

## An Evidence-Based Practice Project to Assess and Improve Distraction in the Operating Room during the Induction of Anesthesia at Mott Children's Hospital

Laura Wetzel MS, CRNA • Tonie Owens MSN, RN, CNS-APRN • Andrea Meyer MSN, CRNA • Lora Gibbs CRNA, CNML • Grant Smith RN • Jimmy Nevel RN

The Division of Pediatric Anesthesiology, University of Michigan, Ann Arbor, MI

### Why Quiet KIDZ?



- Distraction for anesthesia providers during critical periods of general anesthesia is a patient safety concern.(1)
- Noise levels in the operating room can hinder staff communication. (2,3)
- Distractions during induction can adversely affect complex tasks as well as negatively impact the anesthesiology residents' mental efficiency and ability to hear a change in the pitch of the pulse oximeter. (4,5)
- AORN, American Society of Anesthesiologists (ASA), and The Joint Commission recommend distraction mitigation strategies in the operating room during critical periods. (6,7,8)

### Clinical Question

Does the implementation of a distraction mitigating protocol (QUIET KIDZ) during induction, compared to the standard induction practice without a targeted distraction reduction strategy, improve the perception of distraction among anesthesia providers at Mott Hospital?

### Methods

#### Survey Phase I & II: Pre-Post Intervention Design

**Phase I:** Anesthesia providers completed survey to help gauge the perception of distraction during induction of anesthesia at Mott Hospital

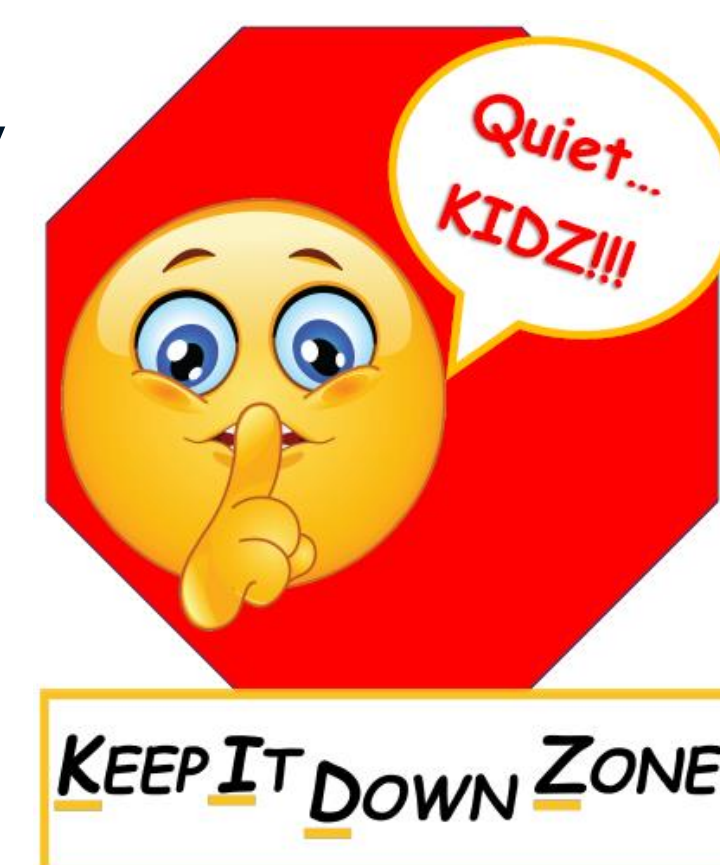
**Phase II:** Post implementation survey evaluated effectiveness of intervention to mitigate perception of distraction among anesthesia providers

#### Intervention 1: Why, How, and Why Now for a distraction free induction

- Education and awareness sessions presented to perioperative staff, anesthesia staff, MPLAN, and OR committees
- Multidisciplinary team created: "Change Champions"

