MedTrack Inhaler Companion studiored



Product overview

Company Name:	MedTrack Health
Product name:	MedTrack Inhaler Companion
Project manager/owner:	Sophia K.
Contributors:	Daniel R. (Hardware), Aisha M. (Software), Kevin T. (UX Design)
Version:	1
Locations of sale:	United States (initial), expand to Europe and Asia in year two

Date:	09/22/2025
Prepared by:	Sophia K.

Purpose

Objective:	Develop a connected smart inhaler cap that tracks medication use and syncs with an app to improve adherence.
Target market:	Patients with asthma or COPD, caregivers, and healthcare providers.
Target audience:	Age: 12–65 Location: Urban/suburban Education: Mixed Income: Broad (covered by insurance or self-pay) Lifestyle: Health-focused, reliant on routine medical management
Success metrics:	 4.5+ star average rating on Amazon/Best Buy 50,000 units sold in year one 60% DAU for health features <5% annual return rate

Competition

Propeller Health	Smart inhaler sensors + app; widely used in clinical trials	
Adherium Smartinhaler	Strong in pediatric asthma adherence monitoring	
Teva Digihaler	FDA-approved digital inhaler with built-in sensors	

Features and scope

Feature 1:

Description:	Medication Tracking Logs inhaler usage with timestamp
In scope:	Bluetooth-enabled smart cap to track every puff
Out of scope (Future considerations):	Integration with electronic health records (EHR)

Feature 2:

Description:	Reminders & Alerts Patient reminders to use inhaler
In scope:	App notifications for missed or scheduled doses
Out of scope (Future considerations):	Voice assistant integration (Alexa, Google Home)

Feature 3:

Description:	Data Sync Sync data to mobile app
In scope:	iOS + Android support with secure cloud storage
Out of scope (Future considerations):	Web dashboard for providers (phase 2)

Feature 4:

Description:	Caregiver Access Allow caregivers to view adherence
In scope:	Optional caregiver app login
Out of scope (Future considerations):	Multi-patient management features

Feature 5:

Description:	Analytics Provide adherence reports
In scope:	Usage history charts and streak trackers
Out of scope (Future considerations):	Al-based predictive analytics for flare-ups

User interaction

User feedback:	Push notifications and vibration reminders for medication times	
Visuals:	Daily/weekly adherence graphs, badges for streaks, and warnings for missed doses	

Design and branding

Branding Tone:	Supportive, trustworthy, health-focused
Visual identity:	Key colors: Blue, green, white Logo: Shield + inhaler icon symbolizing protection

Software architecture and data processing

Firmware functions/algorithms:	Timestamp logging for each puff, Bluetooth sync with low power mode
Cloud application:	Encrypted cloud storage; HIPAA-compliant; companion app for iOS + Android

Servicing and updates

Firmware:	Over-the-air (OTA) updates via mobile app	
Software:	Quarterly updates with UI improvements, caregiver features, bug fixes	

Key milestones

Department	Start date	Status	Completion date
Hardware Design	10/01/25	Not Started	01/15/26
Software Development	11/01/25	Not Started	03/20/26
Regulatory Approval	01/20/26	Not Started	06/01/26

Feature milestones

Feature	Status	Date
Medication tracking	Not Started	11/15/25
Reminders & alerts	Not Started	12/10/25
Caregiver access	Not Started	01/15/26
Analytics + reports	Not Started	02/15/26

Open questions:

Question	Answer	Date answered
Will the device be disposable or reusable?	Leaning toward reusable replaceable batteries.	Pending
What battery type is optimal?	Testing CR2032 vs rechargeable Li-ion	10/15/25
How will caregiver permissions work?	Likely a secondary login or linked account.	Pending

Contact information

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