

# Improving Radiation Stewardship by Decreasing CT Utilization for Pediatric Appendectomies Elaine Henry, MSN, RNC-NIC

ECU Health Quality Improvement Symposium January 31, 2024

# **Background/Introduction**



- Appendectomy surgery reviews
- Specific reports with comparison risk adjusted data
- Radiation Stewardship = % of all CT scans preceded by US



- CED Appendicitis Care Pathway
- Radiation Stewardship Compliancy decreased in 2021





American College of Radiology™



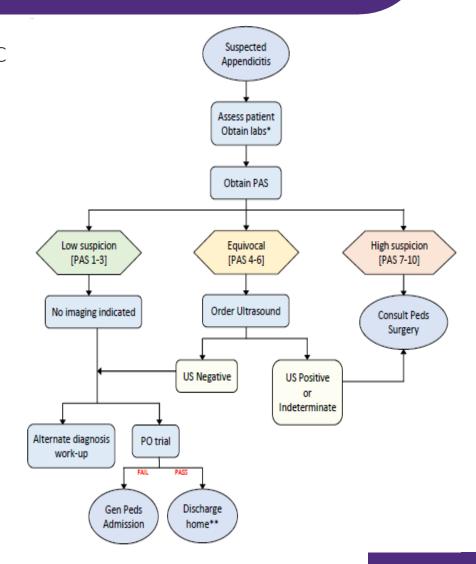
The Image Gently Alliance

Aim Statement - Improve Radiation Stewardship by 50% over 12 months for pediatric patients presenting to ECUH Medical Center who had appendectomy surgery through the relaunch of the appendicitis pathway addressing timing of radiological tests performed when diagnosing appendicitis.



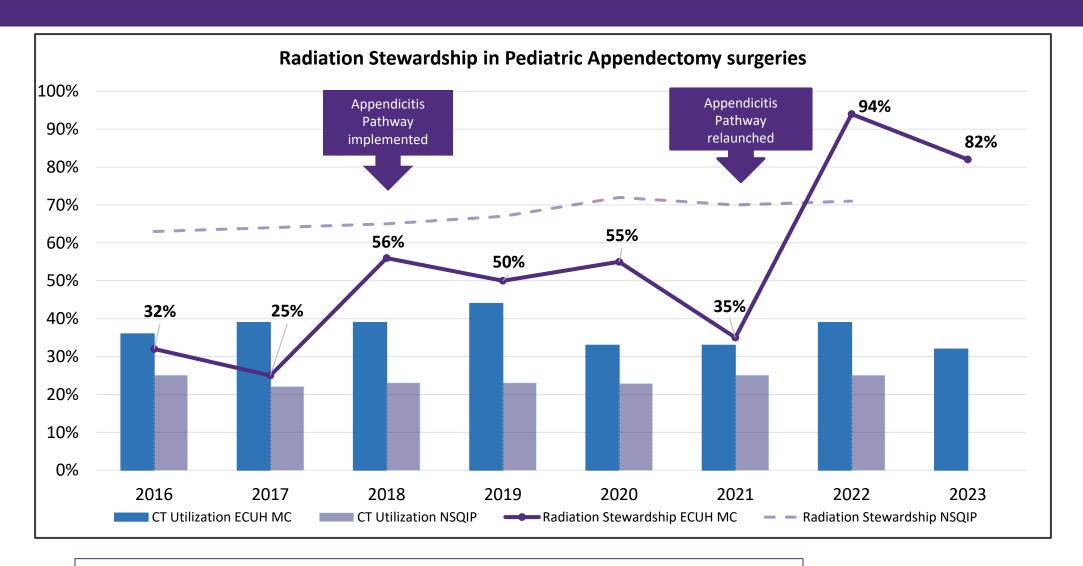
## Methods

- o Inclusion: All pediatric (< 18 yr old) appendectomies performed at ECUHMC
- Exclusion: Transfers from an outlying hospital
- Drill downs demonstrated the clinical pathway was not followed
  - CT scans were performed instead of ultrasound or both were obtained
- Peds surgery collaborated with Children's ED to relaunch the Appendicitis pathway
- o Measures:
  - Compliance with obtaining US prior to CT scan
  - Overall CT utilization





# Results



Radiation Stewardship % = Compliance in obtaining US prior to CT scan



## Conclusion



#### Key Finding:

o Relaunching of the existing CED Appendicitis Care Pathway improved Radiation Stewardship compliancy over 50% from previous 12 months.



#### Conclusion:

- O Utilization of available reports & comparison data assists in highlighting areas of improvement
- Doesn't have to be a solo effort collaborate!
- Continued efforts needed to reduce overall CT utilization



#### Next Step in progress:

 Radiology implementing ultrasound technician education and an Ultrasound template report to further reduce CT utilization overall

