

# Framework for Conducting a Quality Assessment and Improvement Project in Urology Practice

AUA Quality Improvement Summit 2017  
Stewardship of Diagnostic Imaging

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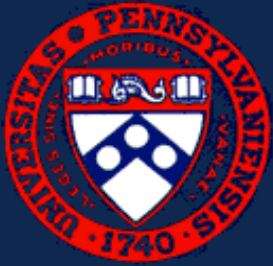
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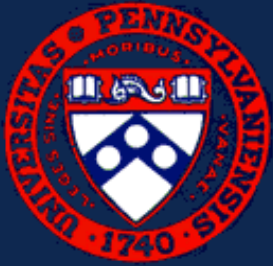
# Plan of Action

1. Define the problem and population (i.e. what is the current state, and how do we know there is a problem)
2. Stakeholder analysis
3. Framework (i.e. structure/process/outcome)/background data to support your potential change
4. SMART objective development
5. Assessment strategy and data analysis
6. Intervention selection and plan for implementation
7. Bench marking and barriers to success
8. Sustainability



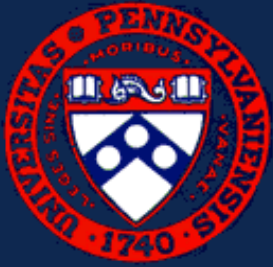
# The Scenario

- You are a urologist part of a large group practice affiliated with (or employed by) a large hospital/health system
- You have recognized several of your own and your practice's patients with a history of nephrolithiasis following up after an ED visit(s) at your affiliated hospital with at least 1, if not more than 1 CT report during their episode of acute renal colic



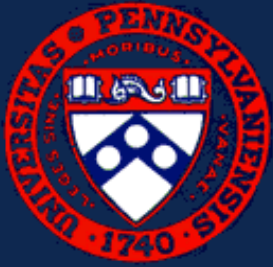
# The Scenario

- You are familiar with the emerging literature about the value of US first for the diagnosis of nephrolithiasis in the ED, particularly in patients with a history of the disease
- You are concerned about how the apparent CT first practice pattern may impact the patient, you as the provider, the hospital, and the overall health care system
- As the urologist responsible for QI efforts in your practice/department, you decide you are going to further investigate this issue



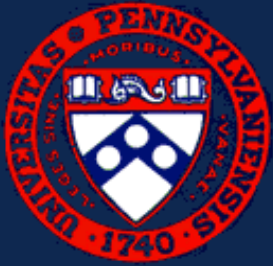
# The Problem

- What is the problem?
  - Overuse?
  - Underuse?
  - Inappropriate use?
  - Variation?
  - Harms?
  - Costs?
  - Alternatives?



# The Problem

You Don't Know



# Assessment of the Current State

- To determine to confirm you have a problem, and what the magnitude of that problem is, you decide to do a chart review
- You pull the charts of the last 100 consecutive patients evaluated in your practice with acute renal colic/diagnosis of nephrolithiasis who were also seen in the ED prior to their visit



# Assessment of the Current State



90 Initial  
CT



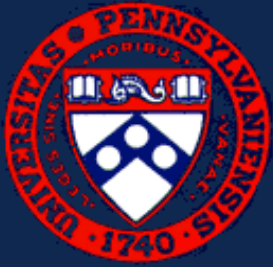
10 Initial  
Renal US



10 Repeat  
CT







# Assessment of the Current State

- When you examine the charts of the 10 who underwent a renal US they are similar to the patients who underwent a CT, except that they all seemed to be ordered by a single provider
- When you examine the charts of the 10 who underwent a repeat CT they re-presented with pain, but no other alarm symptoms/findings and they were all seen in the same ED only 1 week earlier



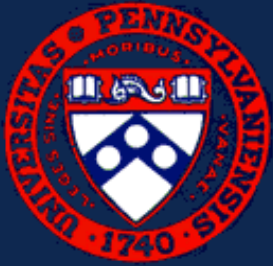
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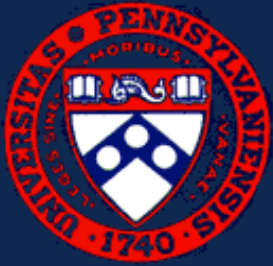
# The Problem

- CT is the first line diagnostic imaging modality for patients presenting with suspected acute renal colic in the ED of our affiliated hospital which has resulted in overuse relative to equivalent alternatives, inappropriate use leading to potential harm, and variation in care across providers



# Stakeholder Analysis

- Identify at what level you are going to do the analysis
  - Individual, Team, Division, Department, Hospital, Health System
- Identify your potential list of stakeholders
  - Brainstorm
- Determine how you will gather the opinions of your stakeholders
  - Interviews, Questionnaires, etc.



# Stakeholder Analysis

- Need to identify, understand, and account for the corporate culture
- Need to identify, understand, and account for the willingness to change