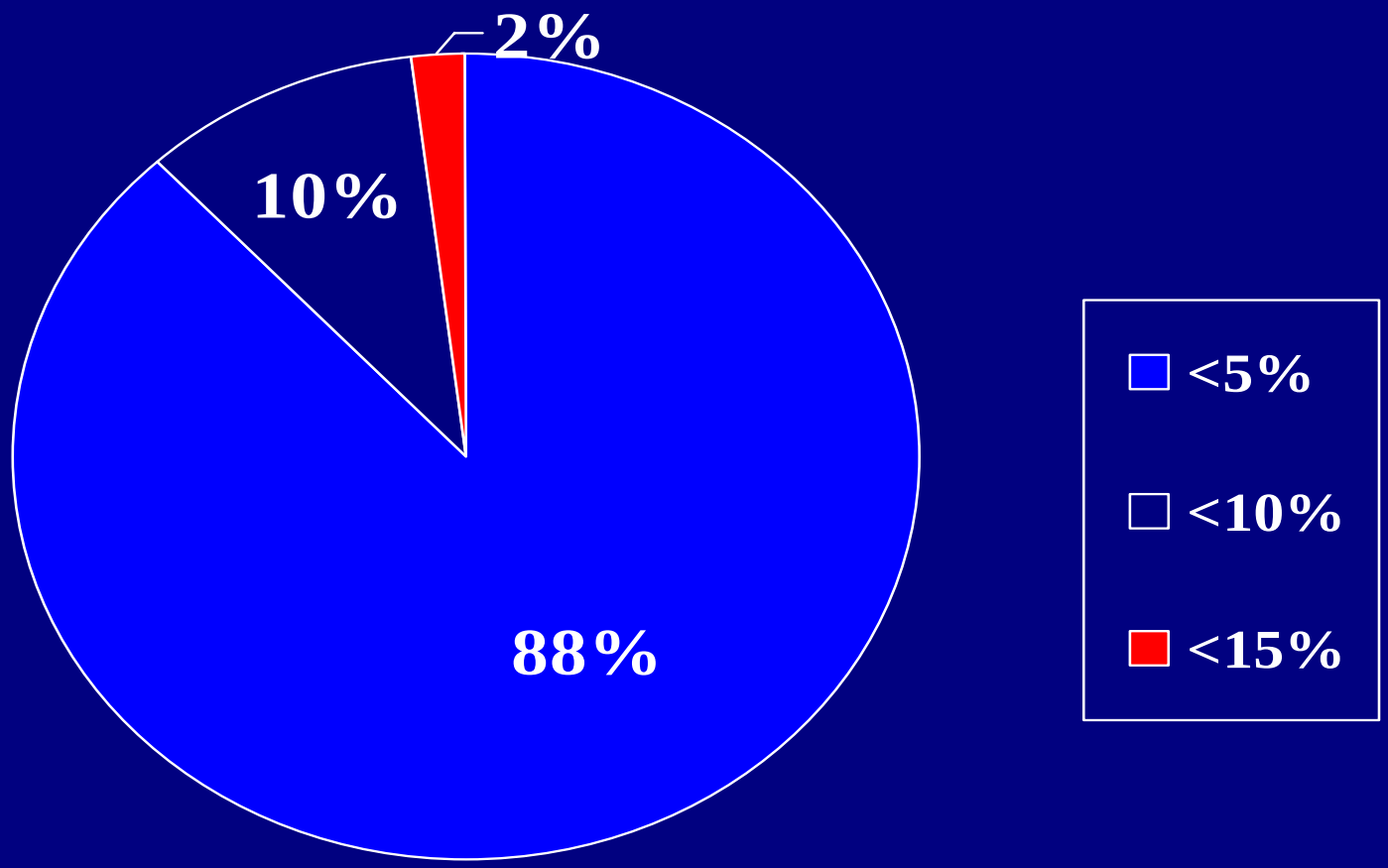
Porter and MacMulkin, Ann Surg Onc 2003

Method Of Learning SLN Bx in 2006 (N=138)



