Improving Wait Times Along the Breast Health Clinical Trajectory

Duggan RD¹, Payne JI¹,², Foley TJ¹, Caines JS¹,²,³

1. Nova Scotia Breast Screening Program
2. Department of Diagnostic Radiology, Dalhousie University
3. QEII Health Sciences Centre, Halifax, Nova Scotia
Disclosure Statement

Mr. Duggan does not have any affiliations with any persons or entities that could be perceived as having a bearing on his presentation.
Background

• The Nova Scotia Department of Health & Wellness publishes wait time indicators across a variety of health-related services online to help patients and providers make informed choices
Welcome to Nova Scotia's Wait Times

We are committed to reducing wait times and providing better health care for you and your family.

This website provides information about wait times to help patients, families and health care professionals make more informed choices.

Search wait times...

Quick links:
- More About Wait Times
- National Benchmarks

Service Categories:
- Select a category...

All Services:
- Mammography (Diagnostic)

Latest News & Bulletins:
- Better Care Sooner Plan Helping Thousands
- Investment Supports Expansion of Satellite Dialysis Unit
- Province Providing Faster, Expanded Access to Home Care Services
- Nova Scotians Learn How to Self-manage Chronic Conditions
- Investment Supports Collaborative Emergency Centres in Nova Scotia
Background

• As of 2009, the Nova Scotia Breast Screening Program (NSBSP) moved from a prospective to a retrospective method of analyzing breast imaging wait times.

• Since 2009, the NSBSP has expanded the breadth of reported indicators and expanded dissemination through the direct delivery to key stakeholders every calendar quarter.

• Monitoring of breast imaging wait times aids in improving system performance and provides transparency to the public.
Objectives

• Monitor the entire clinical trajectory beyond the breadth of national performance indicators for breast screening wait times

• Inform clinical, managerial, and administrative staff of their direct affect on wait times

• Break national wait time indicators into smallest components for tailored reports
Methods

• All breast imaging in Nova Scotia (screening and diagnostic) is centrally booked by the NSBSP booking office

• The NSBSP’s information system contains date-related data for all breast imaging and associated events that occur in Nova Scotia
Methods

• A data extract is generated by the NSBSP’s information system for each of its nine wait time indicators:
  – Screening Mammography
  – Screen to Work-up
    • Screen to Report
    • Report to Work-up
  – Diagnostic Mammography
  – Screen to Core Biopsy
  – Work-up to Core Biopsy
  – Image to Core Biopsy
  – Core Biopsy to Cancer Surgery
Methods

• Breast imaging wait times in Nova Scotia are calculated by calendar quarter using SAS. The median and 90th percentiles are reported as per provincial wait time standards.

• Once calculated, the nine indicators are graphed for each of the nine District Health Authorities (DHAs) in Nova Scotia.
Methods

• Graphing is done to compare each respective DHA to the provincial value, as well as to each other

• National and provincial targets are included where applicable

• The NSBSP submits four of the nine indicators to the Nova Scotia Wait Times website for public access
A comparison of a particular site versus the provincial values
A performance comparison of all DHAs and the province for a calendar quarter. National target visualized.
A performance comparison of all DHAs and the province over four calendar quarters.
National target visualized.
Methods

• Once completed, a 19-page PDF report is e-mailed to all breast imaging radiologists, senior breast imaging technologists, technical assistants and department managers for each respective DHA

• Each respective report includes a summary cover page highlighting performance for all indicators
Nova Scotia Breast Screening Program Wait Times Overview
October 01 - December 31 2012

