Digital literacy enables up-to-date sleep medicine in inclusive healthcare

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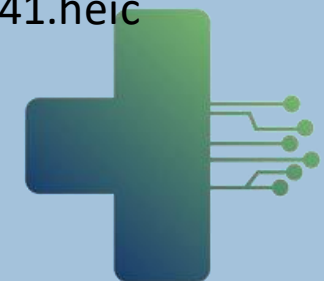*SleepRace Group4*

Crete, 7.7.2025

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About

- Recommended created application: SleepRace

- Team name: Balance

- Aravantinou-Karlatou Antonia , Bikaki Stavroula, Gracin Luciana, Ratkovic Barbara

The Problem

- Obstructive Sleep Apnea (OSA) is a sleep disorder characterized by repeated episodes of complete or partial airway blockage during sleep.

- OSA treatment typically involves a combination of lifestyle changes and medical interventions as Continuous Positive Airway Pressure (CPAP).

- Many patients prescribed CPAP therapy discontinue its use.

- **Therefore, there is a need to improve patient compliance, especially at the beginning of treatment.**
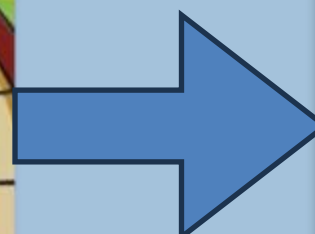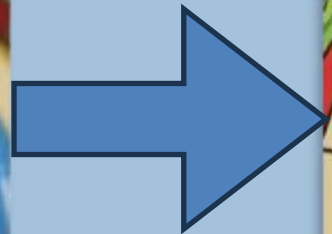
The Solution

- The app to track the use of the CPAP machine

- Motivation to keep using the machine

Please turn right your mobile!

Target Market

- **Users:** Everyone with OSA, especially the older population and less motivated patients

- **Customers:** Public, registration with low fee

Market Opportunity

The market is large and growing, combining the $139B+ mobile gaming industry with millions of OSA patients needing better therapy adherence, offering strong growth potential.
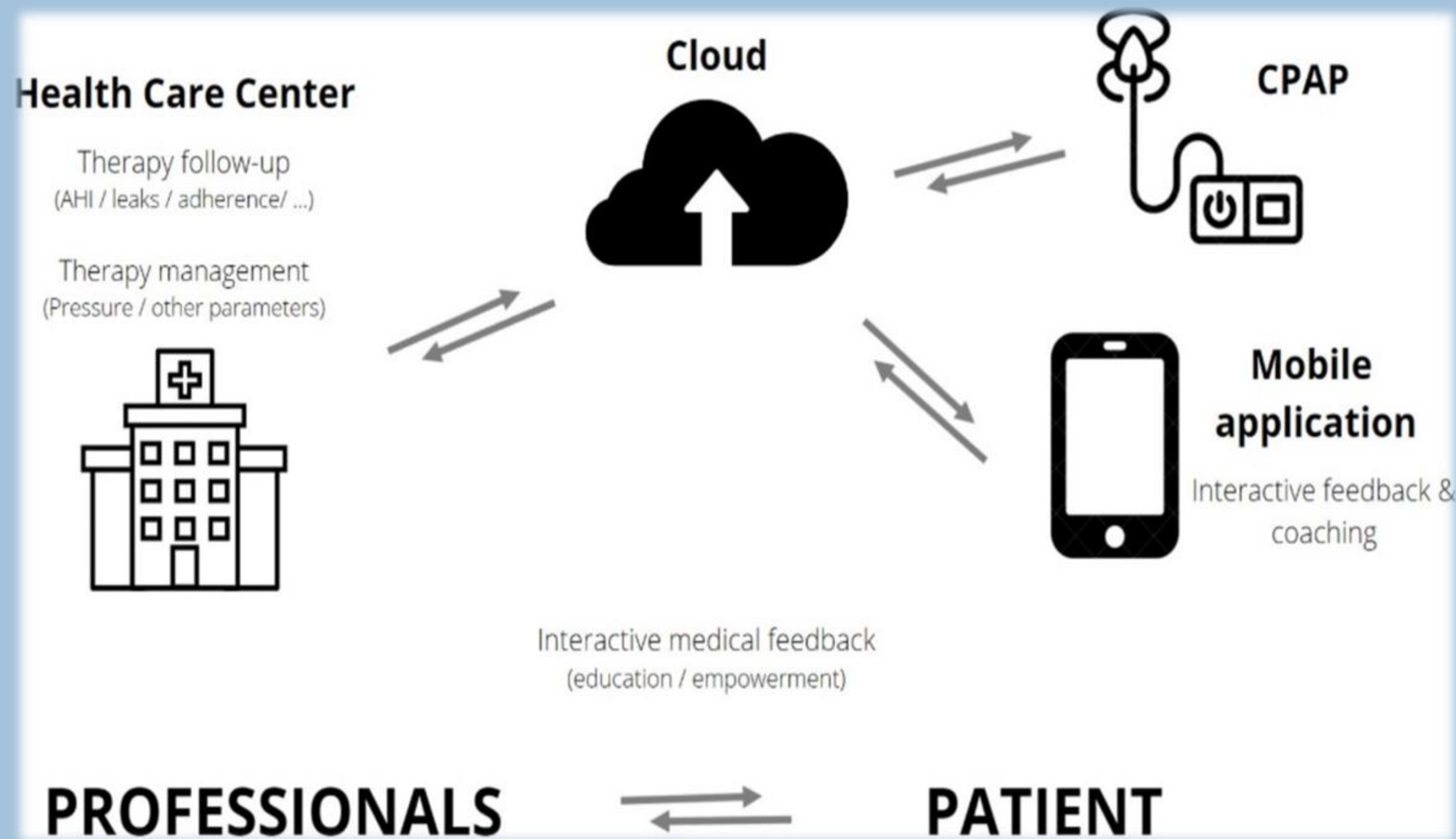
Business Model