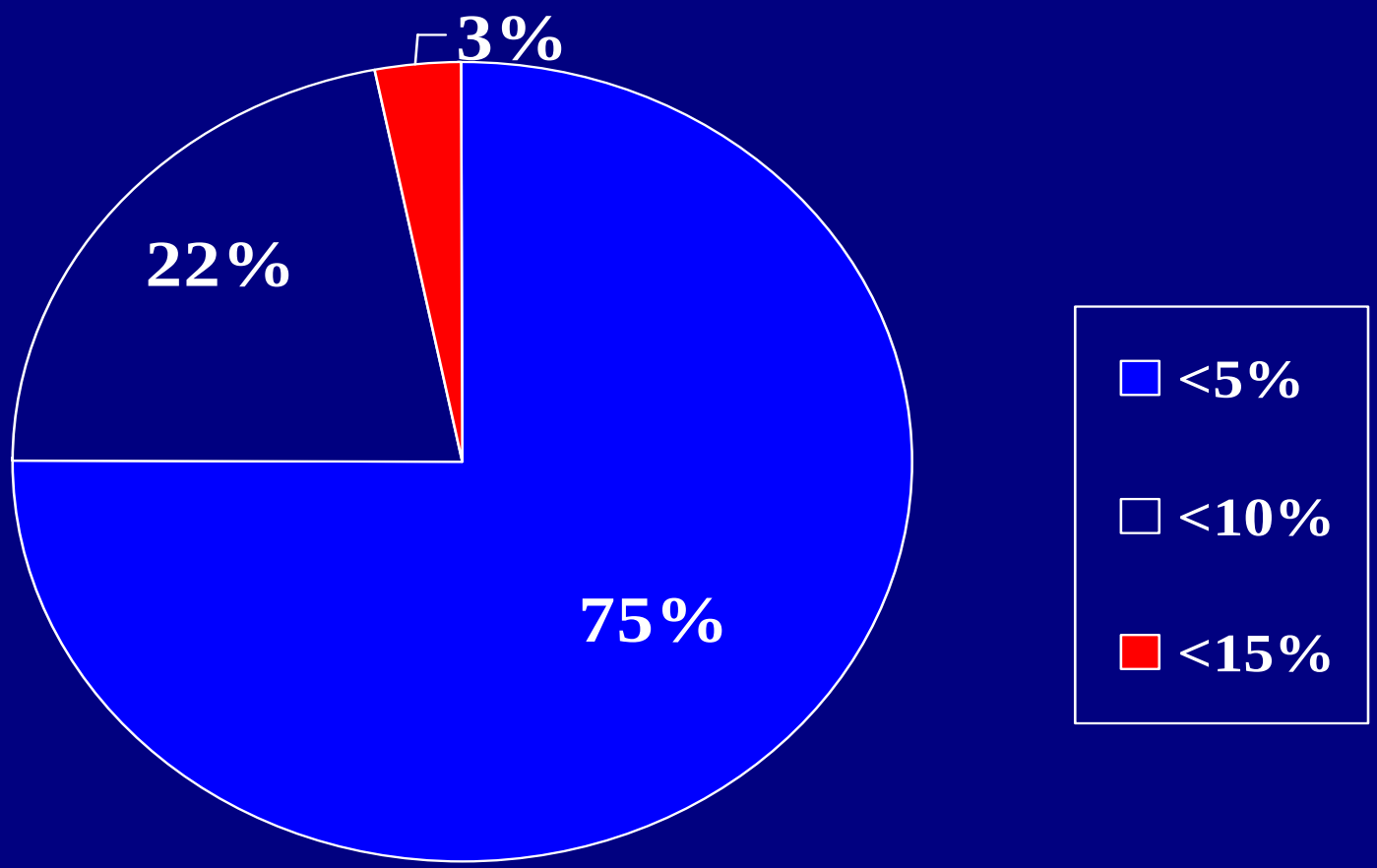
Quan et al. Breast J 2008

Highest Acceptable False Negative Rate in 2001 (N=138)



