

# Breast Cancer Screening Outcomes

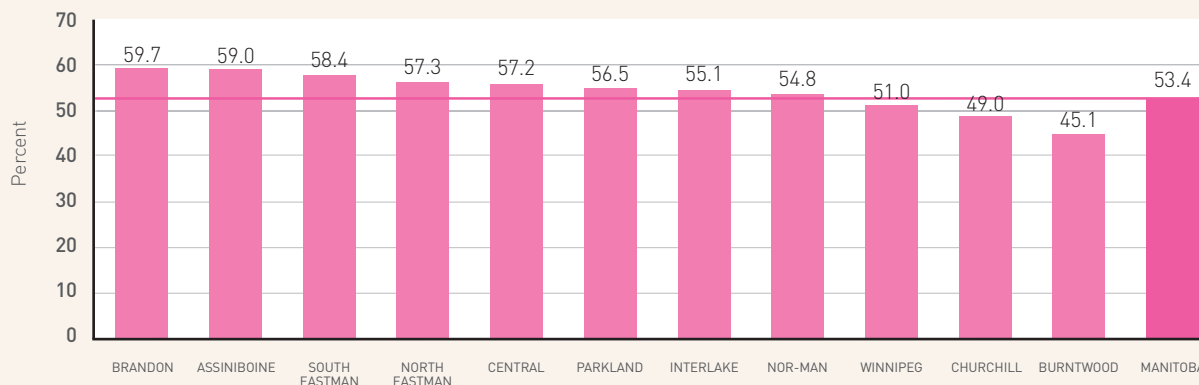
January 2010 - December 2011

BreastCheck's goal is to reduce mortality from breast cancer by detecting it as early as possible. In order to achieve this goal, BreastCheck recommends screening mammography (breast x-rays) for asymptomatic women 50 to 74 years of age, every 2 years.

BreastCheck's operations are evidence-based, continue to follow national guidelines, and meet the majority of national targets for organized breast cancer screening programs.

**(FIGURE 1)**

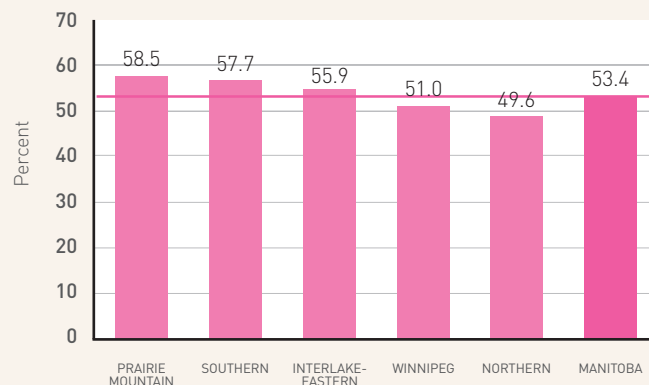
**Participation rate by Regional Health Authority from January 2010 to December 2011\***



\*women 50-69 years of age

**(FIGURE 2)**

**Participation rate by New\* Regional Health Authority from January 2010 to December 2011**

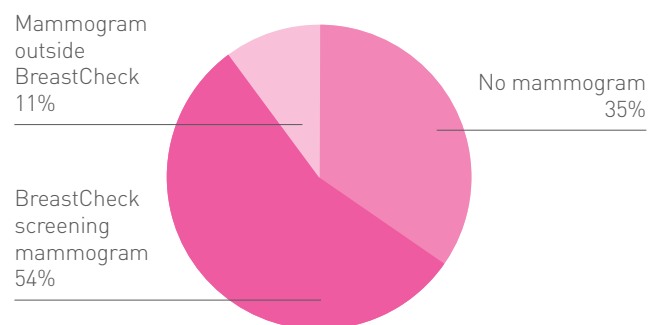


\*as established in 2012; women 50-69 years of age

## How Many Women Were Screened?

- ▶ BreastCheck provided 91,696 screens, an increase of 9,204 screens over the previous 2 years; 82,554 screens were for women 50 – 69 years of age.
- ▶ BreastCheck's participation rate was 53% (previously 56%). (Figures 1 & 2)
- ▶ 9% (n=8,704) of all screens at BreastCheck were for women over age 69. This number has continued to increase since the upper age limit of 69 was removed in 2008 and contributes to the decreased participation in the target group (50 – 69 years of age).
- ▶ Retention rate (the percentage of women re-screened within 30 months) was 79%.
- ▶ From April 2010 to March 2012, 11% of women 50 to 69 years of age had a mammogram outside of BreastCheck, 54% had a mammogram at BreastCheck, and 35% had no mammogram. (Figure 3)

