Professional Story Rubric

With the nurse residency program onboarding new nurses multiple times throughout the year, VUMC has a significant number of novice inpatient nurses. Throughout my years as a nurse at Vanderbilt as an inpatient and as a radiology procedural nurse, I have noticed significant educational gaps with inpatient nursing staff. In addition to this gap, radiology recovery (ROCU) has experienced a 20% decrease in bed availability due to construction. I saw this as an opportunity to create resources the floor nurses could use to feel more confident when caring for IR patients as well as offload patients who needed to go to ROCU for recovery to decompress their throughput. I targeted the step-down floors because it is within scope of critical care trained nurses to recover moderately sedated procedural patients when staffing matrixes allow. ROCU does not accommodate ICU level patients as they must recover in their room. Thus, I felt this education initiative would most benefit the step-down nurses. The identification of this educational gap is further supported by a study that was conducted at Canadian 460 inpatient bed hospital. Non-radiology inpatient nurses were interviewed to gauge their knowledge of caring for an interventional radiology patient. "Non-radiology nurses consistently commented on how they lacked confidence when implementing IR preprocedural and postprocedural care. This left them feeling confused and unsure of how to safely provide care for their IR patients. Participants voiced a strong desire to have current, written resources that provide clear direction and instruction particularly relating to preprocedural care" (Carly A et al 2021). Common themes they noted from the interviews were "Increasing knowledge helps build confidence, IR knowledge gap prevented development of a trusted nurse-patient relationship and lacked knowledge about imaging modalities and procedures." This evidence-based practice study further supports my goal of my initiative. I started with constructing a reference sheet to give a copy to the charge nurses on these floors. I wanted to provide the bedside nurses with a guide to refer to when recovering an IR patient. I wanted to build off this reference sheet and ask to be invited to unit board meetings to discuss more in depth the role of interventional radiology in a patient's care. The goal of the lecture is to address any concerns or anxieties floor nurses may have about pre and post care of a patient who needs IR. I educated on NPO guidelines, the different procedures that are most common for inpatients, recovery expectations following a procedure and how to find IR and contact us. This was also supported by the study, "Clinical collaboration could be enhanced by identifying either the interventional radiologist's name and contact number on patients' charts or a clinical liaison" (Carly A et al 2021). I also discussed with IR residents, when they are on-call, what are the most common pages received from nursing staff. I used this data in my PowerPoint as well. I discussed different incidences when to page the primary team and when to page IR. I discussed during lecture most common questions that were paged and when these questions could be directed to IR charge to help better streamline communication between floor and procedural nurses so they can adequately educate their patients and their family. Not only did I educate to help improve patient satisfaction during admission, but I also provided education that would facilitate more knowledgeable discharge teaching. I educated how to flush different drains, change drain bags, and drain dressing when

the patient is home. These efforts help build a trusting relationship between patients and non-radiology nurses. By being more informed of IR services, nurses can holistically care for their patients and provide emotional support to patients who need IR services. This is further supported by Carly A et al, "When specialists in IR departments actively seek out opportunities to share information, non-radiology nurses can provide safer, more informed care in hospitals as well as community settings. Knowing that lack of collaboration among IR departments, hospital, and community nurses can impact the provision of safe holistic care, the need for professional development opportunities that enhance interdepartmental collaboration becomes clear. In sum, there is a pressing need to develop resources that non-radiology nurses can use to deepen their understanding of IR." IR touches every patient population in the hospital from patient's admitted to oncology to patients on labor and delivery services. My goal with this project is to further extend the educational materials to the nurse residency program. This way nurses can be educated before they are on the units and have baseline IR educated to grow from and apply on the floors.

The success of my work is evident in the redcap surveys that were taken to assess the level of knowledge and comfortability the inpatient nursing staff had taking care of an IR patient. Before my presentation during unit boards, participants took a pre survey that addressed their baseline knowledge and comfortability around IR patient care. Participants were instructed to take a post survey right after presentation and one month after to evaluate if discussion and education were beneficial to their practice. The redcap first identified date, job title and unit of work. The redcap survey included 8 statements that were answered on Likert scale from strongly disagree to strongly agree options. They are listed below.

1. I am comfortable caring for patient after an embolization
2. I am comfortable caring for a patient after new nephrostomy tube
3. I am comfortable caring for a patient after a solid organ biopsy. (liver kidney lung)
4. I have a good understanding of interventional radiology services
5. I have a good understanding of a patient's npo requirements prior to an IR procedure
6. I know who to contact when I have interventional radiology questions
7. I know NPO guidelines for moderate sedation/general anesthesia procedures
8. I feel I can safely take care of post procedure interventional radiology patients.

The survey responses show an increase in comfort and knowledge among inpatient nursing staff regarding caring for a patient undergoing an IR procedure. There was a more significant increase from pre survey results, prior to my education, and the one-month follow-up survey. One month follow-up allowed time for these nurses to integrate the new knowledge into their practice. By improving the communication and education between inpatient and the IR procedural world, I feel this workflow innovation not only strengthen inpatient nursing confidence when caring for an IR patient, but also tended to the throughput barrier our ROCU is experiencing with a significant bed decrease. The main limitation to my data is nurse engagement for the follow-up survey. Reminder emails to take the post survey assessment were sent to floor managers and

educators from myself, my educator, my manager, and my csl on separate occasions to try to encourage engagement.

