

Standardized Pain Management Protocol for Pediatric Needle Insertion: Improving Team Coordination and Pain Relief



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BACKGROUND/INTRODUCTION

Pain management during needle procedures is vital but often overlooked in pediatric care. At our children's hospital, over 200,000 patients annually endure needle pain, with venipuncture being especially painful. Research shows that a pre-procedure pain management protocol can reduce pain and improve satisfaction. However, the lack of a standardized approach among nursing staff contributes to unnecessary pain.

OBJECTIVES

- 1. Enhance patient comfort by implementing a standardized pain management protocol for pediatric needle procedures.
- 2. Improve staff efficiency by ensuring consistent pain management practices.
- 3. Identify and integrate best practices for pediatric pain management. Address the long-term effects of untreated pain through proactive management strategies.

PICO

Among clinical staff in a 22-bed inpatient pediatric unit, how does the implementation and education of a standardized set of topical anesthetic agents affect staff consistency with the new pain management procedure, compared to existing inconsistent practices?

TOPICAL ANESTHETIC AGENTS



LITERATURE/EVIDENCE

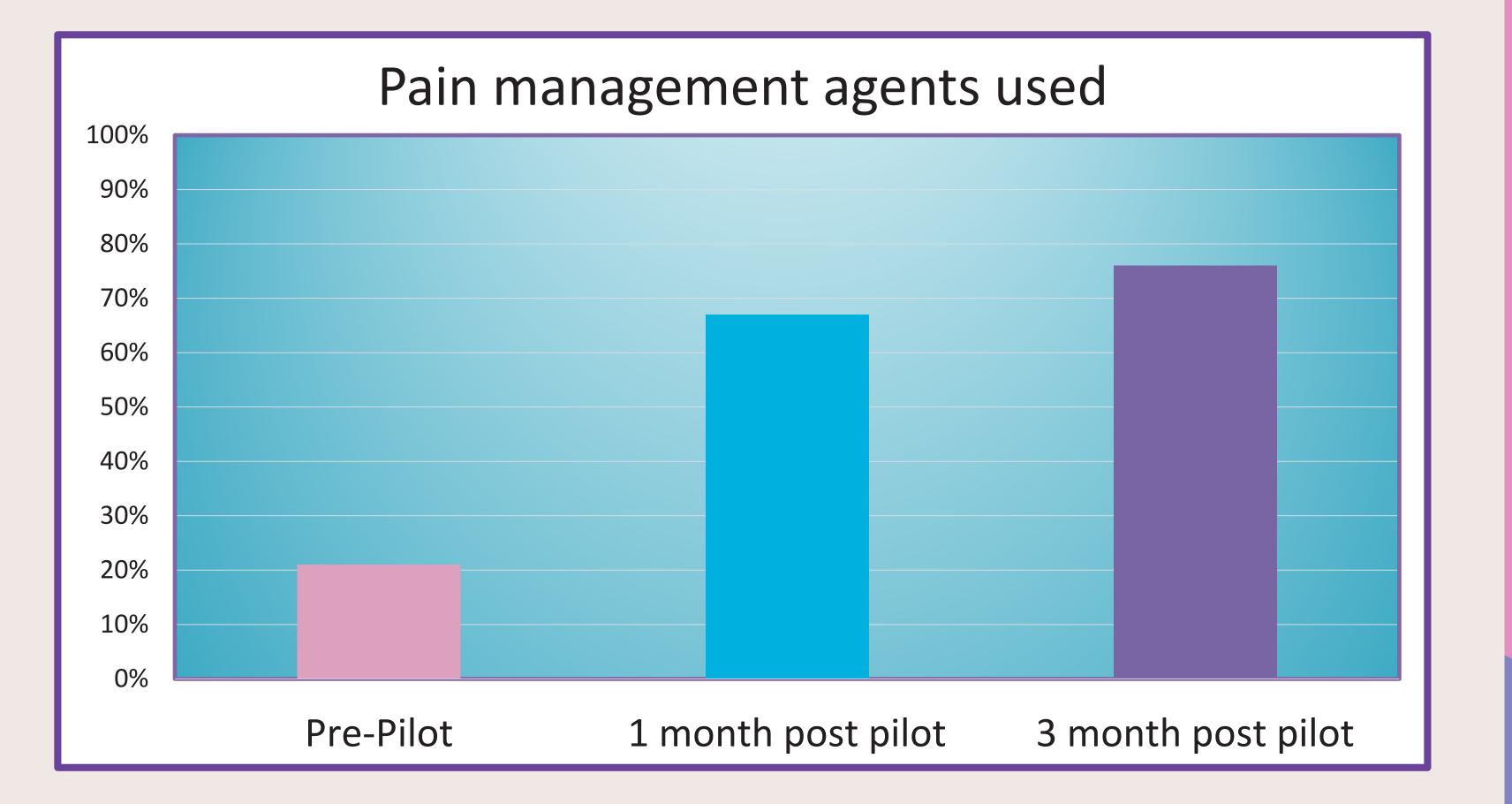
- Cho & Choi (2021): Systematic review showing that distraction techniques effectively reduce needle-related pain and distress in children.
- Monk et al. (2023): "Poke Plan" initiative demonstrated improved pain management and patient satisfaction.
- Lorenc et al. (2024): Quality improvement effort highlighting the benefits of standardized plans to enhance pediatric comfort during PIV insertions and blood specimen collection, through distraction and pain mitigation strategies.

METHOD

- Assessment completed prior to implementation, as well as 1 month & 3 months post-implementation (n=42 patients for each assessment)
 - Prior to pilot, 21% of patients received pain management
- Multidisciplinary team formed with stakeholder
- Key barriers identified included lack of knowledge, and availability of pain management agents
- Comprehensive staff education via one-on-one meetings, flyers, and emails
- Provider collaboration to place initial orders and follow up on missing orders
- Pharmacy collaboration to ensure pain agents readily available on unit
- Pilot ran for one month
- Post-Implementation- Pain management rates significantly increased from 21% to 67%

Three-Month Follow-Up- 76% of patients receiving pain management demonstrating sustained success

• Laminated guides placed at nursing stations for easy ongoing reference.



IMPLICATION

Implementing a standardized pain management protocol and staff education significantly improves adherence, reducing inconsistencies and enhancing patient care.

This structured approach optimized pain management practices, set a foundation for sustainable improvements, and ensuring better patient outcomes with staff consistency across unit



Next Steps

- Ongoing training and resources continue to reinforce initial education
- Standardized protocols enhance the quality of pediatric care
- Ongoing data analysis
 ensures continuous
 optimization of pain
 management practices
- Creation of system-wide
 Quick Reference Guide on pain agent use
- Future pilots planned for additional units