**(FIGURE 3)**  
**Percentage of women by location of mammogram**  
**April 2010 to March 2012**

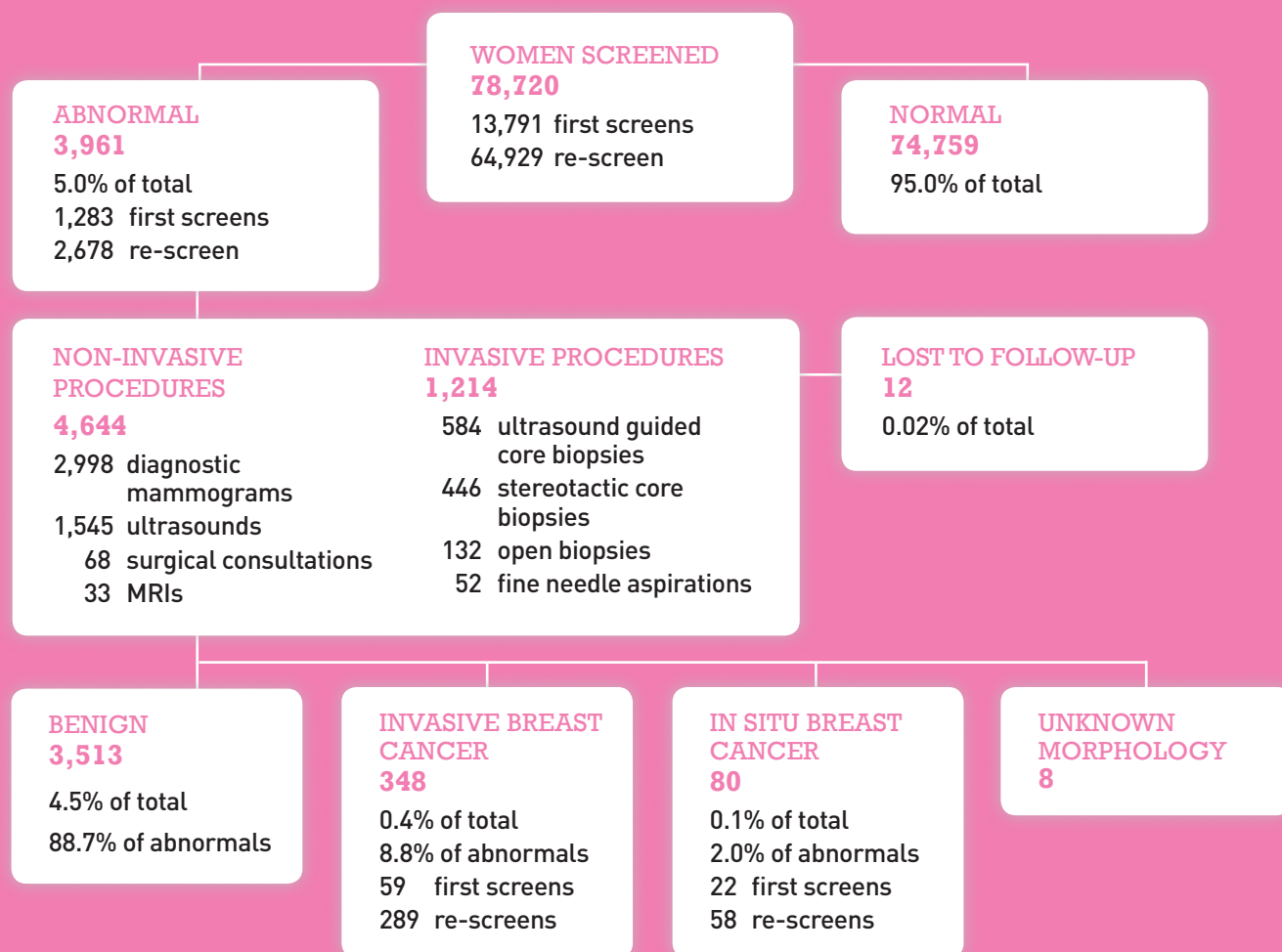


Source: Manitoba Health - women 50-69 years of age

### How Many Women Needed Further Tests?

- ▶ 98% of women received their screening results from BreastCheck within the recommended target of 14 days (median = 3.0 days).
- ▶ 5% of women screened at BreastCheck were referred for further diagnostic tests.
- ▶ 78% of follow-up tests were either a diagnostic mammogram or an ultrasound.

**(FIGURE 4)**  
**Screening outcome summary January 2010 to December 2011\***



\*women 50 – 69 years of age

## What Was The Time To Diagnosis?

- ▶ 68% of women who had an abnormal mammogram had their first follow-up test within 3 weeks of their screening date.
- ▶ 85% of women who had an abnormal mammogram and did not require a biopsy received a final diagnosis within 5 weeks of screening.
- ▶ 52% of women who had an abnormal mammogram and required a biopsy received a final diagnosis within 7 weeks of screening.
- ▶ The median wait time from screen date to final diagnosis for women with an abnormal mammogram was 21 days.
  - For women diagnosed with cancer, the median wait time from screen date to final diagnosis was 34 days.
  - For women with a benign outcome, the median wait time was 20 days.