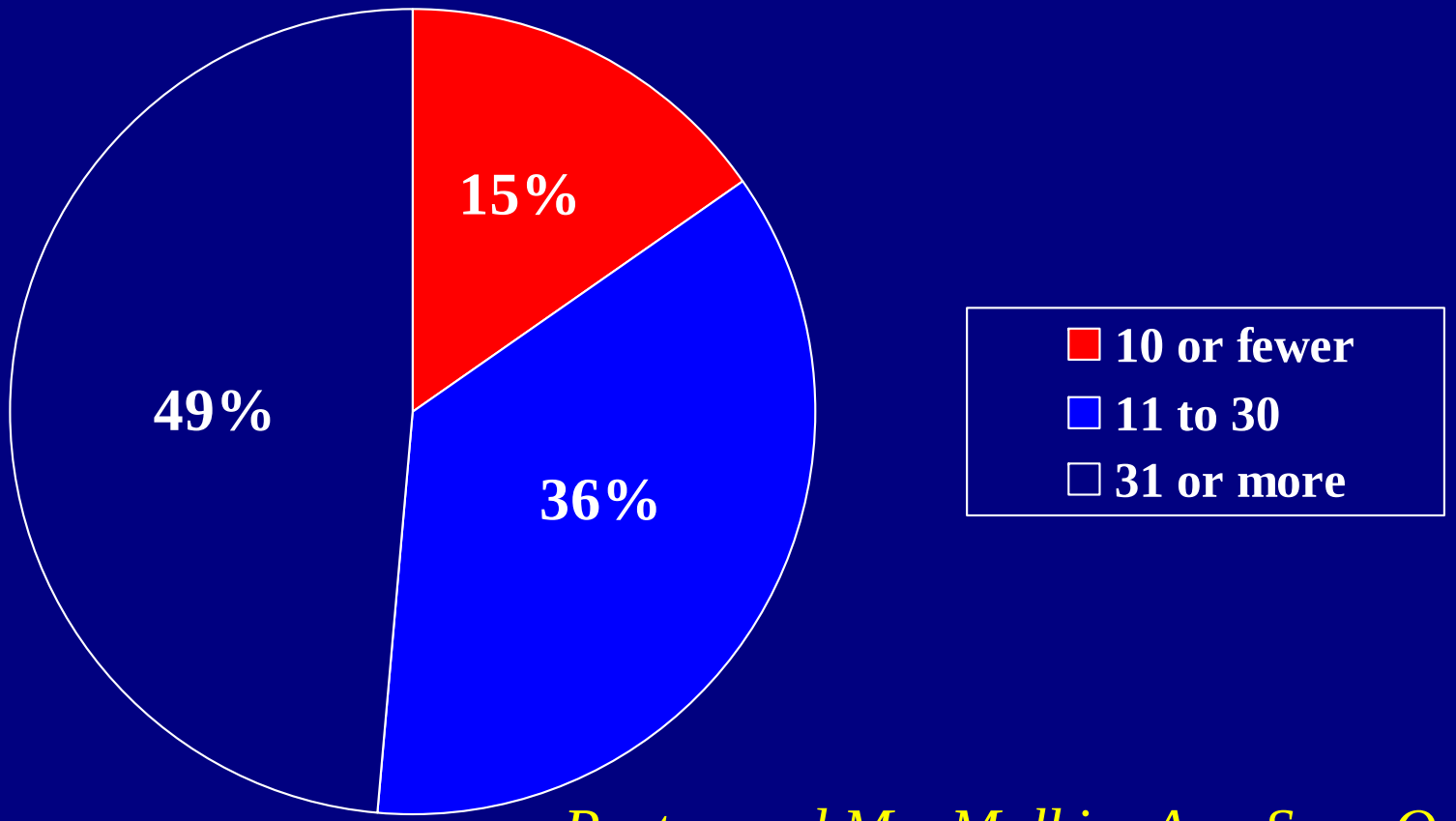
Porter and MacMulkin, Ann Surg Onc 2003

Highest Acceptable False Negative Rate in 2006 (N=306)