A couple of years ago, I, along with our CSL, manager, educator, and a couple other senior IR nurses, had the idea to create an IR bootcamp for new staff. The goal of bootcamp was to assist with orientation of new hires beyond their shifts. The bootcamp is composed of hands-on skills that nurses could practice as well as guest speakers from pharmacy and respiratory. It turned out to be a great refresher for current staff as well. The staff would rotate between four rooms with different stations. One room talked about critical care skills such as managing art lines, ET tubes, and MTP resuscitation. Another station had guest speakers from pharmacy and respiratory. I led procedural overview and moderate sedation policies and guidelines. Bootcamp was such a success we did it annually. My presentation has been recorded so it could be uploaded to orientation LMS modules for new hires should they not be able to attend bootcamp.

More recently, our educator, QIA RN, and I decided to reconstruct bootcamp into an IR orientation on-boarding class for new interventional radiology nurses and also our new ROCU nurses. The goal of this class is to help with the on boarding process to interventional radiology. We reviewed the qualitative data we received from the orientation needs assessment from staff the year prior to help with topics to cover and how to cover them. Almost everyone felt a class discussing radiology specifics topics such as sedation, patient positioning and recovery would be helpful during their orientation. This data is evident in the graphs attached. This is a four-hour class that will take place on a Friday once a month and be offered to any new hires in IR or ROCU. Incorporating ROCU and IR together in this class will hopefully create a well-rounded new hire who can safely care for their patients when they are off orientation. Similar content will take place but, in a classroom setting, with a smaller group of nurses to allow for more open discussion and questions. Because the class is going to be offered monthly instead of yearly, new hires will not have to wait until they are well into orientation or possibly off orientation like they did with bootcamp. This onboarding class is to help replace the extra hours that new hires have when they are on orientation. Typically, new hires will have left over fte hours from orientation epic days, and we are trying to replace those unused hours with this class, if they are still orientation. Therefore, the new hires will have time built into their orientation for this class, unlike bootcamp that took place after a workday and was not as timely with orientation completion. My role of the class is to still present procedural overview and moderate sedation but will also incorporate my IR recovery education that I have been using to discuss at inpatient unit boards. In the past, bootcamp did not cover recovery of the IR patient which will be beneficial not only to our new ROCU hires attending but also IR nurses who will need to familiarize with the recovery requirements. Our first class was on January 19th, we had 7 nurses attend. Four were from IR and 3 from ROCU. Some nurses were still on orientation, a couple were very recently off orientation, and a couple had been off orientation for a few months. However, it was insightful to hear the nurses who are no longer on orientation and had questions about processes or situations that they were exposed to during orientation. Our goal of this class is to empower these nurses to feel equipped and confident to care for a patient undergoing a

radiology procedure. Especially because radiology nurses can require a lot of critical and independent thinking whether you are the only on-call IR nurse in the middle of the night or one of two ROCU nurses who stay late with our patients after hours. This class count for 3.5 contact hours as well as being required as part of orientation for IR/ROCU nurses.

We also helped design a pocket guide that new hires could use as a quick reference for IR procedures. The pocket guide includes QR codes that show what to look out for different procedures and what medications should be on hand in the room. The pocket guide is in lieu of an orientation binder that we have used in the past to give new hires. Due to the size of the binder and not up to date content, we decided to make a less cumbersome and more up to date resource for new hires.

I have been one of the RSLs in interventional radiology for most of my time in radiology. During that time, I have helped give input and insight to help with process improvement initiatives. I developed a narrative that our nurse coordinators could use to better educate patients on their pre op calls for the expectations of moderate sedation. I had noticed several patients when arriving for their procedure day thought they were getting general anesthesia or going to be completely out sometimes resulting in needing to reschedule a patient because they wanted anesthesia. The goal of my narrative is to help set the expectation before the day of procedure so that a patient can decide over the phone if they felt they would need anesthesia instead of moderate sedation. (This initiative is over two years old) Another time I saw an opportunity of improving communication was with end of day shift reports. As an RSL on my previous two units at VUH, we utilized the EOSRs and I thought this could be beneficial to the world of radiology. I tweaked the template I used on the floor to be more radiology specific such as including inpatient adds on, cancelations, specimen issues, next schedule concerns, inpatient consults still pending to be added on, FCOT compliance, and rounds timing. This communication tool has been helpful in capturing opportunities where improvements can be made. RSL, CSL, radiology directory, nurse and tech manager, educator, schedulers, nurse coordinators, APPs, and chief IR attending are all included in the recipients. This tool helps not only helps with closed loop communication but also is helpful when debriefing a safety concern because we can have input from different members of our interprofessional team. Over the years I have helped update the EOSR to stay relevant and include any key information we feel needs to be added. I have trained other RSLs on what to include in their EOSR and used their feedback to update the template to include anything they feel would serve the department.

