

in hospitals. These residents translate their broad EM/CC skill-set to the IM setting, where they have filled the void left by the elimination of procedural competence requirements for certain bedside procedures in categorical IM training. These changes have led to a drop in the number of procedures performed by internists. Our EM/IM program has organized an Invasive Procedure Team (IPT) to perform bedside procedures in a safe, prompt and cost-effective manner.

**Educational Objectives:** To enhance resident knowledge and skills required in the performance of procedures with standardized didactic sessions, and to ensure patient safety and procedural competence.

**Curricular Design:** All participating residents undergo standardized didactic sessions for each of the procedures (central/midline catheter insertion, paracentesis, arthrocentesis, and lumbar puncture). Residents learn: indications, contraindications, overview of equipment tray, technique, and potential complications. Each procedural session uses: video instruction, hands-on simulator based instruction, ultrasound guidance, and a written post-test. Bedside procedures are supervised by an attending and competence is determined by direct observation after five successful attempts for each procedure. Findings and recommendations are communicated with the primary team and follow up is performed to assess for complications.

**Impact/Effectiveness:** IPT has standardized the training of residents to ensure patient safety and procedural competence. IPT performs ~400 procedures within the hospital every year, decreasing the utilization of costly specialty services. It has maintained an excellent safety record, with only 3 adverse events in 5 years (spontaneous hemoperitoneum after paracentesis). Residents and faculty are responsible for ongoing quality assurance and performance improvement.

## 40 Is Virtual Grand Rounds a Good Option for Resident Conferences?

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**Background:** Inviting speakers to resident didactic conferences can be expensive and time consuming for both the program and speaker. Using remote meeting technology allows a speaker to share their desktop while seeing and speaking to a remote audience. We trialed one application in our residency program to bring in more nationally recognized speakers as experts on CORE curriculum topics.

**Educational Objectives:** Provide our residency program with more Nationally Recognized speakers on Core Curriculum topics while saving on cost and travel time for our speakers.

**Curricular Design:** We trialed inviting speakers to give

instruction to our residents via remote meeting technology for a 3 month period. Speakers were selected for their expertise on a topic and invited to speak on a resident didactic conference date. A test run of the application was performed prior to their scheduled talk. Following the three month trial, a survey was distributed to our speakers soliciting feedback on the use of the technology. We also reviewed lecture evaluations from our residents, and informal comments from our residency administration.

**Impact/Effectiveness:** We found that the use of remote meeting technology enabled us to bring in more nationally known speakers without the speaker cost or schedule disruption due to travel. Speakers were able to use the technology with very little training or prep time.

Post-lecture evaluations revealed our residents appreciated the opportunity to have more nationally recognized guest speakers. Comments were generally positive, yet raised a few issues with the technology. (See Table 1)

Informal feedback from residency administration showed the need for practice runs, which allowed opportunity to connect with speakers prior to their scheduled talk. It was also noted that technology use with remote conferencing is easier with experience.

In conclusion, by using remote meeting technology, we found we were able to provide our residency program with more nationally recognized speakers while saving on cost and travel time for our speakers.

**Table 1.** Resident Comments.

Pro	Con
"Great talks-would like more of these virtual speakers."	"Difficult format for being able to ask questions - is there a way to facilitate that?"
"VSEE is AWESOME."	"You presented great information but I had a hard time staying with you. That could definitely be a product of the video format."
"Do more of this."	"Dr. X was great and she did a nice ultrasound overview. However I feel that VSee is not the greatest technology out there (it's very glitchy) and took a bit away from the presentation overall."
"Totally awesome - more please!"	"Would have better in person."
"Fabulous! Do this again please!"	
"VSee worked well for this!"	