

Methods and Challenges in Evaluating Operational Programs: An Example from a Virtual Breast Patient Navigation Program

Marcy Winget, PhD

ARCC Meeting

May 26, 2013

Background

- In 2003, a Provincial Breast Cancer sub-committee was established in response to the issue of considerable delays in breast cancer care in Alberta.
- In Oct 2007, the Comprehensive Breast Care Program (CBCP) was launched in Edmonton to address issues related to timeliness of breast cancer care.

Overall Goals - CBCP

- Develop and implement an integrated and comprehensive approach to provide services to patients suspected or diagnosed with breast cancer
- Expedite access for breast cancer patients to diagnostic, treatment and psycho-social support services
- Improve the quality of care for breast cancer patients undergoing diagnosis and treatment

Program Patient Care Targets

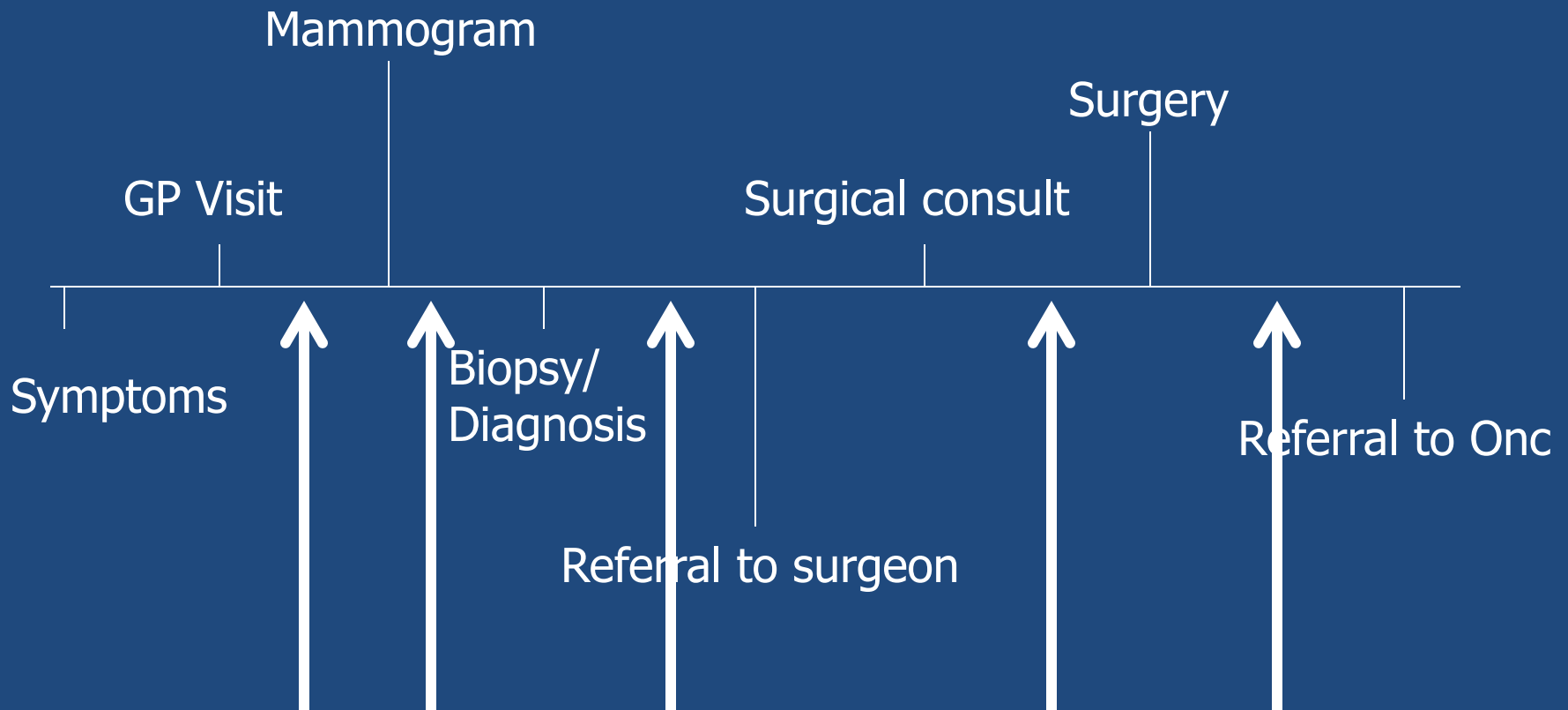
- Referral to surgery – 4 weeks/ 28 days
- Surgery to radiation –8 weeks/56 days
- Surgery to systemic therapy – as soon as possible after wound healing, and within 8 weeks/ 56days of surgery as the outer limit

Where “referral” is defined as the date of enrollment into CBCP

Evaluation Challenges

- Targets are treatment-driven even though not every patient has breast cancer or needs surgery;
- No targets around diagnosis
- Patient diagnosis is not collected by the program;
- Patients can enter CBCP at any point in their diagnostic and/or treatment trajectory

Simplified Breast Cancer Care Trajectory



Referral to CBCP Can Happen Almost Any Time

Why Did This Happen?

