

Product Requirements Document (PRD) for CareHaven

Product Name: CareHaven - AI-Driven Caregiving Platform

TL;DR Description

CareHaven is an AI-powered platform designed to improve caregiving experiences for elderly individuals, disabled people, and children with special needs. It provides real-time emergency assistance, AI-driven medication management, caregiver training, and community-building features to enhance the quality of care and reduce stigmatization.

Spec Status

- Status: **Draft**
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Summary

CareHaven is a comprehensive AI-driven caregiving platform that addresses critical challenges in caregiving, such as medication mismanagement, lack of real-time medical support, social isolation, and insufficient caregiver training. By integrating AI-powered chatbots, medication tracking, and caregiver education, CareHaven provides a holistic solution for caregiving companies, professional caregivers, and family members providing care.

Problem Statement / Motivation

Caregiving companies in the US, UK, and Canada face major challenges in delivering high-quality care due to staff shortages, lack of adequate training, and the growing demand for specialized support. Patients often experience social isolation and stigmatization, while caregivers struggle with medication management, emergency responses, and skill development.

Key Challenges Identified

- **Medication Mismanagement:** Missed doses, incorrect dosages, and lack of tracking.

- **Caregiver Training Gaps:** Lack of emergency preparedness, mental health support, and specialized training.
- **Social Isolation and Stigmatization:** Disabled individuals and special needs children often face exclusion.
- **Limited Real-Time Emergency Support:** Caregivers lack immediate access to medical guidance during crises.

Goals & Non-Goals

Goals

- Improve Caregiving Efficiency and Safety: Through AI-driven tools.
- Provide Real-Time Support: For emergencies via AI chatbots.
- Enhance Medication Adherence: With AI-powered tracking and reminders.
- Build a Supportive Community: Through AI-driven engagement features.
- Offer Scalable Caregiver Training: To ensure high-quality care.

Non-Goals

- Replace human caregivers entirely.
- Provide medical diagnoses or treatments.
- Focus solely on online caregiving (in-person care remains a priority).

User Stories / Use Cases

Persona	User Story	Job to Be Done
Professional Caregiver	As a caregiver, I want real-time AI assistance during emergencies so that I can provide immediate and accurate care.	Ensure patient safety and reduce response time.

Family Caregiver	As a family caregiver, I want medication reminders and refill alerts so that my loved one takes medication correctly.	Improve medication adherence and reduce errors.
Parent of a Special Needs Child	As a parent, I want AI-driven recommendations for inclusive activities so that my child feels less isolated.	Build a supportive community and reduce stigmatization.
Caregiving Agency	As a caregiving agency, I want to track caregiver performance and training needs so that I can maintain high-quality care services.	Ensure staff competency and improve service delivery.
Elderly Care Recipient	As an elderly individual, I want health monitoring and predictive alerts so that potential health issues can be detected early.	Improve health outcomes and reduce hospitalizations.

Customers and Business Impact

Customer Impact

- Elderly Individuals: Improved medication adherence and emergency support.
- Disabled Individuals: Reduced isolation through community-building features.
- Special Needs Children: Access to tailored activities and resources.
- Caregivers: Enhanced training and real-time assistance.

Business Impact

- Increased Efficiency: Reduced medication errors and faster emergency responses.
- Higher Caregiver Retention: Improved training and support for caregivers.
- Data-Driven Insights: Better understanding of patient needs and caregiver performance.
- Revenue Growth: Subscription-based model for caregiving companies and premium features for families.

Proposed Solution

CareHaven offers AI-powered solutions for caregiving, including:

- **AI Chatbot for Emergency Support:** Real-time medical guidance and crisis management.
- **Automated Medication Management:** Smart tracking, reminders, and refill alerts.
- **AI-Powered Caregiver Training:** Interactive modules for emergency preparedness, mental health, and specialized care.
- **Community-Building Features:** AI-driven matching, activity recommendations, and discussion forums.
- **Health Monitoring Tools:** Wearable integration for real-time health tracking and predictive alerts.

Requirements

Functional Requirements

No.	Requirement	Priority
1	AI chatbot provides real-time emergency support.	P0
2	Medication tracking with reminders and refill alerts.	P0
3	Interactive caregiver training modules.	P1
4	Community-building features (forums, activity recommendations).	P1
5	Health monitoring integration with wearables.	P2

Non-Functional Requirements

- **Data Privacy:** Compliance with HIPAA, GDPR, and PIPEDA.
- **Scalability:** Support for thousands of users across multiple regions.
- **Usability:** Intuitive interface for caregivers and care recipients.

FAQs

- **How will users onboard to CareHaven?**
 - Users can sign up via the app or website using their email or social media accounts.

