Paracentesis Team: An EPIC Chat Opt-In Group for Hospital Procedures

Tyler Fugere, MD, Chetan Virmani, MD, Saikiran Kilaru, MD
NYU Langone Hospital - Brooklyn

Introduction

At NYU Brooklyn, a lack of certified providers able to perform a bedside paracentesis has led to increased utilization of interventional radiology for both diagnostic and therapeutic paracenteses. With increased turnover of providers through residents graduating the program and low numbers of hospitalists able to perform the procedure, minimal supervision existed to train and certify new providers in paracenteses. Through a hospital initiative, a paracentesis team was formed, led by both hospitalists and certified residents, to increase the number of certified providers able to provide timely care for their patients with this procedure.

Purpose

The purpose of this project is multifold, and its primary goal as mentioned above was to increase provider certification throughout the internal medicine department.

Additional goals were set forth at project onset, with plans to standardize materials used and procedure guidelines and to decrease in utilization of inpatient interventional radiology for paracenteses.

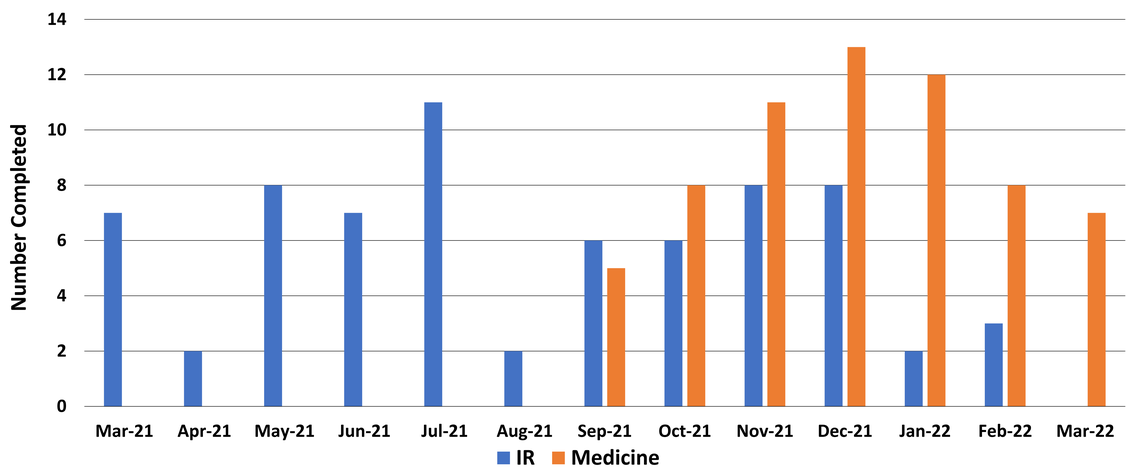
Centralization of materials available to the internal medicine service would decrease movement waste accrued through retrieval of materials across multiple units. Standardizing guidelines would streamline procedure from start to finish while ensuring patient safety. By collaborating with the interventional radiology department, inpatient paracenteses would first be attempted by the internal medicine service to decrease patient volume needing imaging-guided paracenteses.

Methods and Materials

To pair providers together for training as well as to expedite patient care through timely paracenteses, an EPIC Chat Opt-In group was created in September 2021 titled “LB Medicine Paracentesis Priority List.” Any provider in the hospital could message the group requesting a paracentesis be completed. Providers in the chat could then offer to perform or to supervise another provider. Patient charts were saved for data collection after chat request was placed. If a provider requested for interventional radiology first, they were directed to the paracentesis team instead.

Collaboration with medicine and nursing leadership led to development of standardized protocol and centralization of resources. Monthly meetings were held during which materials like large volume vacutainers, paracentesis composite trays, and butterfly ultrasound probes were ordered. Division of responsibilities including pre-procedure supply acquisition and consent, procedure protocol, and post-procedure monitoring of drain were identified with clear demarcation of roles.

Inpatient Paracenteses Graph



Results

Prior to the intervention, there were only 3 hospitalists and 3 certified residents available to supervise the procedure. Over the course of the past 8 months, over 70 paracenteses were performed through chat request, and 10 new providers completed the minimum 5 paracentesis to become certified. A total of 30 different providers performed the procedure since the intervention began. Of paracentesis requests to the group, less than 10 needed to be referred to interventional radiology due to unsafe bedside paracentesis. There were 30 inpatient IR paracentesis in the 6 months prior to intervention, and 33 in the 6 months after start. However, March (month 7 after intervention) saw 0 paracenteses completed by IR, with only 5 completed from January to March (months 5-7). Additional data from April onward has not been assessed at this time.

Conclusions

The hospital initiative to create a paracentesis team accessible through an EPIC Chat Opt-In group has led to an increase in certification of hospital providers and to multiple beneficial outcomes for the hospital. While total numbers of Interventional Radiology paracenteses have stayed the same, there has been a sharp decrease over the past three months in those requiring IR inpatient assistance. Additionally, a multidisciplinary approach to this project with Medicine, Nursing, IR, and Hospital Administration has led to a centralized collection of paracentesis materials, standardized policies for performing the procedure and escalating care to IR, and approval to obtain additional butterfly ultrasounds for providers to use. With this level of support from the hospital and continued growth of both certified providers and trainees, we can expect this intervention to lead to improved hospital outcomes and many more certified providers.

Tyler Fugere: Tyler.Fugere@nyulangone.org Saikiran Kilaru: Saikiran.Kilaru@nyulangone.org Chetan Virmani: Chetan.Virmani@nyulangone.org