#### Intervention 2: Room Preparation

- Quiet KIDZ Signs on OR doors
- Music turned off in OR prior to patient arrival



#### Intervention 3: Provider Preparation

- Remind: Verbal reminder after pre-op verification
- Remember: No side conversations, music, or loud noises
- Reinforce: If noise levels go up remind the room to keep it down

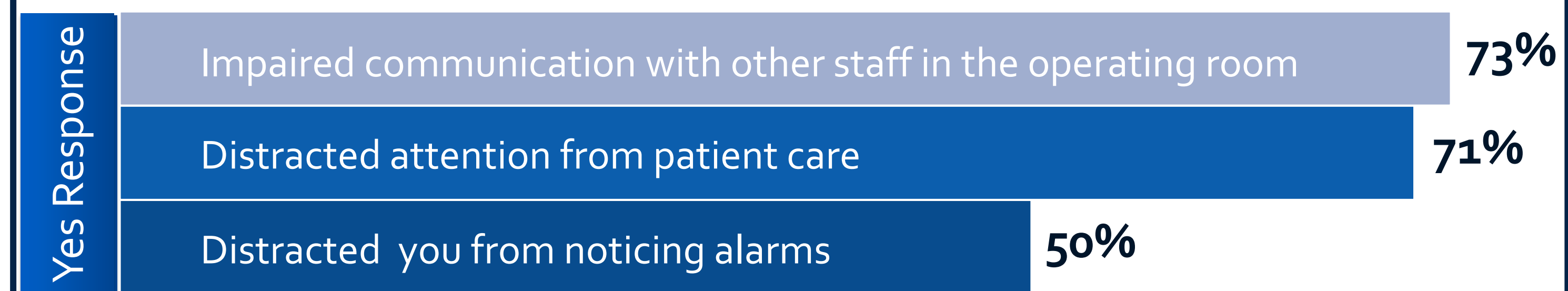
#### Data Collection: Multidisciplinary Team