- **How will CareHaven ensure data privacy?**
 - All data will be encrypted, and the platform will comply with healthcare privacy regulations (e.g., HIPAA, GDPR, PIPEDA).
- **What devices are supported?**
 - CareHaven will be available as a mobile app (iOS and Android) and a web platform.
- **How will CareHaven handle emergencies?**
 - The AI chatbot will provide step-by-step guidance and connect users to emergency services if needed.
- **What happens if the AI chatbot gives incorrect advice?**
 - The chatbot will be trained on verified medical guidelines and regularly audited for accuracy. In critical situations, users will be advised to contact healthcare professionals.
- **How will CareHaven handle caregiver training?**
 - The platform will offer interactive, AI-driven training modules that caregivers can complete at their own pace. Progress will be tracked and certified.
- **Can CareHaven integrate with existing healthcare systems?**
 - Yes, CareHaven will integrate with electronic health records (EHRs) and wearable devices for seamless data sharing.
- **How will CareHaven reduce social isolation?**
 - The platform will include community-building features like forums, activity recommendations, and peer support groups to foster connections.
- **What happens if a user forgets to take their medication?**
 - The AI will send reminders and escalate alerts to caregivers if medication is missed.
- **How will CareHaven measure success?**
 - Success will be measured through metrics like reduced medication errors, faster emergency response times, and higher caregiver satisfaction scores.

Measuring Success

Co.Lab Success Metrics

- Functional AI chatbot prototype for emergency support.
- Successful pilot test with at least 10 caregiving companies.
- Positive caregiver feedback (80% satisfaction rating or higher).

Product Success Metrics

- Reduction in Emergency Response Time: Measured by caregiver-reported response efficiency.

- Decrease in Medication Errors: Tracked via user-reported adherence improvements.
- Higher Caregiver Engagement: Measured through training module completion rates.
- Increased Community Participation: Number of active users in forums and activity groups.

Milestones & Timeline

• Phase 1: MVP Development (0-3 Months)

Milestone	Tasks	Expected Completion
Project Kickoff	- Finalize product scope and requirements. - Assemble the development team.	Week 1
AI Chatbot Development	- Design and develop the AI chatbot for emergency support. - Train the chatbot on medical guidelines and emergency protocols.	Weeks 2-6
Medication Management Module	- Build the medication tracking system with reminders and refill alerts. - Integrate with wearable devices for real-time health monitoring.	Weeks 7-10
Caregiver Training Platform	- Develop interactive training modules for caregivers. - Include topics like emergency preparedness, mental health, and specialized care.	Weeks 11-12
Internal Testing	- Conduct alpha testing with the development team. - Fix bugs and refine features based on feedback.	Week 13

• Phase 2: Beta Testing (3-6 Months)

Milestone	Tasks	Expected Completion
Beta Testing Preparation	- Recruit 10 caregiving companies for beta testing. - Prepare onboarding materials and training for beta users.	Week 14
Beta Launch	- Deploy the MVP to beta testers. - Monitor usage and collect feedback.	Weeks 15-18

Milestone	Tasks	Expected Completion
Feedback Analysis	- Analyze user feedback and identify areas for improvement. - Prioritize feature enhancements and bug fixes.	Weeks 19-20
Iterative Improvements	- Implement changes based on beta feedback. - Conduct a second round of beta testing if necessary.	Weeks 21-24

● **Phase 3: Public Launch (6-12 Months)**

Milestone	Tasks	Expected Completion
Marketing Campaign	- Develop marketing materials (website, social media, ads). - Partner with caregiving agencies and healthcare providers for promotion.	Weeks 25-26
Public Launch	- Release CareHaven to the public. - Monitor app performance and user adoption.	Week 27
Post-Launch Support	- Provide customer support and address user issues. - Collect user feedback for future updates.	Weeks 28-36

● **Phase 4: Feature Expansion (12+ Months)**

Milestone	Tasks	Expected Completion
Health Monitoring Expansion	- Add advanced health monitoring features (e.g., predictive alerts, integration with more wearables).	Months 13-15
Community Features Enhancement	- Expand community-building tools (e.g., AI-driven event recommendations, peer support groups).	Months 16-18
AI Performance Insights	- Develop analytics dashboards for caregiving agencies to track caregiver performance and patient outcomes.	Months 19-21
Smart Home Integration	- Integrate with smart home devices for real-time monitoring and assistance.	Months 22-24

Open Questions / Appendix

- What compliance and data privacy considerations need to be addressed for AI-driven caregiving?
- How will the AI chatbot be trained to ensure accurate medical guidance?
- What partnerships can be formed with caregiving agencies to accelerate adoption?