

Anesthesia Induction Tablet-App to Reduce Anxiety

Technology Overview

High anxiety during anesthesia induction is associated with more post-operative pain, emergence delirium, behavioral changes at home (separation anxiety, tantrums, night terrors) and chronic mask phobia in children.

Cincinnati Children's partnered with families and designers to create a digital product that provides a more calming induction experience. In clinical studies, children played with the breath-controlled app prior to induction. They were then calm and cooperative to receive induction (the tablet is housed in a case that, when ready for anesthesia, connects to standard anesthesia equipment).



Calm breathing provides the child with a sense of control and promotes relaxation as they drift to sleep.



Children control the games by calmly breathing into the mask, prior to anesthesia and then during induction.

Our tablet case with built-in breath sensor* seamlessly pairs with standard anesthesia equipment. During induction, the sensor is connected to the anesthesia circuit.

Front



Back



Custom tablet case with built in breath sensor



Standard anesthesia equipment

Breath sensor port



Standard anesthesia equipment connected to the breath sensor port on the custom tablet case

*Product is patent pending. FDA's 513g feedback - not considered a medical device.

Answer these 3 questions by email to Innovation.Ventures@cchmc.org and receive a gift card to Starbucks as our thank-you. Please provide your title and professional contact information, which will remain confidential.*

1. What would you like to see in terms of clinical data to demonstrate effectiveness of product?
2. Do you prefer an “open” or a dedicated tablet?
 - a. An open tablet allows for other apps to be loaded to the tablet. As this may potentially interfere with the anesthesia game, the manufacturer will not be able to support device issues.
 - b. A dedicated tablet allows the manufacturer to offer full support for the device and game application.
3. Would you be interested in a subscription model vs. a purchase model?
 - a. In a subscription model, you will receive a new tablet every 3 years with the latest hardware and updated game levels.
 - b. In a purchase model, you will be eligible to download game updates/bug fixes on an ongoing basis.

*Providing your title and professional contact information allows us to categorize the feedback based on roles and the size and acuity level of your institution.

