

NOHARM: Nonpharmacological Options in post-operative Hospital-based And Rehabilitation pain Management pragmatic trial

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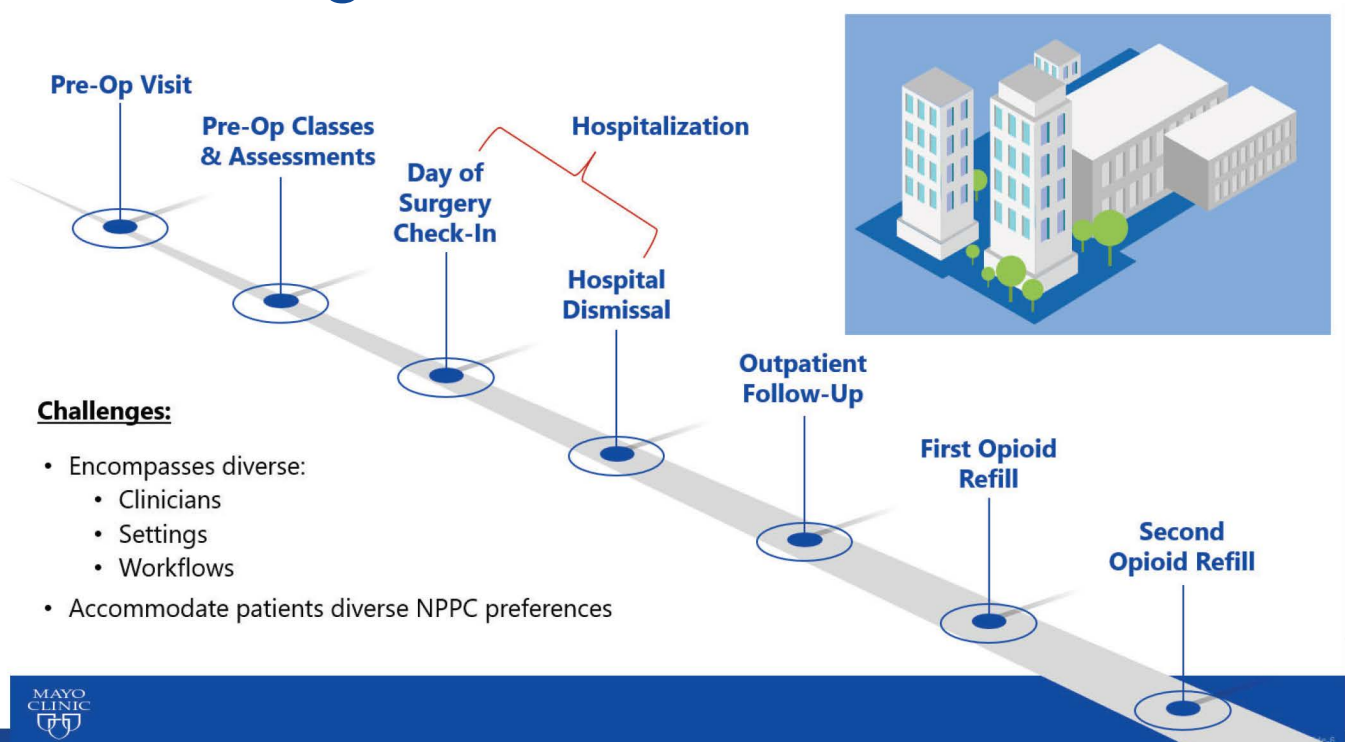
Objective

- Evaluate whether pain and function, assessed with PROMIS tools, can be improved while honoring patient values and de-emphasizing opioids in pain management

