

# Improving Patient Care and Reducing Health Care Cost: Addressing Utilization of Inpatient Renal US Within 48 Hours of Abdominal CT/MRI

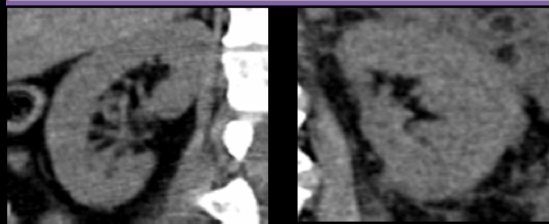
**Ravi Jayavarapu, MD, Lyndsay Clements, RDMS , Audrey Yates, MSIE,  
Halemane Ganesh, MD**

**Department of Radiology**

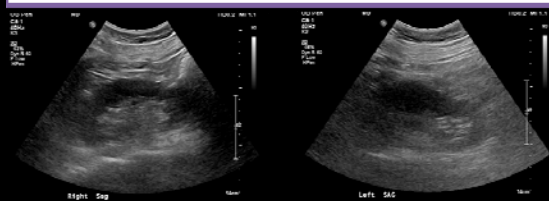


## **FIND a Process to Improve**

Normal Abdominal CT



Normal Renal US within 24 hours



# CLARIFY Current Knowledge

Retrospective data analysis (July – December 2016) of 204 inpatient renal US scans performed within 48 hours of Abdominal CT/MRI.

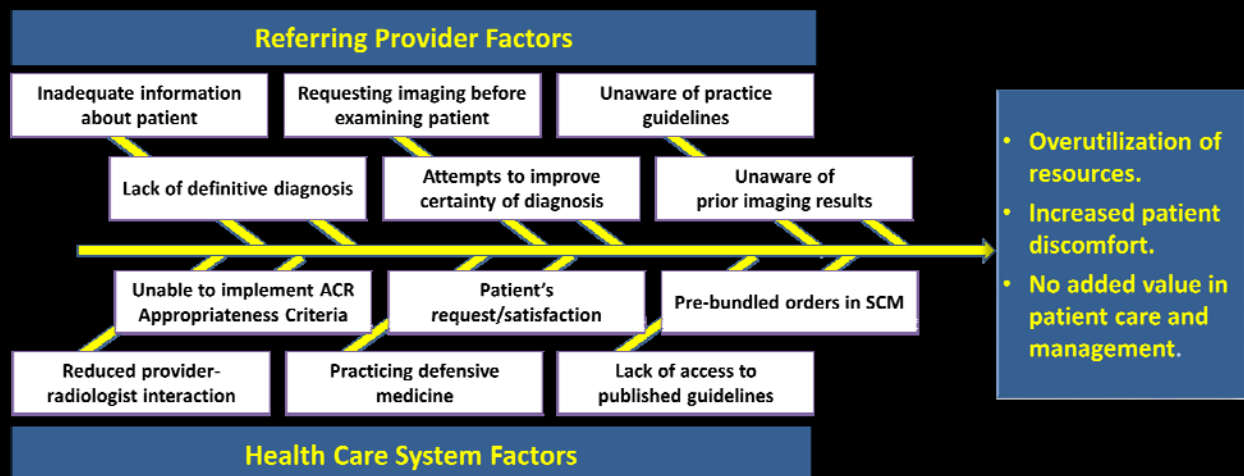
## INDICATIONS

- Acute Kidney Injury (AKI) (72%)
- Flank pain (7%)
- Infection (4%)
- CT report recommendation (3%)
- Renal calculi (2%)
- Other (12%)

## ADDED VALUE

- **95.2%** US yielded no additional clinical information to alter patient management
- **98.4%** US provided no additional information when prior CT/MRI normal
- **100%** US for AKI negative for hydronephrosis