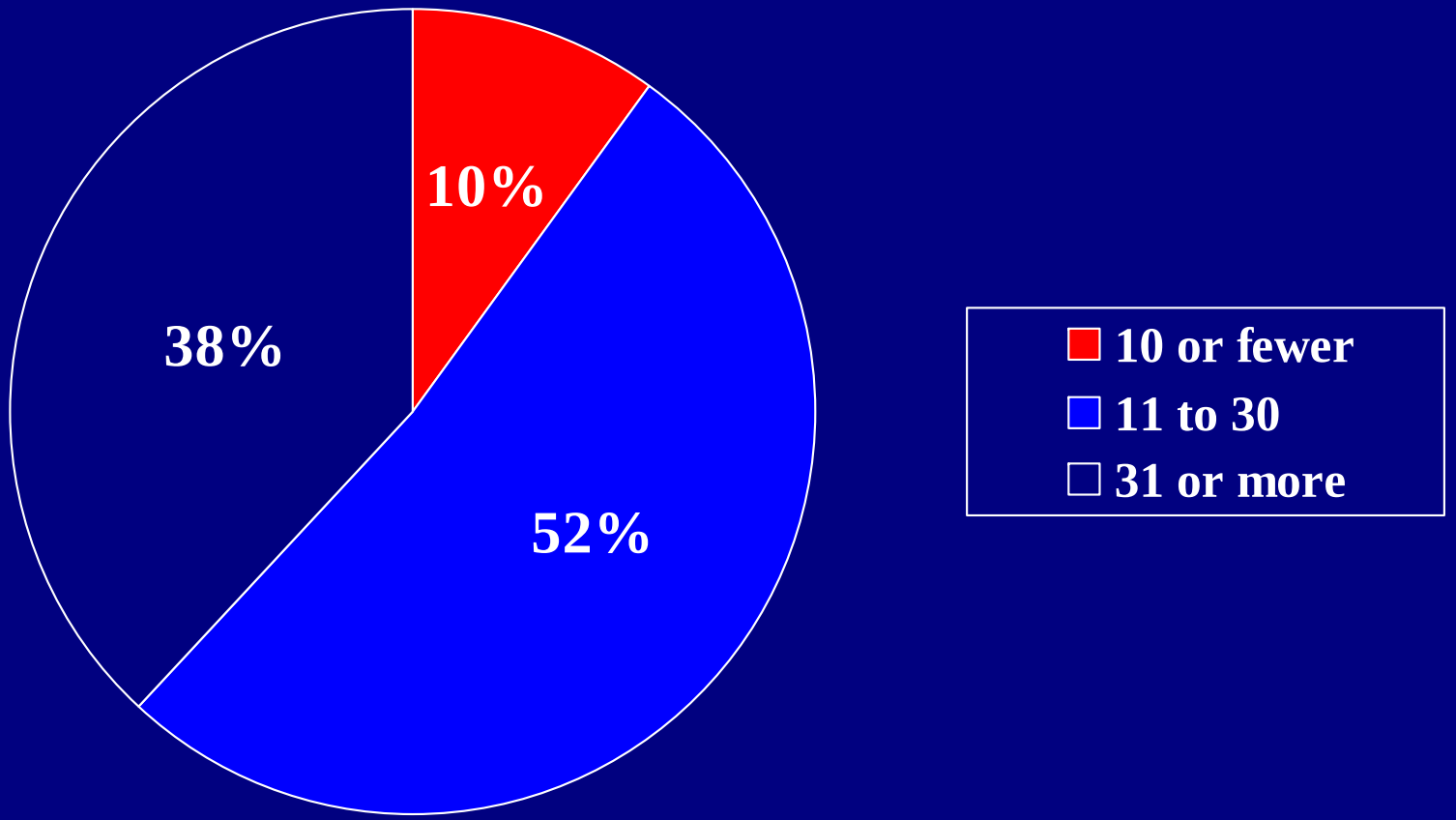
Quan et al. Breast J 2008

Number of Concurrent SLN Bx & ALND Before Abandonment ALND in 2001



Porter and MacMulkin, Ann Surg Onc 2003

Number of Concurrent SLN Bx & ALND Before Abandonment ALND in 2006



Quan et al. Breast J 2008

Breast Cancer Surgery in Canada More Data

- Among surgeons treating breast cancer:
  - 57% have immediate breast reconstruction available at their institution
  - 79% felt “most general surgeons” should perform breast cancer surgery
  - 71% are satisfied with proportion of practice related to breast disease

Porter and MacMulkin, World J Surg 2004

Breast Cancer Surgery in Canada

- We are thoughtful adopters
- Resources are an important issue
  - Particularly services/resources outside domain of the general surgeon
- “Ripe” for some interprovincial initiatives

Outline

- Breast cancer surgery in Canada – current status
- Synoptic reporting
  - Pathology
  - Surgery
- Synoptic Reporting Tools Project (SRTP)
- Conclusions

What is Synoptic Reporting?

- Standardized process to capture data according to predetermined variables and definitions
- Can be text based or digital

Synoptic Reporting
Why?

- Commonly-cited benefits
  - Improves content and completeness of reports → Most data