Strategy

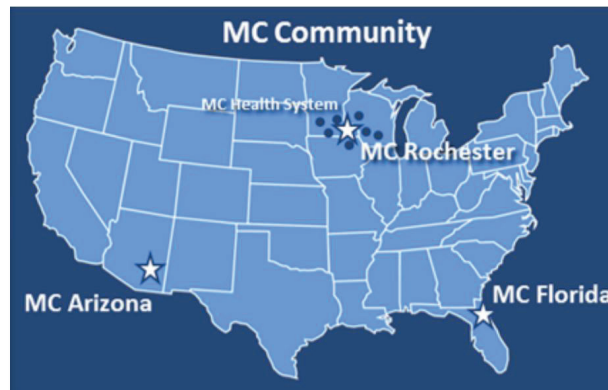
- Test an EHR-embedded, bundled intervention of patient- and clinician-facing decision support components that enable patients to integrate nonpharmacologic pain care into their perioperative management
- Stepped-wedge, cluster randomized pragmatic trial design

EHR to integrate NPPC use



Setting

- Clusters throughout Mayo Clinic Enterprise, spanning 6 institutions and 4 states



Study design

	Tranche 1 Rochester Cardiac, C-Section Florida Eau Claire Ortho, Colorectal, Gyn, C-section LaCrosse Gyn, C-Section	Tranche 2 Rochester Ortho, Gyn, Lung Arizona Lung, Cardiac Mankato Colorectal	Tranche 3 Rochester Colorectal Florida Transplant Arizona Colorectal, Gyn, Transplant	Tranche 4 Florida Colorectal, Gyn, Lung, Cardiac Eau Claire Lung, Cardiac Mankato C-Section	Tranche 5 Rochester Transplant Arizona Ortho Mankato Ortho LaCrosse Ortho, Colorectal
Control condition	Data Collection 10/16/2020				
Step 1	Go live 3/1/2021				
Step 2		Go live 10/1/2021			
Step 3			Go live 5/1/2022		
Step 4				Go live 12/1/2022	
Step 5					Go live 7/1/2023

Nonpharmacological pain care (NPPC)

Movement

- Walking
- Yoga
- Tai Chi

Relaxation

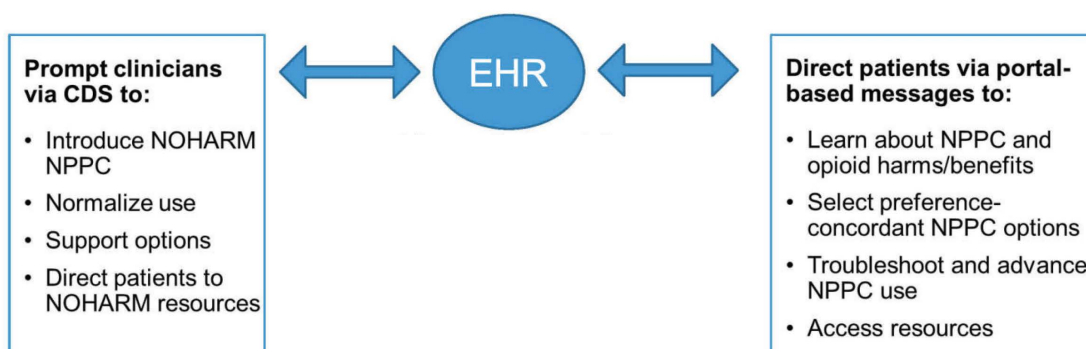
- Meditation
- Relaxed breathing
- Music listening
- Guided imagery
- Muscle relaxation
- Aromatherapy

Physical

- Acupressure
- Massage
- Cold or heat
- TENS



Intervention



Aromatherapy for Pain (2:36)

Acupressure for Pain (1:51)

Guided Imagery for Pain (2:33)

For Our Patients
At Mayo Clinic, we are committed to helping you manage your pain.

While you are healing
Many techniques can help you manage pain. Learning to use these techniques can help you heal.

Pain management techniques

Barriers/challenges

- Unpredictable EHR instability
 - Intervention assignment logic
 - PROM assignment logic
- Consistency of staffing and staff engagement
 - Turnover, cross-coverage, use of locums
- Competing staff demands
- Variable administrative and allied health engagement
- EHR data abstraction and curation

Solutions/lessons learned

- Critical importance of scheduled, standardized EHR functionality checks
- Continued engagement and implementation
 - Effective approaches are contextual
 - Chocolate is a powerful catalyst
- Delicate balance between clinician buy-in and annoyance
- “Passive” and “scalable” are relative terms
- Culture