



Enhancing Clinical Decision Making for Injection Treatments of Non- surgical Knee Patients: A Quality Improvement Project

Project Proposal:

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Background



- ▶ 80% of people over 65 have osteoarthritis of the knee
- ▶ Contraindications to knee surgery
- ▶ For those not considering surgery options are limited
- ▶ Over 33 million injections a year in US
- ▶ The guidelines on choosing injections vary/conflict



Problem Statement

- ▶ In an Orthopedic office in Northeast Tennessee clinical decision making for treatment options of non-surgical candidates with osteoarthritis is unclear.
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Literature Review

- ▶ Conflicts
 - ▶ HA 28% vs Placebo minimal improvement \$400-\$1200
 - ▶ Egg allergy for natural products
 - ▶ PRP is shown superior to HA \$1192
 - ▶ PRP vs placebo
 - ▶ Potential for infection/contamination
 - ▶ Steroids 39% \$100-\$300
 - ▶ Diabetes
 - ▶ Max three injections a year
 - ▶ Joint degradation
 - ▶ Steroids Less effective than HA
 - ▶ Allograft 60-80% improvement \$1200
 - ▶ Active cancer – may increase T-cells



- ▶ Major Guidelines

- ▶ American Academy of Orthopedic Surgeons

- ▶ 1st Topical and oral NSAIDS, narcotics

- ▶ 2nd Steroids, HA, debridement and partial meniscus repair

- ▶ Osteoarthritis Research Society

- ▶ 1st Arthritis education programs, structured exercise, tai-chi, yoga, weight management

- ▶ 2nd Topical and oral NSAIDs conditional

- ▶ American College of rheumatology

- ▶ Exercise, self-management program, weight loss, tai-chi, cane use, orthotics, knee brace and topical/oral NSAIDS



Purpose Statement



- ▶ The purpose of this quality improvement project is to develop a clinical guideline so that providers know criteria for choosing optimal knee alternative treatments for non-surgical knee patients.

KTA FRAMEWORK

Evaluate Outcomes -
Adoption in practice
is the ultimate goal

Identify problem -
Providers choose
injections based on
preference

KTA WHEEL

Knowledge Inquiry

Knowledge Synthesis

Knowledge tools/productus

Select Interventions -
An educational
guideline with free
lunch provided will
help adopt the tool

Assess Barriers -
Providers routine may
prevent change

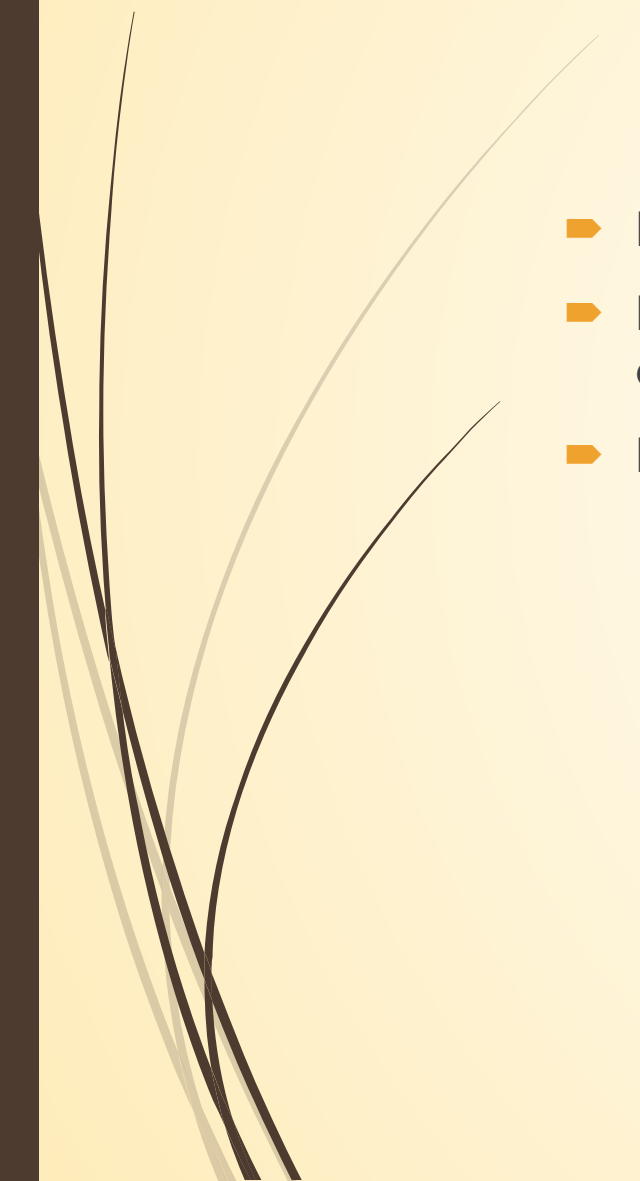


PROJECT METHODS

- ▶ Project Design
 - ▶ Quality Improvement Project using the Delphi Method
- ▶ Setting
 - ▶ Privately Owned Orthopedic Practice in NE Tennessee
- ▶ Implementation
 - ▶ Develop a Clinical guideline
 - ▶ Expert Feedback



EVALUATION AND OUTCOMES

- ▶ Develop a clinical guideline
 - ▶ Experts to evaluate the guideline for content (accuracy), clarity, and ease of use
 - ▶ Present the guideline to the practice for adoption
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Data Collection Pre-Survey

I choose injections for non-surgical knee patients based on:	Never= 0	Sometimes = 1	Often = 2	Always = 3
"Expected Pain improvement"				
"Cost"				
"Expected functionality improvement"				

Data Collection Post survey

	Not at all/ No= 0	Somewhat/ sometimes = 1	Mostly/most of the time = 2	Yes = 3
The information on the handout is accurate				
The handout is easy to use				
The handout is clear				
I will adopt this handout into my practice				

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