Evaluating Satisfaction of the Radiologist Assistant within an Academic Pediatric Institution: Comparing Reviews from Staff Radiologic Technologists, Radiologists, and Radiology Residents

Introduction

Since its introduction in the mid-1960s, physician extenders, also known as Non-Physician Providers (NPPs) and Mid-Level Practitioners, were created to fill the void in areas of medicine suffering from a physician shortage. Due to the lack of individuals providing radiology services, a new physician extender role known as the Radiologist Practitioner Assistant (RPA) role was introduced in 1993. Shortly afterward, the Registered Radiologist Assistant (RRA) was recognized in 2003. Within the United States, the extent of the physician shortage and the need to provide medical services in specialties have produced numerous Physician Assistants (PAs), Nurse Practitioners (NPs), and Radiologist Assistants (RPAs/RRAs).

Over time, these Mid-Level Practitioners have not only been utilized to meet the demand in patient care but have also been integrated into providing instruction in the academic facility.

Materials and Methods

Three surveys were conducted in our Pediatric Radiology Department, which included the pediatric division body Radiologists, pediatric division Radiologic Technologists, and Radiology Residents from 2018-2019 and 2019-2020. Surveys were conducted to assess everyone's overall experience of a Radiologist Assistant working and training Radiology Residents in pediatric fluoroscopy.

While majority of the surveyed questions for Radiology Residents were similar, a few questions differed in regards to their personal experiences: 1) Prior to your Pediatric rotation how comfortable were you at performing fluoroscopic procedures, 2) Does the Radiologist Assistant demonstrate the ability to teach, 3) Did the Radiologist Assistant explain in detail how to perform procedures, 4) During your training, how would you rate the supervision levels of the Radiologist Assistant, 5) Do you feel like you received adequate training from the Radiologist Assistant, 6) Do you think the Radiologist Assistant participates effectively as a member of the Radiology team, 7) Does the Radiologist Assistant provide procedure feedback when appropriate, 8) Do you think having a Radiologist Assistant in the Academic Facility enhances the learning environment, 9) After completion of your Pediatric rotation do you feel comfortable performing fluoroscopy in pediatrics, and 10) Overall, during your pediatric rotation, how satisfied are you with the training you received from the Radiologist Assistant while in the fluoroscopy suite?

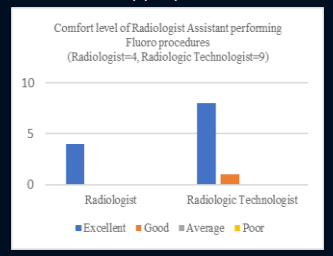
Analysis

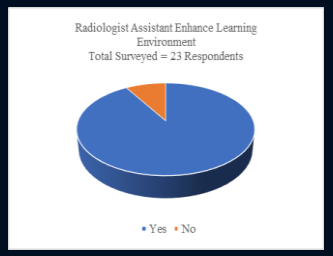
Most of the questions had a 4-item answer selection ranging from either Exceptional, Excellent, and Extremely Satisfied as the best answers to Average, Poor, or Extremely Unsatisfied, with few questions having a 2-item answer as True or False.

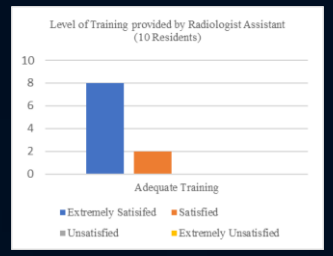
A total of 29 surveys were distributed. Of those 29 surveys distributed, 23 surveys were collected: 4 out of 4 Radiologists responded, 9 out of 9 Radiologic Technologists responded, and 10 out of 16 Radiology Residents responded. The total percentage that responded was 79%.

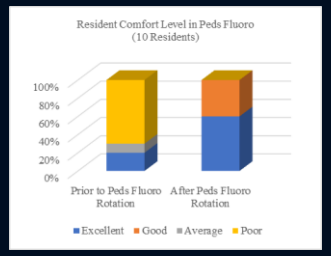
Result

Surveyed results from Radiologists, Residents, and Radiologic Technologists were obtained and calculated in excel format. Out of the returned Resident surveys, there was an 85% "Excellent" rating of the Radiologist Assistant explaining in detail of how to perform procedures, with a 100% response rate from Radiologists, Residents, and Radiologic Technologists agreeing that the Radiologist Assistant provides procedural feedback when appropriate.









Discussion

Reines et al. (2006) noted that teaching hospitals are employing midlevel practitioners such as PAs and NPs to deliver safe, cost-effective, high-quality care to the patient, and their representative program chose to integrate midlevel providers into the teaching service to provide flexibility to the physicians. They noted that the midlevel providers were involved in the educational program and were involved in teaching conferences, teaching rounds, and grand rounds and were considered evaluators on the patient floors. They were also considered "incidental" teachers who aided students and resident physicians with varying attending physician requirements (Reines et al., 2006).

From 2017 to 2019, the number of radiology practices employing physician extenders (NPs and PAs) outpaced the growth of radiologists, and some individuals wonder how the growth of physician extenders in the Academic facility may affect radiology education (Davenport et al., 2022).

Davenport et al. (2022) mentioned that physician extenders have the potential to improve education in several ways: 1) by reducing noneducational or less educational duties, freeing trainees to participate in advanced activities; 2) teach trainees intensive skills, and 3) by educating trainees how to work in a modern multi-disciplinary health care environment. They also summarized that a physician extender offers an opportunity for benefit without risk. In a commentary by Herliczek (2011), he noted his experience of hiring a PA to function as a Radiology Extender (RE) in pediatrics because of their increasing workloads and service demands. This, in turn, allowed the attending radiologists time to interpret other modalities and teach residents at their workstations.

I currently perform fluoroscopic procedures solo or assist in teaching fluoroscopic examinations to our Radiology Residents. During the day, there is an opportunity to teach before, during, and after examination performance, with the final interpretation being provided by the Attending Radiologist on service. I also provide fluoroscopic lectures outside the fluoroscopic suite to technologists, residents, med students, and specialized services throughout the hospital.

The main objective of this study was to demonstrate that Radiologist Assistants should be considered an integral part of the Radiology team and a considerable component of the education contributed to Radiology Residents at an Academic facility.

Conclusion

The present study aimed to investigate the overall satisfaction of having a Radiologist Assistant performing and teaching procedures within the Pediatric division. Radiologist Assistants are knowledgeable physician extenders that positively influence the fluoroscopic suite and are beneficial in the training of Radiology Residents. Radiologist Assistants delivery high value care and should be considered a valuable component in delivering high value education in academics.

References

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