  - Reduces risk of misinterpretation of findings
  - Improves communications among health care professionals
  - Increase efficiency/decrease cost of report creation/distribution

What are Known Benefits of Synoptic Reporting? Pathology

- Narrative breast cancer reporting (n=120)
  - 100% histologic type
  - 90% size
  - 90% grade
  - 25% margins oriented properly
  - 47% lymphovascular invasion
- Clear room for improvement

Wilkinson et al. JACS 2003

What are Known Benefits of Synoptic Reporting? Pathology

- Implement computerized pathology reporting (cluster) randomized trial (n=2042 reports)
  - 28.4% (95% CI 15.7%-41.2%) increase in complete reports for registry purposes
  - 24.5% (95% CI 11.0%-38.0%) increase in complete reports for patient management
  - Acceptable to pathologists, preferred by clinicians

Branston et al. Eur J Cancer 2002

What are Known Benefits of Synoptic Reporting? Surgery

- Non-randomized comparison of narrative vs. web-based synoptic report (WebSMR) for rectal cancer surgery
  - Overall complete specified data elements increased with synoptic report (99% vs. 45.9%; $p<0.001$)
  - Particular components wider difference e.g. preoperative treatment, comorbidity, metastatic/local tumor assessment
  - Mean time to complete report = 6 minutes