### Time to Diagnosis Targets from Screen Date to:

#### FIRST FOLLOW-UP TEST

≥90% within 3 weeks

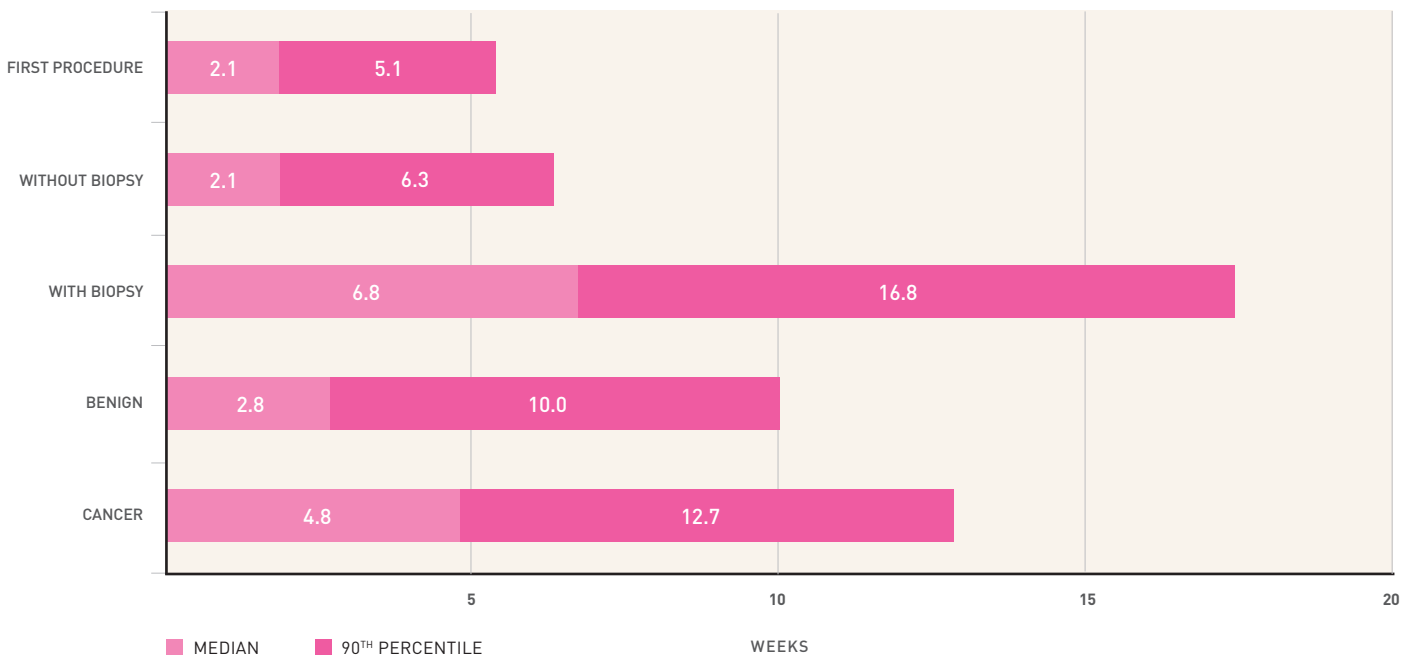
#### FINAL DIAGNOSIS

WITHOUT BIOPSY ≥90% within 5 weeks

WITH BIOPSY ≥90% within 7 weeks

(FIGURE 5)

Median and 90<sup>th</sup> percentile wait times to first procedure and diagnosis  
(women 50 to 69 years of age; January 2010 to December 2011)



## How Are We Doing?

- ▶ As part of the ongoing evaluation of BreastCheck, interim measures of program effectiveness are regularly compared to national targets as shown in Table 1.

**(TABLE 1)**

**Comparison of BreastCheck Outcomes with Canadian Targets<sup>1</sup>  
(women 50 to 69 years of age; January 2010 to December 2011)**

PERFORMANCE MEASURE	TARGET	BREASTCHECK OUTCOME
Participation rate – 30 months	≥ 70% of the eligible population	58%
Participation rate – 24 months	Surveillance and monitoring purposes only	53%
Retention rate for women screened in 2009	≥ 75% re-screened within 30 months	79%
Abnormal call rate	< 10% first screen < 5% re-screen	9.3% 4.1%
Invasive cancer detection rate	> 5 per 1,000 first screen > 3 per 1,000 re-screen	4.3 4.5
In situ cancer detection rate	Per 1,000 screens Surveillance and monitoring purposes only	1.0
Diagnostic interval	≥ 90% within 5 weeks – no tissue biopsy ≥ 90% within 7 weeks – tissue biopsy	85% 52%
Positive predictive value	≥ 5% first screen ≥ 6% re-screen	5% 11%
Benign to malignant open biopsy ratio	≤ 2:1 first and re-screens	2.5:1
Benign to malignant core biopsy ratio	Surveillance and monitoring purposes only	1.3:1
Invasive tumour size	> 25% ≤ 10 mm > 50% ≤ 15 mm	35% 60%
Negative lymph nodes in cases of invasive cancer	> 70% node negative	77%
Post-screen detected invasive cancer rate (2008 and 2009)	< 6 per 10,000 person years (0-12 months) < 12 per 10,000 person years (0-24 months)	5.3 6.5

<sup>1</sup>Canadian Partnership Against Cancer. Report from the Evaluation Indicators Working Group: Guidelines for Monitoring Breast Cancer Screening Program Performance (3rd Edition). Toronto: Canadian Partnership Against Cancer; February, 2013.