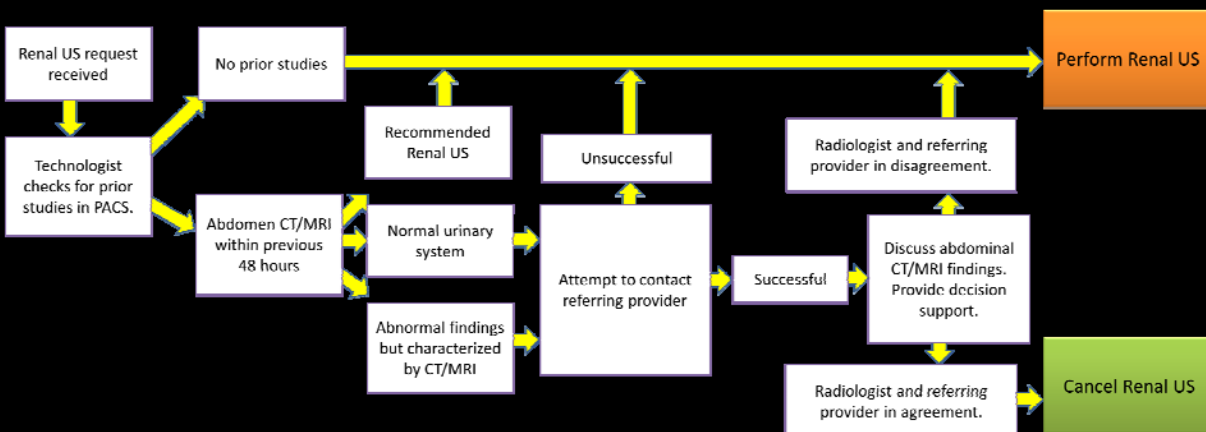
# UNDERSTAND Root Causes



## GOAL Statement

To reduce utilization of Inpatient Renal US within 48 hours of Abdominal CT/MRI by 50% over one year through a referring provider "Call Back" program

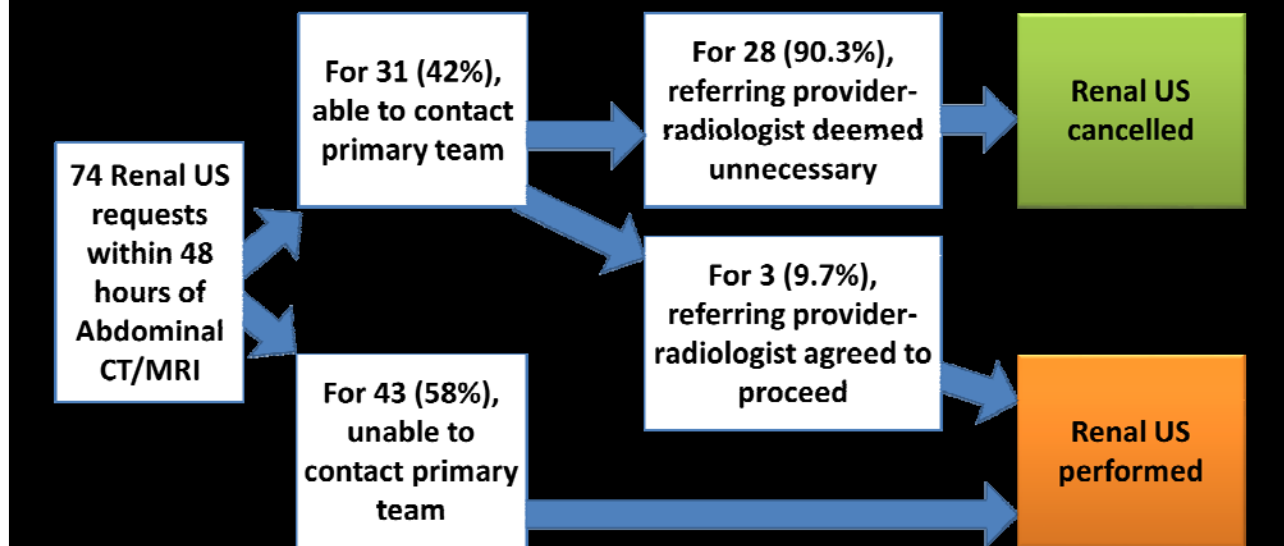
## PLAN the Improvement



## DO the Improvement

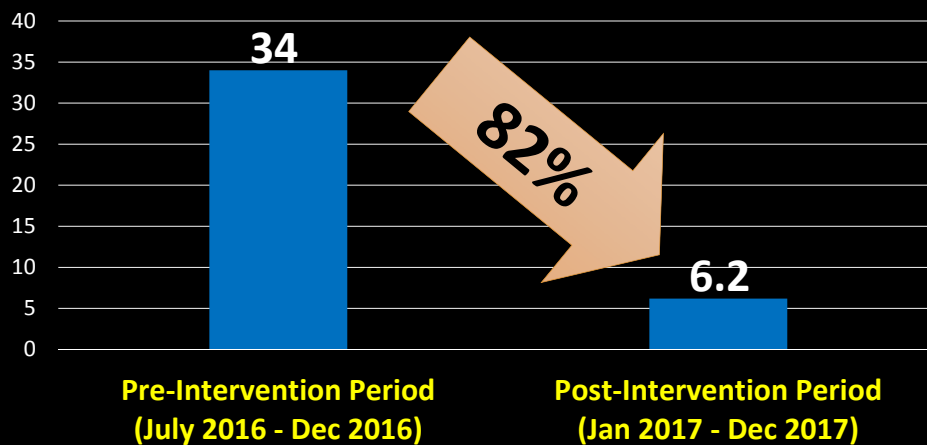
For a period of 1 year  
(January 2017 – December 2017)  
Provider “Call Back” program  
implemented.

## STUDY the Results



## STUDY the Results

Number of Inpatient Renal US performed  
within 48 hours of Abdominal CT/MRI per month



## Next Steps

- Continue to engage and educate referring providers in utilizing appropriate imaging.
- Promote referring provider-radiologist communication and provide evidence-based imaging decision support at point-of-care.

**Thank You!**

