Quality Improvement with The Breast Center

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Introduction

With the exception of certain skin cancers, breast cancer is the most common cancer in women of all ethnicities. Breast cancer is the most lethal cancer for Hispanic women, and second most lethal for white, black, Asian/Pacific Islanders, and American Indian/Alaska Native women (Centers for Disease Control and Prevention, 2019). The Breast Center is primarily an imaging center focused on breast health with the goal of lessening the impact of breast cancer on the community. They do this utilizing various types of imaging and biopsies, as well as providing risk assessments and genetic testing related to breast malignancies.

I spent the summer of 2019 interning at The Breast Center under Audra Flammang. She has a degree in communications and holds the position of Quality Assurance Administrator. She primarily works to ensure Joint Commission Quality Indicators are met and proper documentation of these indicators takes place. She communicates with the staff in weekly meetings about their ideas for quality improvement projects and necessary indicators for ongoing or upcoming projects. Her job also includes preparing case briefings for the weekly Breast Conference that occurs at Washington Regional.

During my internship, I was fortunate to learn a lot about radiology and cancer, participate in several quality improvement initiatives, complete chart audits, sit in on interdisciplinary meetings, and observe imaging and biopsies. In this paper, I will walk through experiences that I had, as well as how they aligned with my goals for this internship.

Reflection

One of my weaknesses coming into this internship was my lack of knowledge about cancer and radiology. Before I could be useful in chart audits and quality improvement projects,
I needed to familiarize myself with radiology, malignant and benign breast findings, as well as all of the associated terms used. I began this process by spending some time looking through the BI-RADS manual. This is the Breast Imaging Reporting and Data System. The manual walks through all different types of breast imaging, and outlines characteristics of the image that allow it to be classified by its likelihood of malignancy from 0-6. I was able to examine a lot of radiology images and learn what breast tissue looked like if there was calcification, or if a mass was ill-defined, lobular, oval, speculated and more. I also learned the associated level of suspicion for these characteristics.

While I was there, I got to meet and learn some from Dr. Harms about Breast MRI technology. Dr Harms is a breast radiologist, but he is one of the most renowned radiologists in The United States. He won the Komen Foundation Scientist of the Year for his invention of breast MRI technology, and was a chairman for the Radiologic Devices Panel for the FDA. I was fortunate to have some time with Dr. Harms in which he explained to me how his MRI machine worked. I got to see it in action and then review some of the resulting breast MRI images. I developed a greater understanding of radiology because of this experience.

To further prepare for the quality initiative projects and chart audits, I spent time reviewing *The Breast Book* by Dr. Susan Love. This provided me with an understanding of different levels of treatment, how chemotherapy and hormonal therapy works, what made each stage of cancer different from the others, and what terms like “triple negative,” and “LCIS,” mean. I learned that each type of breast cancer is so vastly different, and this means that it requires different types of treatment. Some have hormone receptors that can be targeted with hormone receptor blockers. Other types of cancer would not respond to hormonal treatment at all. Some could be surgically excised quite easily, but other types have to undergo reduction by
chemotherapy and radiation before a surgeon would attempt to remove the cancer. I gained a lot of knowledge that helped me to meet my objective of understanding cancer and breast disease better.

Once I learned enough to be helpful, I became highly involved with the data processing side of quality improvement, as well as assisting with preparation for their upcoming audit by The Joint Commission. I helped identify appropriate cases that met the Joint Commission requests- such as a certain number of patients with Lobular Carcinoma in Situ, a certain number of patients with benign masses, and so on. I had to find evidence of each parameter that the Joint Commission was looking for. This helped me to improve my abilities to navigate through different EHR systems, as well as pathology reports and physician charting. I became very efficient at finding the relevant data and interpreting it.