Edhemivic et al. Ann Surg Oncol 2004

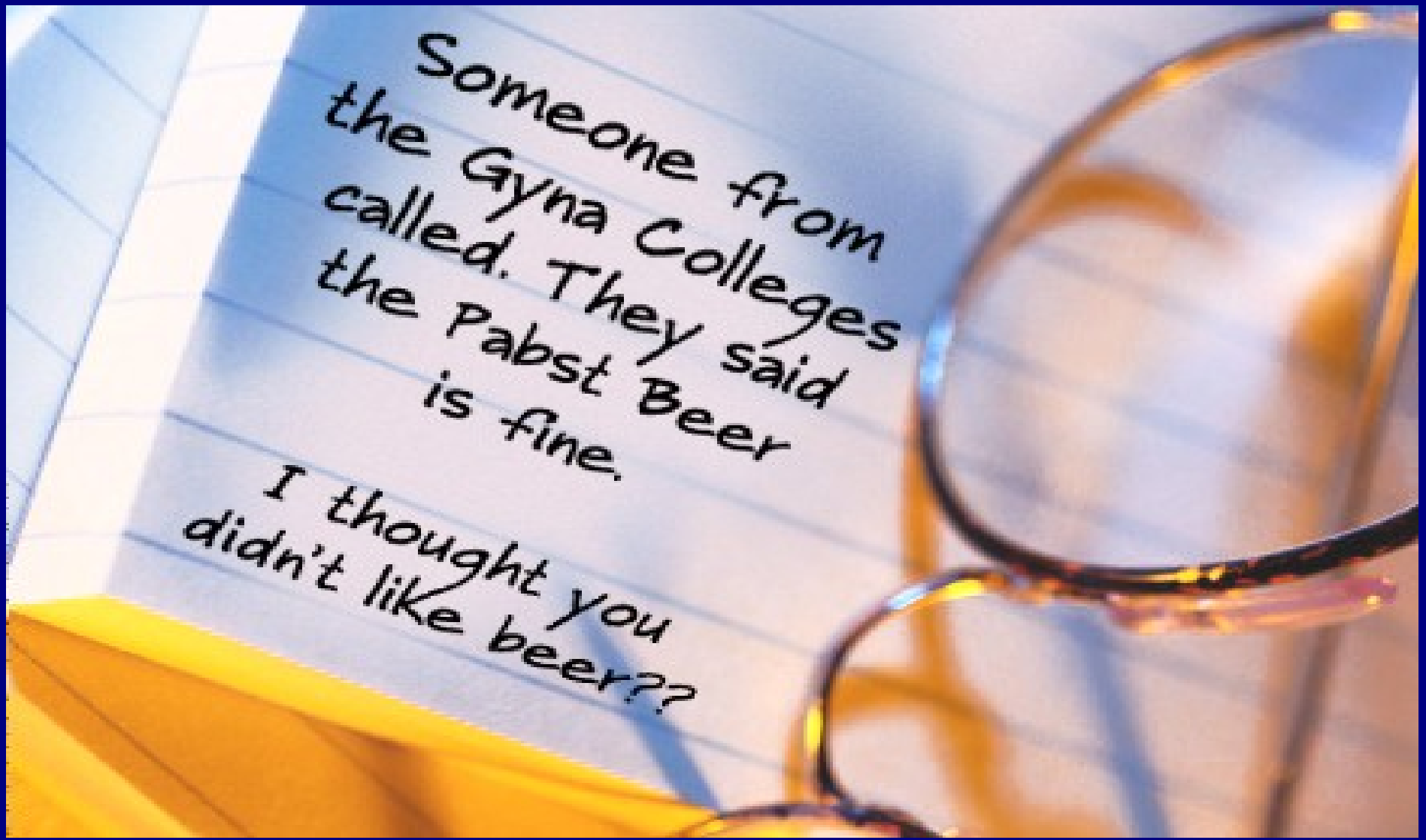
Why Synoptic Surgical Reporting in Breast Cancer?

- Common cancer
- Well-established treatment guidelines
  - Surgery common treatment – definable
  - In most patients, surgery is initial treatment and surgeon is the “quarterback” of subsequent care
- Operative reports contain critical medical information
  - Dictated and text-based, frequently incomplete, vague
- Potential knowledge translation tool

Some Excerpts

- Indications for surgery: “This patient had confirmed breast cancer and presents for surgery today.”
- Details of Procedure:“Following prepping and draping, a standard mastectomy incision was made and standard mastectomy was performed with usual landmarks and flaps. The lower axilla was removed with the tail of the breast. Vessels and lymphatic channels were clipped with medium clips or ligated with 2.0 vicryl ties or suture ligated with 3.0 vicryl. The skin was closed with 7 buried interrupted 3.0 vicryl sutures and 4.0 PDS was used to close the skin, with myself and the assistant suturing in opposing directions.”