As a member of TNA and ANA, I have used their articles for data support for my radiology education initiatives. One article from ANA that really stood out to me was *Radiology Nursing: A growing specialty.* The author, Muriel Mayo, really highlighted how this radiology nursing is not well covered in the nursing school curriculums. Thus, this lack of education is causing fear and anxiety to novice nurses caring for a patient needing IR service. Mayo explains this further when she states, “Nurses outside of radiology have little exposure to this field, and nursing students rarely have an opportunity to complete a radiology clinical rotation” (Moyo 2019). To

support nursing well-being, growth and development, my goal for the IR/ROCU orientation on boarding classes and IR unit board presentations is to fill that educational gap that nurses do not receive during their schooling. Thus, allowing nurses to feel more supported and more at ease when caring for these patients pre and post procedures. Moyo went on to say that "Nursing care in radiology generally begins before the patient is physically in the department" (2019). Part of my presentation covers NPO orders and how to contact IR. Inpatient nursing care is critical to our procedural care of the patient. Because if a patient is not NPO appropriate or given pre-meds timely their care can be delayed. Another concern frequently brought up in unit board discussion is who to contact when their patient is awaiting a procedure for the day. A burden of the inpatient nurses is having a patient NPO all day for procedure to be bumped to the next day without knowing who to contact to get updates. Mayo explains this barrier by stating radiology "nurses have to continually triage and prioritize care, taking into account urgent and emergent cases or changes in patient condition that require a higher level of care or inpatient admission" (2019). I educated inpatient staff with optimal times to call IR to see if patients would have their procedure that day or not along with our best contact numbers. I educated that we are constantly triaging new consults but if able to check back in early afternoon because if time does not allow then a patient can receive a diet order and avoid going another full day NPO. My initiatives in radiology have enabled not only nurses within radiology to make nursing care decisions within their full scope of practice but also extended to 6 of VUH stepdown units' nursing staff. By empowering nurses to feel more confident and independent in their decision making, one can provide more holistic and safe care for our patients.

I have been a radiology nurse at VUH for almost five years and during that time I have trained multiple new hires. I completed the nurse preceptor workshop class. I have been a primary preceptor for new IR hires and trained staff new to the RSL role. Outside of my IR nurse training, I have trained nuclear medicine nurses and helped with their onboarding to covering CT/US procedures on the weekends. In addition to this, during staffing challenges I have helped with assuming nuclear medicine nurse role responsibilities such as covering cCTAs and taking MAA patients to their nuclear medicine scan post procedure. I have trained other IR RNs in these job roles to help with staffing barriers. I have also worked shifts in IV cubby, and I am trained on USPIV. My first year of radiology nursing, I was a ROCU nurse who does pre and post op for radiology procedures. If staffing challenges arise, I will help in this area as well. I feel that being the most senior radiology nurse in my department (IR) and one of the more senior nurses within Vanderbilt, I am an asset to VUH nursing because I am familiar with our department goals as well as organizational goals. I can share my radiology nursing knowledge and expertise with new radiology nurses, new hires to Vanderbilt, and continue to educate inpatient nursing about radiology care for a patient. I serve as a knowledgeable resource for not only new hires but for nurses in other modalities in radiology at VUH. I want to continue to be a nursing leader at VUH as I have just completed training to be a mentor for VPARE and will mentor other nurses to advance and grow professionally. I will continue this work by identifying educational gaps and working with leadership to improve patient safety. I am currently in the

early stages of working with our labor and delivery team to help bridge the gap between IR and L&D when we have mutual patients. IR will take care of MFM patients typically when these patients have post-delivery bleeding or even antepartum patients who require nephrostomy tubes. My goal is to work with the MFM team to see if we can get a better process in place when taking care of their patients. There is a lot of uncertainty about how to care for these patients from the IR nurses. I would like to make a decision tree of who contact when deciding between moderate sedation and general anesthesia. Also, when does a pregnant patient need fetal monitoring and who is responsible for orchestrating that. I also would like to collaborate with their team and ours on how to most safely protect these patients and their babies from radiation during the procedure. As stated in VUMC's innovation pillar, we are committed to leadership that can introduce constructive changes to improve our current practices. My commitment to discovering new knowledge and educational practice aligns with VUMC innovations pillar to provide our patients with excellent care.

Carley A et al., Professional Development Needs of Non-Radiology Nurses: An Exploration of Nurses' Experiences Caring for Interventional Radiology Patients, Journal of Radiology Nursing, https://doi.org/10.1016/j.jradnu.2020.12.011

Moyo, Muriel. "Radiology Nursing: A Growing Specialty." American Nurse, American Nurse Association , 11 Sept. 2019,
www.myamericannurse.com/radiology-nursing-a-growing-specialty/.

Standards:

QUALITY INITIATIVES EP-5

NURSE AUTONOMY EP-12

ADVOCATE FOR RESOURCES TL-7

LEARNING OPPORTUNITIES FOR STAFF DEVELOPMENT SE-6

EVIDENCE BASED PRACTICE NK-2

INNOVATION -NK7

MEMBER OF PROFESSIONAL ORGANIZATION SE-8

NURSE AS A LEADER (eosr) TL-4

Pocket guide, EOSR, basic class, unit board teachings