One quality improvement project that I enjoyed working on was the Tamoxifen Compliance Initiative. It was an interdisciplinary study that looked at compliance levels, and reasons for non-compliance. The goal was to determine how compliance levels could be increased. This required me to work with data received from Highland Oncology to determine the number of patients referred from The Breast Center that were compliant and non-compliant with Tamoxifen. I also examined their reasons for non-compliance and compiled a report. The study showed that non-compliance rates were about 10%, largely due to side effects similar to menopause, as well as vision changes. One option that The Breast Center and Highlands Oncology were considering as a proposed solution was a reduction in the dosage, which has shown to decrease negative side effects, without significantly reducing the therapeutic effects (Lee et al., 2019). This, in theory, would increase long-term compliance.
This project was my favorite to work on because I had the autonomy to compile data, sort it, and write a report that Audra would distribute at the weekly team meeting. My contributions directly impacted the initiative to improve Tamoxifen compliance, and therefore improve patient outcomes. One objective I set prior to beginning my internship was to gain a better understanding of what quality improvement looks like from start to finish, especially with regards to how the interdisciplinary team is involved. I got an up close, inside view of the quality improvement process. I understood the how and why the project idea was generated, it’s importance, how it would create a positive impact, and what data was analyzed. Unfortunately, I was not allowed to attend the interdisciplinary team meetings in which they discussed these initiatives, and that is one area that this experience could have been improved. I would have liked to see who attended each meeting, and what their level of involvement was. In my nursing career, I would like to participate in quality improvement committees, so the opportunity to see examples of team communication and troubleshooting in an effort to change policy and practice would likely have been beneficial to improving my effectiveness in the future.

The best part of my internship was The Breast Conference, hosted by Washington Regional Medical Center. It is a very exclusive meeting. It took me several weeks to get approval to attend, but was well worth the effort. Every Tuesday morning at 6 a.m., there is an interdisciplinary meeting in which all related specialties show up to discuss difficult cases. There were breast surgeons, oncologist, pathologists, radiologists, genetic counseling nurses, a representative from Hope Cancer Resources, occasionally a palliative care physician and special guests. Usually the surgeon would present the case, detail the pathology and treatment plan, and then the radiologist would show the images and describe them. Often, the surgeon would ask questions to the oncologists or other surgeons in order to brainstorm effective treatment plans
that were within the realm of what the patient was willing to comply with. They would also present any particularly rare cases, utilizing them as learning opportunities for the group.

While a lot of the information was above my level of understanding, observing the group collaboration was such an excellent experience. In community health, collaborative care is something that has been discussed often. The Institute of Medicine identifies collaborative care as having the ability to improve effectiveness, efficacy, and safety of medicine (Agency for Healthcare Research and Quality, 2018). This experience gave me a first-hand look at why that is. All of the participants in these conferences communicated with keen interest in what each person had to say. I did not perceive any close-mindedness or elitist attitudes, which allowed for effective communication and the exploration of new ideas. It allowed all parts of that patient’s care team to be involved and on the same page about their treatment plan and options. The collaborative environment that was created was something I would like to emulate as a manager of care for my patients in the future. This exceeded my expectations with regards to the learning objective, “.” Because I had the opportunity to witness exemplary interdisciplinary teamwork, I gained a much better understanding of the importance and value of collaborative care.

Lastly, I got to observe 3 breast biopsies, 3 mammograms, and a breast MRI. The breast biopsies were performed by an interventional radiologist and assisted by 2 nurses. I was able to observe the whole procedure and witness great therapeutic communication throughout. They were so helpful in explaining both to me and the patient what was happening, and what they expected the findings to be based on the mobility and character of the nodules. Observing mammography was interesting as well. I got a better understanding of how the images were obtained, and how precise the radiology technicians had to be in order to get the right image. The breast MRI was rather uneventful, but I learned that these are utilized when the patient has
dense breast tissue, and the structures cannot be visualized adequately by mammogram or ultrasound. All of this contributed to a more holistic understanding of the process that a cancer patient goes through prior to diagnosis. This will allow me to understand the patient experience better.

**Conclusion**

All in all, this internship experience was very rewarding. My biggest takeaways include better understanding of the quality improvement process, practical application of how to collect and process data to improve patient outcomes, and the importance of collaborative care. The first two takeaways directly met my objectives, while the last exceeded my expectations. This is an experience that I would recommend to any nursing student that wants a better grasp on what quality improvement looks like. Without the Research in Nursing course taught by Dr. Ballentine, I would not have been properly equipped to succeed in this internship, but I believe that I was prepared well and excelled. It was not heavy on patient interaction or clinical experience, but I believe that it has added a skill set to my repertoire that I would not have otherwise.
References

