



# Research Week 2023

## Xploro and Pediatric Anxiety

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### Keywords

Surgery, Pediatrics, Digital Technology, Anxiety

### Abstract

#### Objectives

This study aims to evaluate the effectiveness of a digital application, Xploro, in reducing anxiety levels in children undergoing procedures at Doernbecher Children's Hospital.

#### Methods

We are prospectively enrolling children aged 8-14 undergoing elective general surgery, acute care surgery (laparoscopic appendectomy), and elective upper endoscopy and randomizing patients to either standard of care (control) or standard of care with access to Xploro. Trait anxiety is assessed using the state-trait anxiety inventory for children. Pre-operative anxiety is evaluated using the visual analog scale from the perspective of the subject, guardian, and perioperative nursing team on the day of the subject's procedure. Post hoc analysis includes anxiolytic utilization and themes from the anesthesia induction checklist explored. Standard statistical methods will be utilized within SPSS software to analyze collected data.

#### Results

The Xploro study is currently underway, and participants are being screened for inclusion. Twenty-two participants have been enrolled across both groups. We hypothesize that the group with the Xploro intervention will experience lower anxiety and have fewer anti-anxiolytic medications administered.

#### Conclusion

Due to the recent launch of this research study, analysis has not yet been done to determine whether the Xploro application helps mitigate pediatric anxiety. It is hypothesized that Xploro will reduce anxiety in children undergoing procedures and reduce the need for anxiolytics. The results of this study will guide future quality work across the pediatric surgery enterprise at Doernbecher Children's Hospital as part of our multimodal efforts to center children in their care.