- Observed and recorded defined distractions via QR code survey

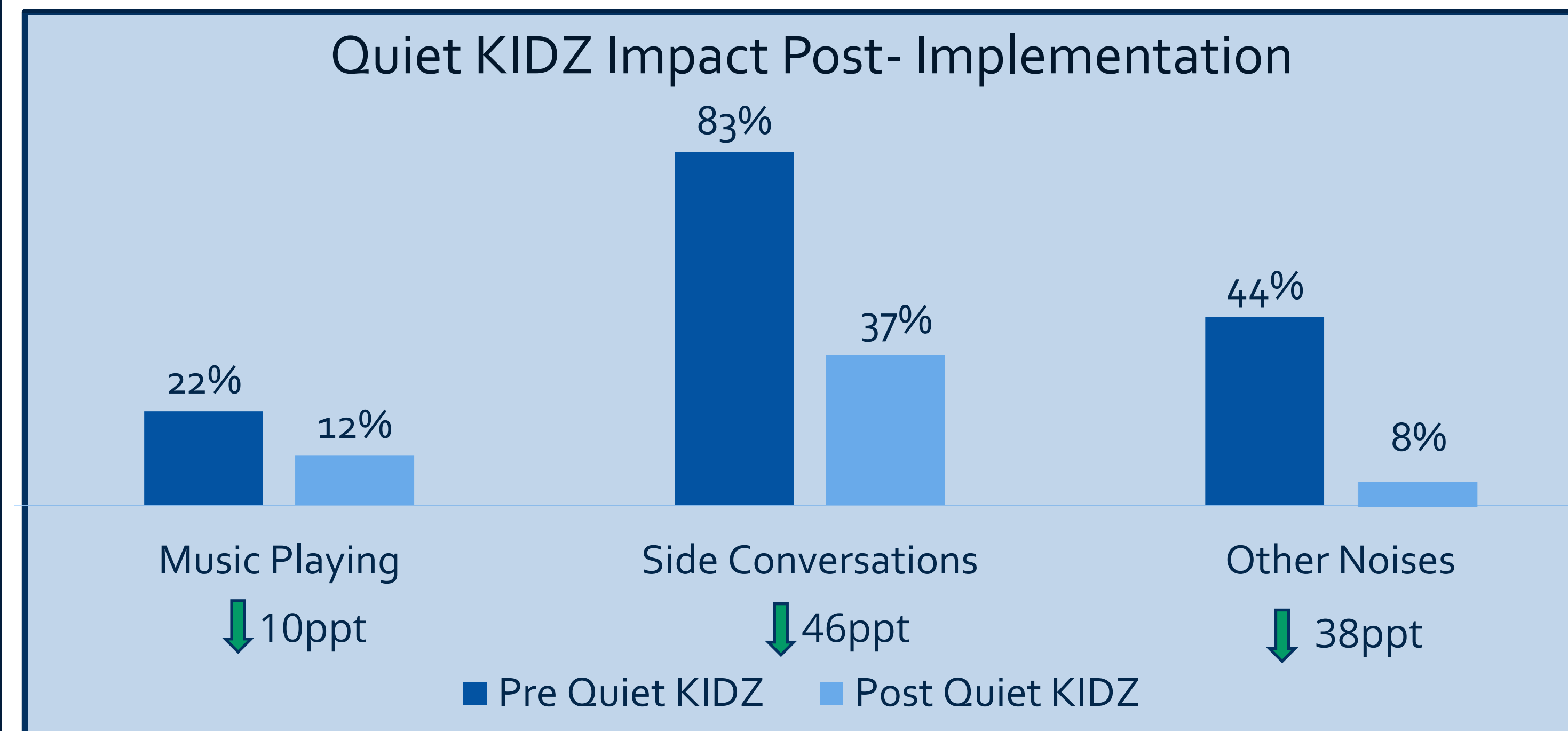
### Results

Pre-Intervention anesthesia survey results confirmed providers perceived **VERY HIGH** levels of distraction during induction

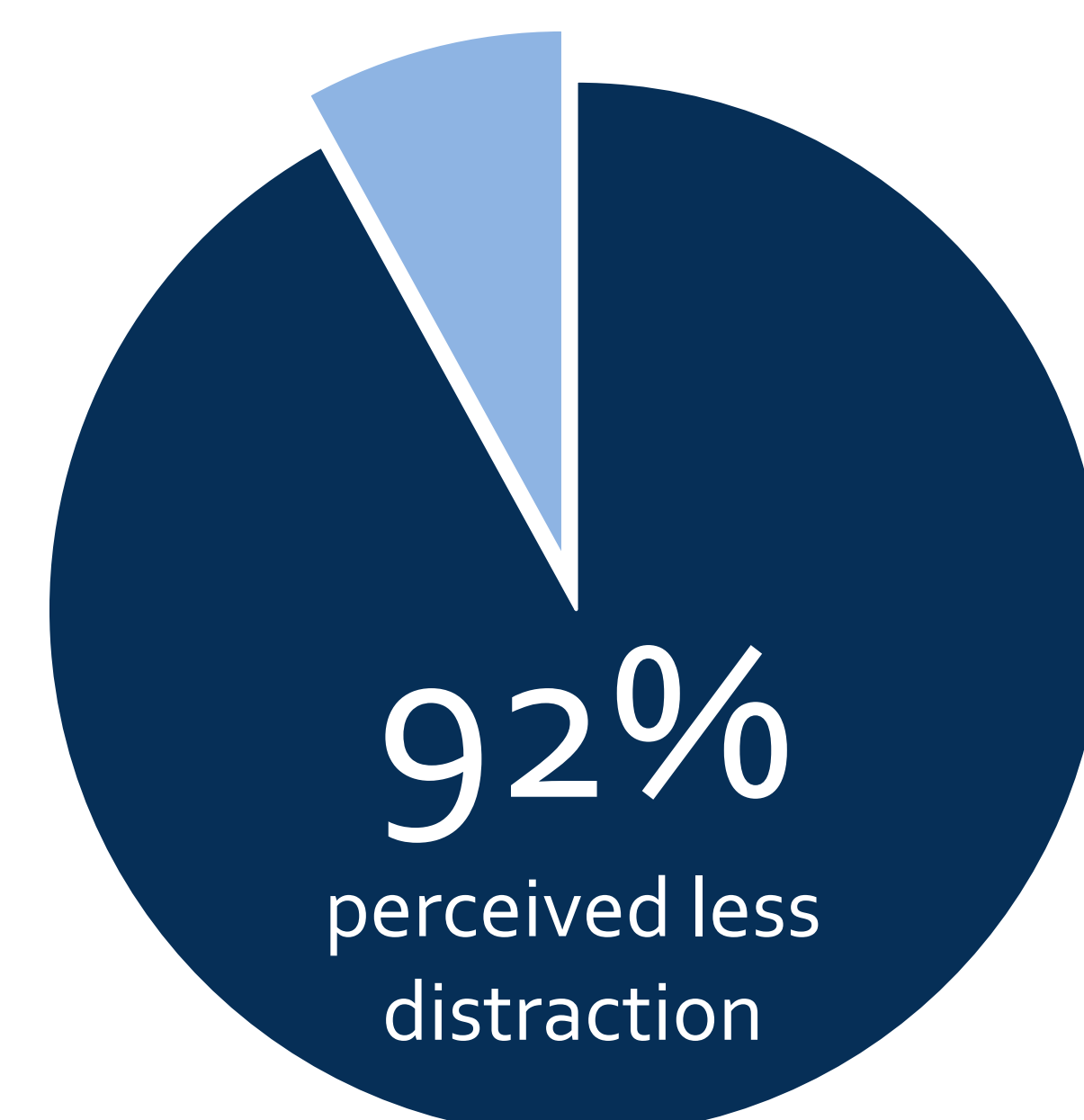
In the past two weeks have side conversations, music playing, or loud noises during the induction of anesthesia...