Misinterpretation



Dichotomy of Surgical Cancer Care

Increasingly complex decision making and treatment

vs.

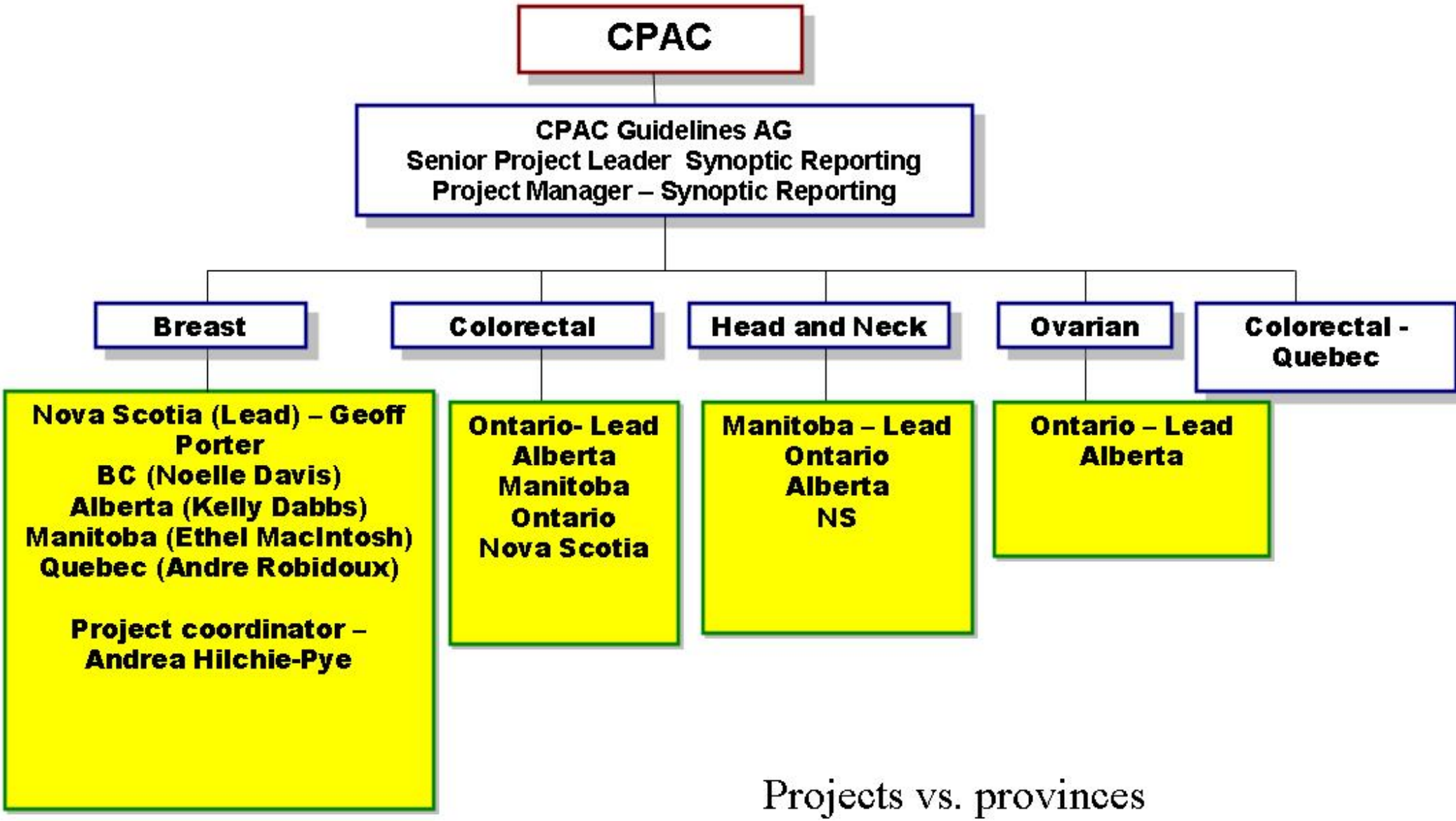
Large number of surgeons

- Makes availability of population-based tool that can describe practice patterns and assist bringing important elements of care into clinical practice extremely attractive

What is the Synoptic Reporting Tools Project (SRTP)?