- Political pressure to get program initiated quickly
- Led by Cancer Care and surgeon community so focus naturally on treatment
- All relevant stakeholders were not involved

Study Questions

Has CBCP affected the time to breast cancer diagnosis?

How many/percent of patients with breast cancer enroll prior to diagnosis?

At what point in the pre-diagnostic trajectory do patients enroll in CBCP of those who enroll prior to breast cancer diagnosis?

Study Design

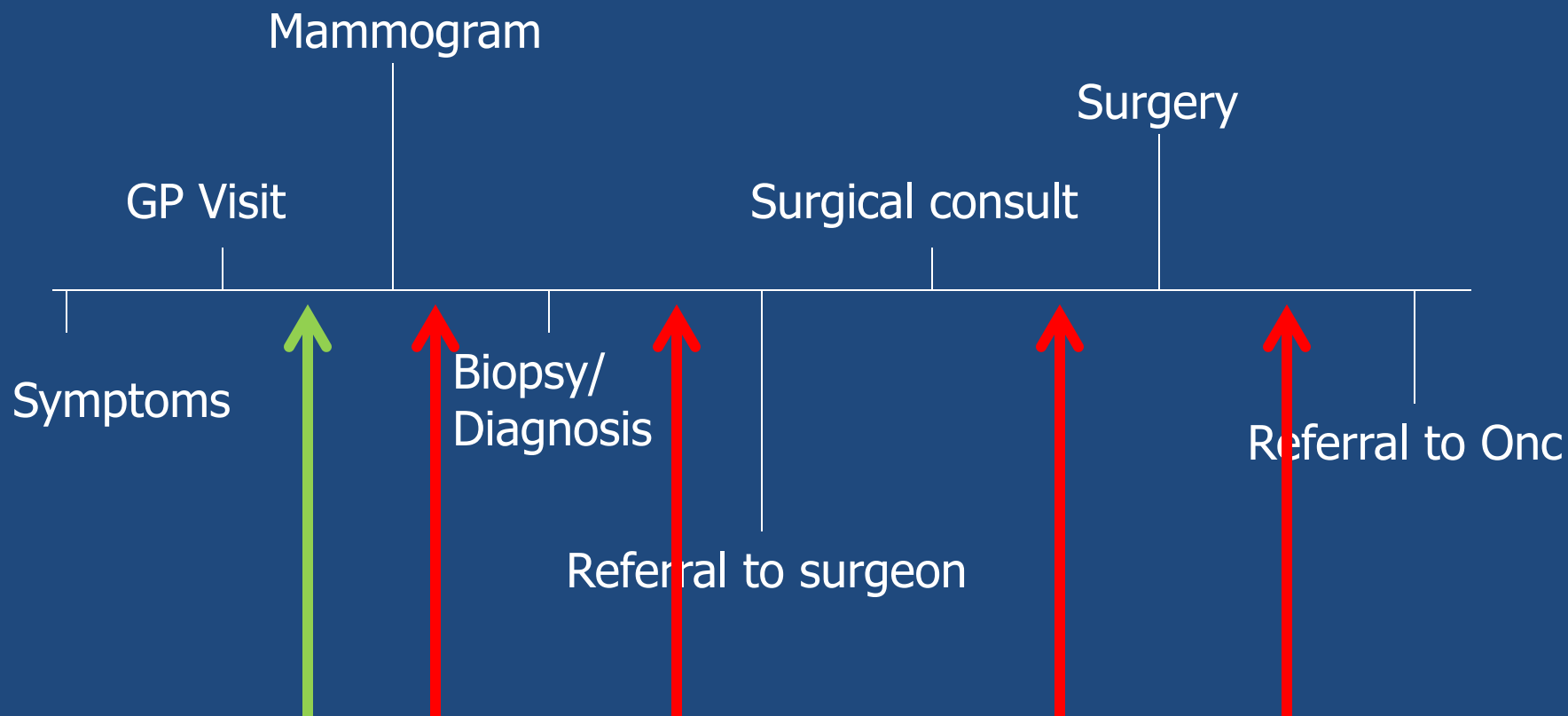
Exposed (CBCP breast cancer cases)

Compared to

Unexposed (non-CBCP breast cancer cases)

With respect to time from 1st diagnostic imaging
to diagnosis

Inclusion Criteria – CBCP cases



Include Only If Referred Prior to Br Ca. Diagnosis

Inclusion Criteria – non-CBCP cases

3 non-CBCP breast cancer cases matched to each CBCP case by:

- Type and result of 1st diagnostic imaging test
- Season and year of 1st diagnostic imaging test
- Age (range) at diagnosis
- City (if Edmonton) or 1st 3 digits of postal code

Data Sources

- Alberta Cancer Registry
(date of cancer diagnosis, demographic info)
- CBCP Database
(dates of referral to CBCP)
- Alberta Society of Radiologists
(dates/results of diagnostic imaging)

Results - What/percent of patients with breast cancer enroll prior to diagnosis?

