**OSUMC / Diagnostic Radiology** 

# Simulation Lab Procedural Education for Residents During the COVID-19 Pandemic

# TRODUCTION

During COVID-19, mandated and voluntary shut down of outpatient procedures has led to a perceived decrease in procedural volume. Due to this, Radiology residents have lost exposure to these procedures and, as such, competency may be lagging compared to their peers in previous classes and other institutions. Additional training is likely required, and simulation of these procedures may help to bridge this gap.

## **OBJECTIVES**

- Assess procedural volume (e.g., CT, ultrasound, and Fluoroscopic guided procedures) before and during the Coronavirus pandemic
- Offer solutions to maintain resident competency in these procedures.

### METHODS

Review of Interventional and Diagnostic Radiology Department's procedural logs before COVID-19 versus during COVID-19 to assess whether volume has decreased, increased, or stayed the same. Dates used for "Pre-Covid-19" are February 2019-January 2020. "During Covid-19" includes February 2020-February 2021. These procedures include CT and Ultrasound guided biopsies, drain placements, para/thoracentesis, and fluoroscopic guided lumbar punctures, arthrograms, and line placements.

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### RESULTS

# **Simulation Labs at OSUMC**

### US guided biopsies



# **Procedural Volume Comparison**





### **Contrast Reactions**

### Hysterosalpingograms (HSG)

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# CONCLUSION

On average, procedural volume has dropped approximately 40% due to the COVID-19 pandemic. This substantial drop means less exposure to routine procedures for our residents. The lack of outpatient procedures and patients delaying care due to lock down regulations likely contributed this decrease in volume. A possible solution is the use of simulation labs, as shown in the provided images.

### ACKNOWLEDGEMENTS

The entire OSUCHS Simulation lab staff who has created and implemented superb simulation labs during the COVID-19 pandemic to help improving the education of our residents.