- Canadian Partnership Against Cancer initiative
- Interprovincial
- Surgical reporting tool implementation
- Three year pilot
- Major evaluation component

CPAC Synoptic Reporting Projects



Projects vs. provinces

Goal of Breast Cancer SRTP

- More complete reports
- More accurate reports
- More timely reports
- Vehicle for bringing practice guidelines into everyday practice
- Provides clinically relevant and retrievable practice pattern information
- Establish inter-provincial relationships with regards to data collection, reporting, and use of synoptic tools

Interprovincial Work

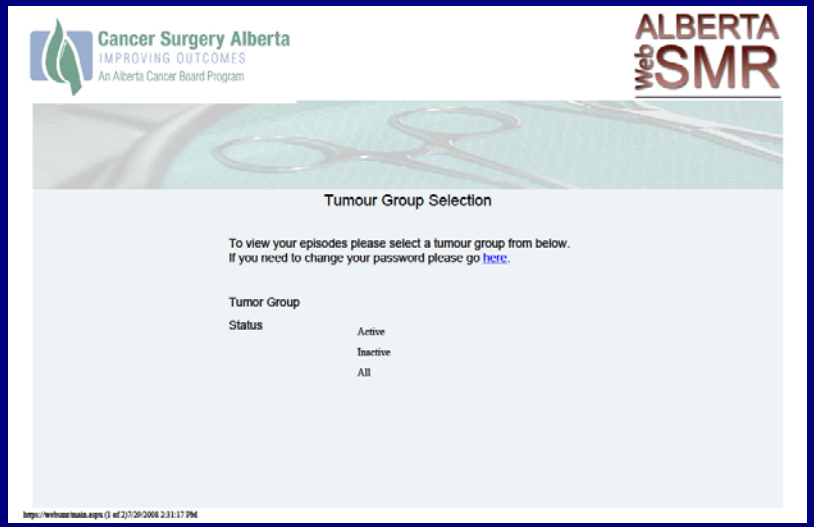
- Five province representation on breast SRTP interprovincial template committee (BC, AB, MAN, QUE, NS)
- Several revisions, provincial and society review and acceptance of content
- Consensus on interprovincial template content (provincial issues identified)

Content of OR Report Driven by:

- Clinical information needs
  - Surgeons
  - Other physicians
  - Other health care workers
- Medical record needs
- Medicolegal/regulatory needs
- Billing needs
- Research needs

What is WebSMR

- Demo



Synoptic Surgical Reporting Principles of Pilot Implementation

- At least time neutral for surgeon
- Done with what surgeon has at end of case
- Voluntary for surgeon
- No duplicated dictated report – cost savings
- No detrimental IM step for facility/others

How is Implementation Going ?

- Securing and nurturing partner support is critical
- Integration of current IT health systems with a new system requires flexibility
- Implementation has major IT and IM challenges
- Focus on user acceptance and IT solutions
- Surgeon buy-in not an issue to date (we are waiting…)
- Technology enables the solution, cannot be the focus

Conclusions

- Important to understand demographics and practice patterns in breast cancer surgery
- Big gap → national-level data relevant to surgical breast cancer care
- Need to merge local/provincial clinical care benefits with a national initiative vital
  - Will SRTP do this?


I WROTE DOWN SOME QUESTIONS...
OR note:
Standard surgery performed

Contact Information

Geoff.Porter@dal.ca

902 473-6499

Andrea Hilchie-Pye

Project Coordinator
Synoptic Reporting Tools Project

473-6090

andrea.hilchie-pye@

ccns.nshealth.ca