## The Radiology Nurse Navigator's Impact Upon Timeliness of Care from Abnormal Imaging to Image-Guided Breast Biopsy

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#### National Quality Measures for Breast Centers (NQMBC)

- □ Set of 30+ criteria published in 2004 by the National Consortium of Breast Centers (NCBC).
- One of the criterion is Imaging Timeliness of Care, specifically "time between diagnostic imaging and Needle/Core biopsy."

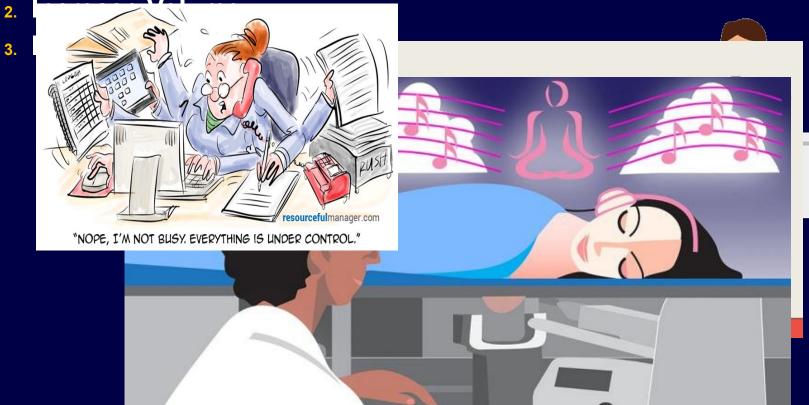


#### **Hypothesis:**

#### Implementing a nurse Navigator will...

**Decrease Interval Time** 

3.







# August 2017 – Dedicated Radiology/Breast Imaging Nurse Navigator position.

- 1. Serve as the entry point for patients into the multidisciplinary breast cancer care system.
- 2. Coordinate care between the referring physician and members of the multidisciplinary breast cancer team.
- 3. Schedule advanced imaging, biopsies (often on same day as diagnostic imaging), and assist with initial surgical and oncology appointments.
- 4. Aid in obtaining referrals and pre-authorizations for procedures, taking an active role in pre and post biopsy care/instructions.
- 5. At Georgetown, consider expanding the Nurse Navigator role to assist physicians at time of biopsy in an effort to increase overall efficiencies within the section.





#### **Study Design**

- Biopsy cases were identified searching radiology reports from Jan 1, 2017 to June 30, 2017 (without the Nurse Navigator) and Jan 1, 2018 to June 30,2018 (with the Nurse Navigator) using the terms BIOPSY (BX) AND BREAST AND MAMMOGRAM.
- For each PROCEDURE, the following were obtained:
  - The type of procedure (MR biopsy, Stereotactic bx, US bx)
  - The date of the biopsy and the date of the initial "abnormal examination"
  - The interval between the imaging and the image-guided biopsy in working days.





#### Results

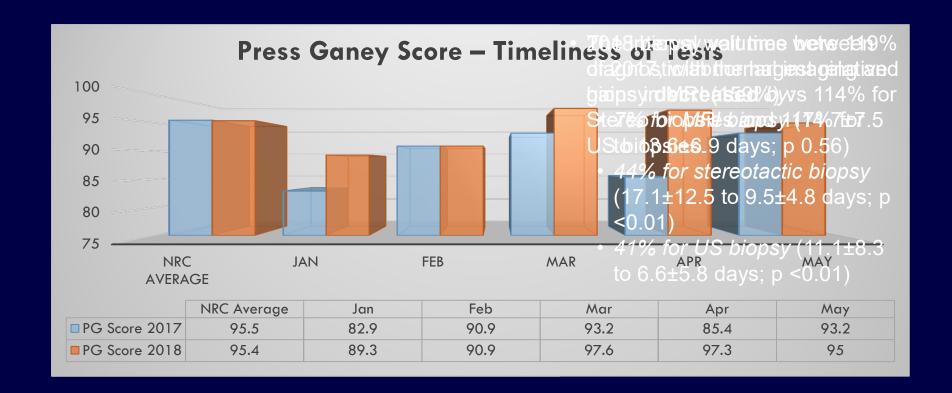
- In 2017, utilizing the aforementioned criteria, 321 procedures were documented in 316 patients. The breakdown of the procedures and average interval time from imaging to biopsy are as follows:
  - 22 MRI biopsies average interval: 14.7 days (range 6-31 days)
  - 79 Stereotactic biopsies average interval: 17.1 days (range 2-64 days)
  - 220 US biopsies average interval: 11.1 days (1-61 days)

- In **2018**, utilizing the aforementioned criteria, <u>383</u> procedures were documented in 370 patients. The breakdown of the procedures and average interval time from imaging to biopsy are as follows:
  - 35 MRI biopsies average interval: 13.6 days (range 2-27 days)
  - 90 Stereotactic biopsies average interval: 9.5 days (range 1-22 days)
  - 258 US biopsies average interval: 6.6 days (0-46 days)





#### Results







#### Conclusion

### The Implementation of a Radiology Nurse Navigator led to:

- Decrease in interval wait times between abnormal imaging and image guided breast biopsy.
- □ Increase in biopsy volumes.
- Increase in patient satisfaction.

#### **Limitations**

- Unusual cases in which delays in biopsy can be attributed to unique circumstances.
- Cases where patients had outside imaging and then came for surgical consultation PRIOR to biopsy.
  - Interval biopsy times take into account both the wait time for the surgical appointment and the biopsy date and thus are higher than patients with imaging performed at MGUH.
- Indeterminate documentation to determine reason for delays in biopsy.





#### **Future Direction**

- Opportunities for further study include looking at the impact of the Nurse Navigator on the following:
  - Patient satisfaction specific to breast imaging
  - Physician and Mammo Technologist Satisfaction
  - Additional quality measures including surgical timeliness of care, time from needle biopsy to initial breast cancer surgery.
  - Cost Benefit Analysis
    - Tangible and Intangible
  - System Wide Implementation





#### References

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- 4. Harding, M. Effect of nurse navigation on patient care satisfaction and distress associated with breast biopsy. *Clin J Oncol Nurs*.2015 Feb;19(1):E15-20.

#### **Image Sources**

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- 2. "Corporate Woman Talking on the Phone Leaning on Desk GIF Animation Loop.gif from Wikimedia Commons by Videoplasty.com, CC-BY-SA 4.0"
- 3. <a href="https://whatsupatupstate.wordpress.com/2016/05/23/a-trusted-guide-through-cancer-treatment-the-nurse-navigator/">https://whatsupatupstate.wordpress.com/2016/05/23/a-trusted-guide-through-cancer-treatment-the-nurse-navigator/</a>
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