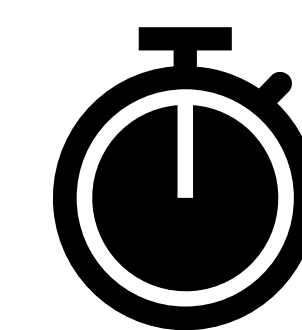
Quiet KIDZ intervention had significant impact on decreasing defined distractions in the operating room



Post Quiet KIDZ survey results reveal significant shift in provider perception of distraction



Balancing measures revealed positive secondary benefits from distraction reduction strategies



25% reduction in anesthesia induction time

29% decrease in door breaches



### Project Impact and Sustainability

Quiet KIDZ is the new standard during anesthesia induction for all pediatric surgical services at Mott Hospital



- Quiet KIDZ revealed need for significant improvements maintaining a more focused induction, essential for patient safety.
- The Quiet KIDZ initiative exemplifies an effective approach to reducing OR distractions, underscoring the importance of multidisciplinary strategy in evaluating patient care and safety.
- Implementation of the Quiet KIDZ pilot received positive feedback from perioperative nursing and staff, CRNAs, anesthesiologists, and surgeons.
- Although not explicitly explored in this project, reducing distraction in the operating rooms could potentially increase collegiality, increase vigilance, decrease errors, and alleviate provider stress.
- Other potential secondary benefits include a calm and quiet operating room environment which enhances patient care and comfort for our young patients, supporting the hospital mission which prioritizes patients and families first.

### Review of Literature

Focused search used: PubMed, CINAHL, OVID, Medline, and Google Scholar, covering healthcare publications from 1971 to 2023.

Search terms: noise reduction, distraction-free environments, "sterile cockpit" principle, anesthesia, and patient safety

### References

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4. Murthy VS, et al. Detrimental effects of noise on anesthetists. *Can. J. Anaesth.* 1995; 42(7):608-11.
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