Improved Access to Surgery Following Centralization of Breast Cancer Surgical Consultations

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Introduction

• Breast cancer management – multidisciplinary, timely access and carefully coordinated care is imperative

• Delay to surgery associated with worse outcomes in breast cancer
  • Reduced overall and disease-specific survival with longer waits (>60 days)\textsuperscript{1,2,3}

• Models to reduce wait times
  • Rapid Diagnostic Unit\textsuperscript{4}: shortened time to diagnosis but no change in time to definitive treatment
  • Rapid Access Breast Clinic\textsuperscript{5}: shorter wait time to surgical consult, RABC patients more likely to undergo surgery within 60 days of presentation
  • Nurse Navigation\textsuperscript{6}: shorter wait time to surgical consult

• Centralized intake and triage: new initiative to further reduce wait time for breast cancer surgery
Methods

• A before-after series using a retrospective review of a prospectively maintained database at Providence Breast Centre, comparing wait times prior to centralization and navigated triage (2017) and after (2018)

Inclusion:
- All patients referred and treated with invasive or in situ breast cancer (2017-2018)

Exclusion:
- Benign disease
- Recurrence
- Palliative pts
- Prophylactic
- NAT (from wait time analysis)

Primary Outcome:
- # days from diagnosis to surgery (Core bx to consult, consult to surgery)

Secondary Outcomes:
- # days for 50%/90% case completion
- Access to specialized programs (NAT, recon)
- # available OR days
Results

Total new patients: 616 (2017) vs 600 (2018)


Core Bx to Consult
21 days $\rightarrow$ 17 days
(p = 0.0013)

Consult to OR
26 days $\rightarrow$ 24 days
(p = 0.06)

Core Bx to OR
47 days $\rightarrow$ 41 days (p = 0.0008)

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Core Bx to Consult (days)</th>
<th>Consult to OR (days)</th>
<th>Core Bx to OR (days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partial Mastectomy</td>
<td>20 $\rightarrow$ 17 (p = 0.02)</td>
<td>23 $\rightarrow$ 22 (p = 0.26)</td>
<td>43 $\rightarrow$ 39 (p = 0.04)</td>
</tr>
<tr>
<td>Total Mastectomy</td>
<td>20 $\rightarrow$ 15 (p = 0.01)</td>
<td>26 $\rightarrow$ 28 (p = 0.31)</td>
<td>46 $\rightarrow$ 43 (p = 0.27)</td>
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<tr>
<td>Mastectomy + Recon</td>
<td>22 $\rightarrow$ 19 (p = 0.22)</td>
<td>38 $\rightarrow$ 30 (p = 0.008)</td>
<td>60 $\rightarrow$ 49 (p = 0.01)</td>
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</tbody>
</table>
Results

Overall volume (# cases) at MSJ in 2017 and 2018 highlighting increased efficiency (shorter wait time) despite overall lower # cases/OR days in 2018

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<thead>
<tr>
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<th>50% done</th>
<th>90% done</th>
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<tbody>
<tr>
<td>2017</td>
<td>37 days</td>
<td>81 days</td>
</tr>
<tr>
<td>2018</td>
<td>36 days</td>
<td>63 days</td>
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Shorter median wait time (50% done) and shorter amount of time needed to get 90% cases done following centralization of consults

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<thead>
<tr>
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<th>2017</th>
<th>2018</th>
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<tr>
<td># patients for NAT</td>
<td>79 (12.8%)</td>
<td>56 (9.33%)</td>
</tr>
<tr>
<td># patients for recon</td>
<td>78</td>
<td>116</td>
</tr>
<tr>
<td># OR days at MSJ</td>
<td>349</td>
<td>324</td>
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Reduced # neoadjuvant therapy post-centralization (Pts meeting borderline criteria had surgery instead) More patients underwent reconstructive surgery 7% reduction in OR time assigned to general surgery in 2018
Conclusions

• Centralization of breast cancer surgical consultation reduced wait time between diagnosis and definitive surgery, despite reduced resources (i.e. OR days)

• Wait time for partial mastectomy and mastectomy with reconstruction showed significant reduction in wait time, whereas total mastectomy showed a trend towards lower wait time to surgery

• Streamlining the patient’s journey with central intake and triage within our breast surgical oncology group led to a significant improvement in efficiency, reducing time to definitive surgery

• Future steps for research: patient reported outcome, effect on surgical volume by individual surgeons pre- and post-centralization
References