- Revenue will come from patient subscriptions for premium features and coaching.
- We'll license the app to healthcare providers and insurers to boost CPAP adherence.
- Partnerships with CPAP device makers will create additional income through integration and co-marketing.

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Go-to-Market Strategy

- Funding opportunities from the government or of organizations to introduce and promote as innovative product.

- Partner with sleep clinics, patient groups, and CPAP manufacturers for trusted referrals and seamless onboarding.

- Build ongoing engagement via social media and user support to foster community and retention.

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Competitor Analysis

Feature / Benefit	Sleep Race	ResMed myAir	Philips DreamMapper	SleepHo
CPAP Data Tracking	Yes	Yes	Yes	Yes
Personalized Coaching	Yes	Yes	Yes	Community support
Detailed Analytics	Yes	Limited (summary)	Limited (summary)	Advanced (breath-by-breath)
Device Compatibility	Multi-brand	ResMed only	Philips only	Multi-brand (ResMed, etc.)
Motivation Tools	Yes	Milestone messages	Goal setting, reminders	Community, achievements
Sleep Stage Tracking	Yes	No	No	Yes (with wearables)
Oxygen/Health Data	Planned / Yes	No	No	Yes (02 Ring, Apple Health)
Community / Support	Planned / Yes	No	No	Yes
User Control	High	Low	Low	High

Traction/Milestones

Design Thinking Completed

- Conducted 10+ user interviews to identify challenges with CPAP use and sleep tracking.
- Ran ideation sessions to define gamified features and user journey.
- Finalized the core concept and user flow of the Sleep Race experience.

Prototype Development (July 2025)

- Built and tested our first interactive prototype.
- Conducted user testing with CPAP patients, focusing on:
  • Ease of use
  • Engagement with game mechanics
  • Visual feedback on progress
- Integrated feedback into improved version this month

User Feedback Highlights

- Users liked the race car visualization of daily progress.
- Found it motivating to "level up" and unlock new vehicles.
- Requested features: daily check-in system, car upgrades, progress rewards.

Early Validation & Next Steps

- Planning a pilot test with 20 users starting end of July 2025.
- Initiated contact with 2 local sleep clinics for expert input and collaboration.
- Wearable integration (e.g., Apple Health, O2 Ring) planned for future release.

We're actively developing Sleep Race this month and moving fast based on real user feedback building a fun, clinically meaningful tool for CPAP users.

Traction/Milestones

Timeline

Prototype testing: July 2025

Pilot study launch: Late July 2025

Beta version: September 2025

Public release: December 2025

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Financials & Funding for 2 years

We are seeking 250,000 € funding to develop our application. This investment will enable us to bring a Minimum Viable Product (MVP) to market, validate key user metrics, and prepare for scaling.

Category	Amount (€)	Description
Product Development	100,000€	MVP development, CPAP device integration (via Bluetooth/API), and GDPR-compliant cloud infrastructure.
Clinical Partnerships & Pilot Study	25,000€	Collaborations with sleep clinics for pilot testing and initial validation.
Marketing & Early User Acquisition	50,000€	Targeted campaigns, initial PR, partnerships with sleep centers, and CPAP suppliers.
Regulatory & Legal Compliance	25,000€	Basic GDPR/legal setup and assessment of CE marking needs.
Lean Team & Operations	40,000€	Part-time technical and clinical advisors, and basic operational costs.
Contingency & Buffer	10,000€	Runway extension and unplanned technical needs.

Call to Action/Closing

- OSA affects over 100 million people worldwide, and yet CPAP adherence remains a major challenge with up to 50% of patients discontinuing use within the first year, leading to serious long-term health risks.

- However, our application provides support, behavioral coaching, and personalized feedback to help users stay on track, sleep better, and improve their quality of life.

- So, We are seeking for funding and partnerships with sleep clinics, and CPAP providers to help us bring to life our mobile application.

- Our mission is to empower these individuals with the tools and confidence they need to succeed in their therapy not just for better sleep, but for a better life.

Disclaimer

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THANK YOU FOR YOUR ATTENTION!