4101 = Total CBCP patients enrolled 2007–2010

2,148 (52%) = CBCP patients diagnosed with breast cancer



223 (10%) = Patients diagnosed with breast cancer after CBCP enrollment

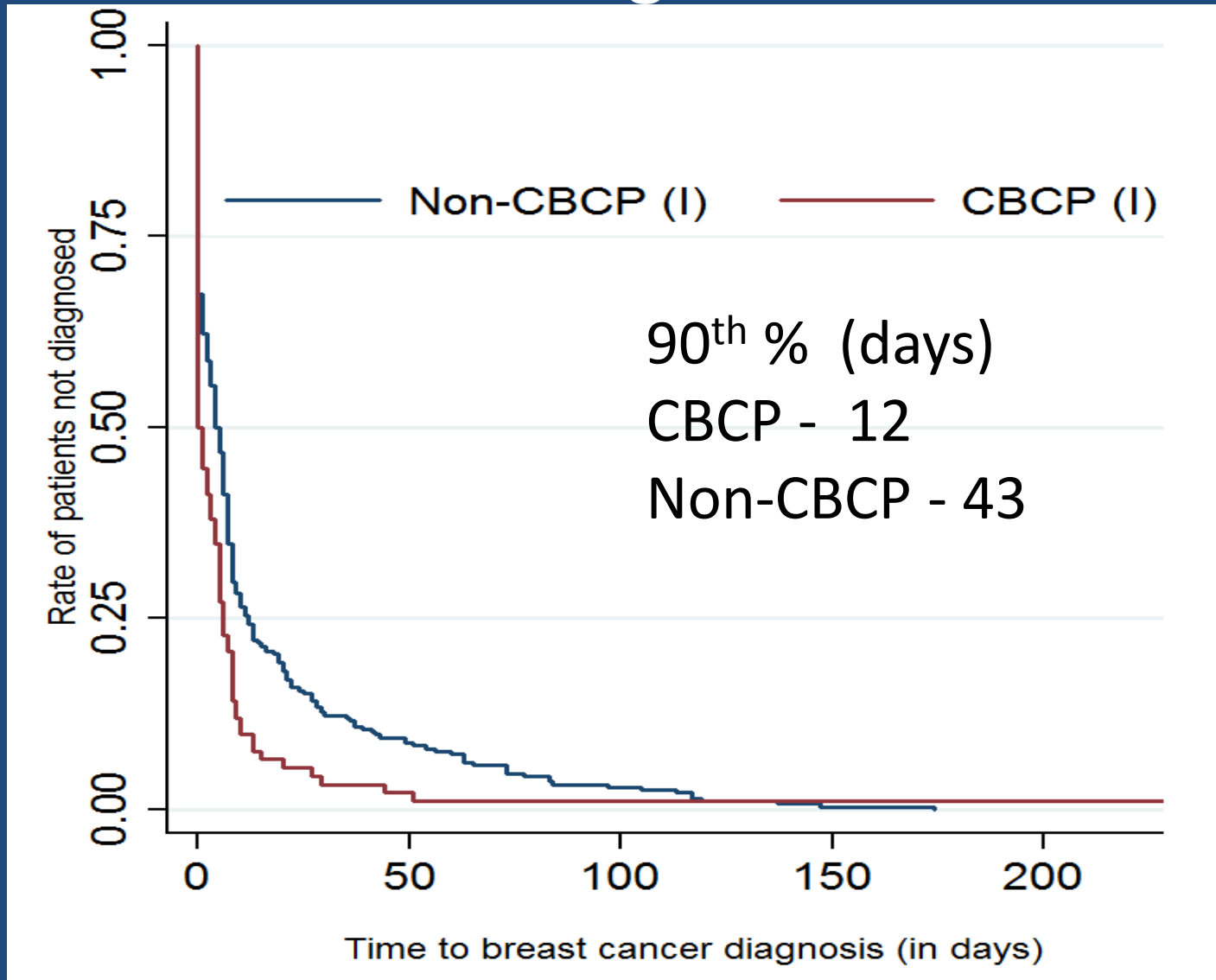
201 = CBCP patients with diagnostic imaging data available

92 (4%) = CBCP patients with at least one diagnostic imaging test between enrollment and diagnosis

Results - At what point in the pre-diagnostic trajectory do patients enroll in CBCP of those who enroll prior to breast cancer diagnosis?

- 77 of 92 patients (84%) had their 1stDI after enrollment into CBCP
- 10 patients had both a mammogram and ultrasound prior to CBCP enrollment
- 5 patients had 1 or 2 mammograms

Results- Impact of CBCP on time to breast cancer diagnosis



Lessons Learned

- Program planners need to consider the breadth of their goals to ensure appropriate targets are put into place –don't just follow political drivers
- Identify stakeholders at the beginning and include them in program design
- Development of new data collection systems should include a phased approach so that changes can be made

Next Steps

- Modifications to the program are being discussed/implemented to increase referrals to CBCP close to 1st DI
- Modifications are being discussed/implemented to improve program monitoring around management and care of all patients in the program

Thank You

Collaborators

- Yan Yuan, PhD
- Kai On Wong, PhD student

Project Managers

- Shelley Cloutier
- Janice Chobanuk