Does a Breast Cancer Nurse Navigator Program Change the Time Elapsed Between Steps in the Treatment Plan?
Overview of Project

• Three Measures regarding breast cancer surgery and the Nurse Navigator program

  2 quantitative measures
  1. Time from diagnosis to surgery
  2. Time from surgery to radiation

  1 qualitative survey
  1. Patient satisfaction
Oncology Nurse Navigator Role

*Why is there a Nurse Navigator?*

*COC, NAPBC/ American College of Surgeons*

*What is the role of the nurse navigator in breast cancer treatment?*
Oncology Nurse Navigator Role

• Educate, explain, answer questions
• Support
• Coordinate between providers
• Connect with resources
Oncology Nurse Navigator Role

• Typical pathway for early-stage Breast Cancer

- Imaging
  - Breast Biopsy
  - Pathology result shows cancer

- Appointment with Breast Surgeon
  - Surgical options
  - Surgery Date

- Lumpectomy
  - See Med Onc and Rad Onc
  - Adjuvant Radiation
Why look into the data?

• Difficult to quantify intangible effects
• There is a need for metrics in the navigator community
3 Measures for breast cancer care at LUH

1. Diagnosis → Surgery

• Time from diagnosis to surgery
  – with and without navigator intervention
  • timeframe: 2015 – 2017
3 Measures for breast cancer care at LUH

2. Surgery → Radiation

• Time from surgery to adjuvant radiation, with and without navigator intervention
  • timeframes: 2015-2017
3 Measures for breast cancer care at LUH

3. Satisfaction with the Nurse Navigator program

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Time from Diagnosis to Surgery

Results:

• 7-58 days with navigator
• 13-83 days without navigator
Time from Diagnosis to Surgery

• **Benchmark**

NQMBC National Quality Measures for Breast Centers: time from biopsy to initial surgery is up to 50 days.

• At LUH:

- 49/51 meet the benchmark with Nav
- 48/51 meet the benchmark w/o Nav
- Of total 102: 95% meet the quality benchmark.
With Navigator

Without Navigator
Time from Diagnosis to Surgery

• Mean with navigator: 24.6 days
• Mean without navigator: 28.9 days

Not statistically significant
P value= 0.93
N=51
Time from Diagnosis to Surgery

What else would we like to know from the data?

• Patient age
• Does the time of year effect the timeframe?
• Compare to subsequent years
• Consider reporting/ publishing/ publicizing the high quality
Time from Surgery to Adjuvant Radiation

- Benchmark? Couldn’t find a consensus.
- Institutional Standard: 4-6 weeks (28-42 days)
  - Time must be allowed for healing post-surgery
  - Many variables affect this timeframe
Time from Surgery to Adjuvant Radiation

Results:

• 19-63 days with navigator
• 12-93 days without navigator

• Institutional Standard: 28-42 days

Not statistically significant
P value= 0.33
N= 30
Time from Surgery to Adjuvant Radiation

With Navigator

Without Navigator
Time from Surgery to Adjuvant Radiation

What else would we like to know?

• Patient age
• Does the time of year effect the timeframe?
• Compare to subsequent years
• Process improvements needed
• How does the timeframe affect outcomes?
Statistical analysis

• Sample size
• Finding the right analytical tools
• Statistical significance
• Statistical analysis to be continued.....
Implications for Navigator

• As metrics to evaluate the navigator program—these two measures may or may not be pertinent.

Therefore…

• Patient satisfaction was also evaluated.
Patient Feedback for Navigator: Method

• Surveys were conducted by phone, by LUH volunteers.
• Collection is ongoing.
Evaluating the navigator program

1. Navigator improved overall comfort
   93% gave highest response

2. I would recommend the service to others
   89% gave highest response

3. Navigator provided helpful info, resources
   78%

4. Navigator kept me and my family informed
   69%
Evaluating navigator services

1. Navigator accessibility during treatment
   93.7% responded Really Helpful
2. The navigator being present at biopsy
   93.3% responded Really Helpful
3. Notes taken during physician appointment
   92%
4. The Health Organizer/Binder information
   81%
5. Follow-up/Reminder Phone Calls from ONN
   78%
Patient Satisfaction Scores - 96% positive overall

- strongly agree/very helpful - 85%
- agree/helpful - 11%
- neutral
- disagree/unhelpful
- strongly disagree/very unhelpful - zero
Patient Satisfaction Overall

• Using 1 to 5 scale, 120 of 141 responses across categories, or 85%, gave the highest rating.

• Average: 4.8 out of 5

• Very satisfied patients

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Future research

• Needed: Could not find a benchmark for the timeframe for adjuvant radiation. Is there a difference in outcomes?
• Needed: Continue to measure quantifiable impacts of navigator. Bigger sample sizes, measuring similar metrics, might reach statistical significance?
• Other ways to look at the same data: differences by age, time of year, insurance status, etc.
• Continue to gather patient feedback for the navigator program.
Limitations

• Sample sizes
• Single institution
• Lack of clear benchmarks for comparison
• Coaching of volunteers in conducting phone surveys
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