## Problem

1 in 10 children in the United States have asthma,1 and over 50% of them do not adhere to their prescribed medication plans.<sup>2</sup> Additionally, current asthma interventions are parent focused which leaves children ill-equipped when away from home.

# Solution

Breasy is a suite of asthma management products for school-aged children with asthma & their parents. Using Breasy, children with asthma can have better control over their health, decreased school absences, and improved quality of life, while reducing responsibility on parents.

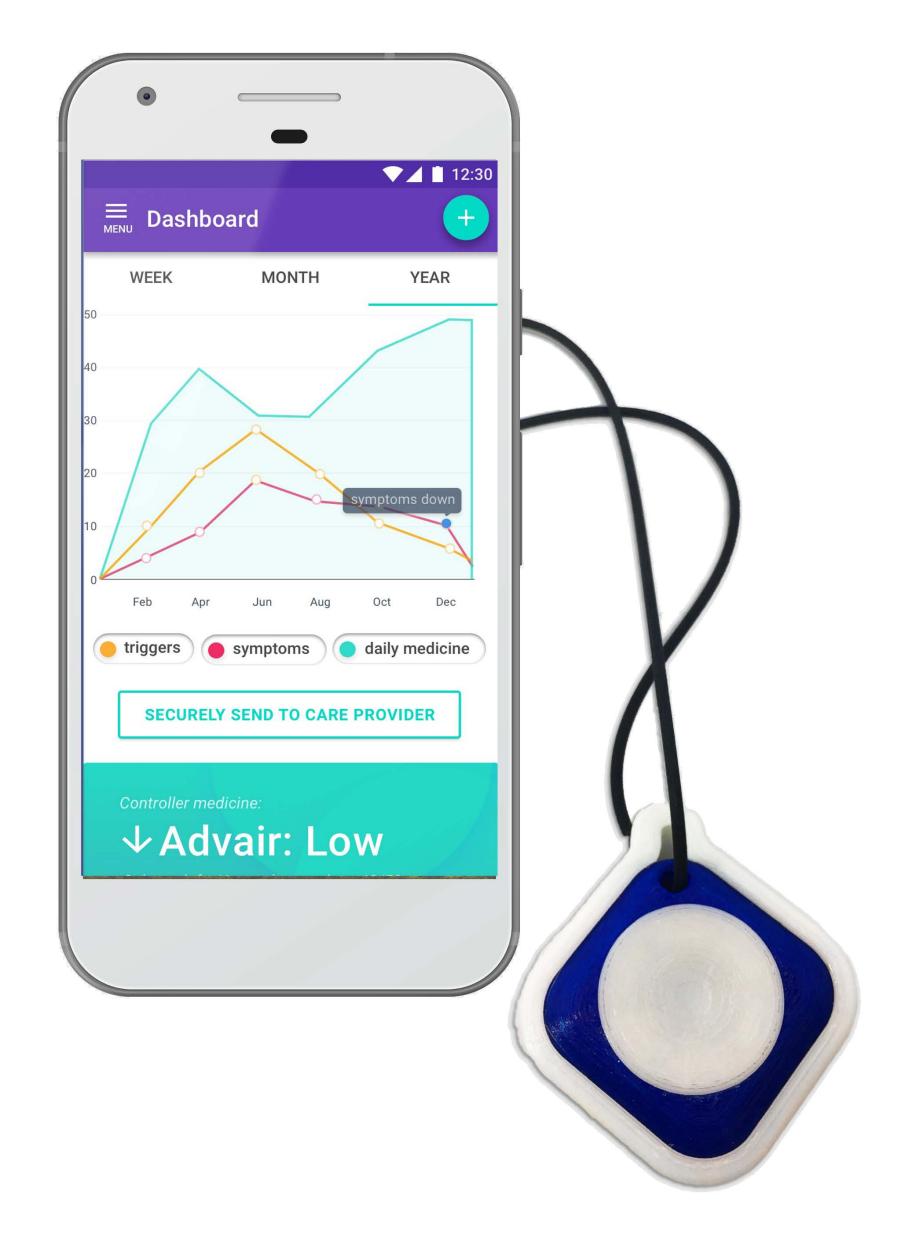
# **Breasy Companion App**

Parents are able to view when their child records symptoms, track progress over time, send reports to a care provider, and receive medication reminders.



#### **Breasy Asthma Info Cards**

Parents can detail the child's asthma needs on a personalizable card that is convenient to hand out and is easy for other adults to understand.



# **Breasy Button**

(Patent Pending) Children can record symptoms throughout the day and alert parents when symptoms get severe.



**Breasy Bag** 

Children can store all asthmarelated items in one place so that it can be grabbed quickly on the way out of the house.

#### **Process**



### Research & Discovery

Literature Review, Competitive Analysis, In-home Interviews with 10 Parent-child dyads, 7-day Diary Studies with 6 Dyads

We learned that dyads share a common goal of preventing the child's asthma from affecting their lives. However, the dyads struggle to manage triggers and overcome the challenges of unpredictable environments and busy lives.



## **Design & Ideation**

**Ideation Session, Concept Testing with** 5 Parent-child Dyads, Refinement through Design Principles

From 90 diverse ideas, we formed an initial set of concepts to test. Concept testing showed that parents found value in an app but that the child's phone time would be limited, so the child would need alternate solutions.

### Prototyping & Evaluation

**Proof-of-Concept and Prototype** Refinement, Usability Testing with 5 **Parent-child Dyads** 

Testing the refined concepts revealed value in pairing the child's Breasy Button with the parent's Breasy Companion App. Dyads also found the Breasy Bag and Breasy Asthma Info Cards to be valuable for times outside of the home.

### **Team Bronchosaurus**

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