Halifax

<table>
<thead>
<tr>
<th>Wait Time Indicator</th>
<th>Definition</th>
<th>5 out of 10 of your patients wait less than</th>
<th>9 out of 10 of your patients wait less than</th>
<th># Records</th>
<th>Comments (based on 90th percentile)</th>
</tr>
</thead>
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<tr>
<td>Screening Mammogram</td>
<td>Date from when a first-time client calls central booking to the date of screening appointment</td>
<td>75</td>
<td>126</td>
<td>224</td>
<td>Above Provincial Target of 91 days.</td>
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<td>Work-up Mammogram</td>
<td>Date from screening mammogram to the date of work-up mammogram</td>
<td>13</td>
<td>15</td>
<td>333</td>
<td>Below Canadian target of 35 days. <em>(Lowest in NS)</em></td>
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<tr>
<td>Screen to Report</td>
<td>Date from screening mammogram to the date of finalized report</td>
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<td>7</td>
<td>3251</td>
<td>Below Canadian target of 14 days.</td>
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<tr>
<td>Report to Work-up</td>
<td>Date from finalized report to date of work-up mammogram</td>
<td>7</td>
<td>10</td>
<td>334</td>
<td>Below Canadian target of 21 days. <em>(Lowest in NS)</em></td>
</tr>
<tr>
<td>Diagnostic Mammogram</td>
<td>Date from when a requisition is received to date of an urgent or semi-urgent diagnostic mammogram</td>
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<td>17</td>
<td>776</td>
<td>Above Provincial target of 14 days.</td>
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<td>Image to Core Biopsy</td>
<td>Date from most recent breast-related diagnostic imaging procedure to date of needle core biopsy</td>
<td>12</td>
<td>21</td>
<td>264</td>
<td><em>(Lowest in NS)</em></td>
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<td>Screen to Core Biopsy</td>
<td>Date from screening mammogram to date of needle core biopsy</td>
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<td>35</td>
<td>116</td>
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<td>22</td>
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<tr>
<td>Core Biopsy to Surgery</td>
<td>Date from needle core biopsy to breast cancer surgery</td>
<td>51</td>
<td>77</td>
<td>66</td>
<td><em>(Calculated over two calendar quarters)</em></td>
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</tbody>
</table>

An example of a wait times report cover page, highlighting performance across all nine indicators
Tailored Wait Time Information

• Wait time performance indicators are often comprised of multiple, smaller wait times along the clinical pathway

• To effectively address the long wait times in Nova Scotia for work-up mammograms (Target: ≤35 days), the NSBSP began reporting this wait time as two separate indicators:
  – Screen to Report
  – Report to Work-up
Tailored Wait Time Information

• **Screen to Report**: a direct reflection of how quickly a radiologist reports a screen (Target: ≤14 days)

• **Report to Work-up**: a reflection of the NSBSP’s booking clerks scheduling of work-up mammogram appointments* (Target: ≤21 days)

• A tailored report is provided to each booking clerk listing all work-ups booked, the number of days each patient had to wait, and the percentage of patients they booked outside the targeted timeframe

*Also dependent on appointment availability at each site
### Work-up Booking Results by Quarter

#### Amherst October - December 2012

**Target: 21 days or less**

<table>
<thead>
<tr>
<th>C_ID</th>
<th>S_RESDATE</th>
<th>PROC_DATE</th>
<th>WAIT</th>
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</table>

0 / 83 = 0.0% over target

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### Work-up Booking Results by Quarter

#### Truro October - December 2012

**Target: 21 days or less**

<table>
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<td>100027</td>
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<td>20/11/12</td>
<td>34</td>
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</table>

4 / 128 = 3.1% over target
Results

• Moving from prospective to retrospective analysis eliminated the ability for sites to manipulate the wait time calculation

• Breaking down national wait indicators allowed the NSBSP to find bottlenecks at various stages of the breast health continuum

• Administrators are more conscientious of making changes that affect wait times

• Poor performing DHAs seek to improve

• Provincial work-up wait time has fallen from 46 days to 26 days in two years
Summary

• NSBSP has moved from estimating screening wait time to the retrospective analysis of nine wait time indicators

• Since dissemination of breast imaging wait time information to all providers and administrators, an overall decrease in wait time has occurred in Nova Scotia

• Tailoring wait times to directly relate to provider performance is empowering
Next Steps

• Fully automate the calculation and graphing of wait time indicators

• Develop an online tool to provide dynamic access to current and historical wait time information through a data warehouse

• Integrating Statistical Process Control (SPC) to automatically alert the NSBSP to emerging trends, based on a set of rules, to allow for quicker intervention
Thank you for your consideration.

Contact Information:

Ryan Duggan MHI RTR Ryan.Duggan@cdha.nshealth.ca
Theresa Foley BSc RTR Theresa.Foley@cdha.nshealth.ca

Nova Scotia Breast Screening Program
603L-7001 Mumford Rd.
Halifax, NS B3L 2H8
P: (902) 473-3960 | 1-800-565-0548
F: (902) 473-3959 | 1-866-470-3959
breastscreening.nshealth.ca