

Product Documentation Process for Catalyst

1. Executive Summary

Project Name: Catalyst

Team Name: Catalyst

Vision: Fast-Tracking Specialist Access for Smarter, Quicker Care

Subtitle: Digital solutions to help increase access, manage health, and improve patient satisfaction along the healthcare journey.

2. Problem Statement

In San Diego, patients often face a frustrating reality when seeking specialist healthcare services. With wait times ranging from **30 to 90 days** or more, the journey to receiving timely medical attention can feel like an uphill battle. Many patients find themselves in situations where:

- They are unsure which specialist to consult, leading to **wasted time** and **aggravation**.
- Symptoms can worsen while waiting for an appointment, resulting in more severe health issues.
- A lack of personalized guidance creates a sense of **helplessness**, especially for individuals unfamiliar with the healthcare system.

Emotional Story Example: Consider a young mother who experiences persistent joint pain but is unsure if she should see a rheumatologist or an orthopedist. After days of uncertainty, she books an appointment with a doctor only to discover that her symptoms are better suited for a different specialist. The **delay** leads to increased pain, affecting her ability to care for her children. Frustrated and overwhelmed, she wonders why the system is so complicated and why she had to suffer for so long before receiving the right care.

3. Our Solution

Catalyst aims to address these critical pain points by leveraging **AI and Machine Learning** to streamline the specialist selection process. Our app will provide users with an interactive chatbot that:

- **Analyzes Symptoms:** Understands patient symptoms through a user-friendly interface.

- **Asks Specific Questions:** Engages users with targeted follow-up questions to refine their condition understanding.
- **Generates Recommendations:** Uses historical data and patient reviews to suggest the most appropriate specialist.

Enhancing Sharp Healthcare's App:

We will integrate a feature called "**Which Doctor Do I Need?**" into Sharp Healthcare's existing app, enhancing the "**Find a Doctor**" functionality. By harnessing the power of **Large Language Models (LLMs)**, our solution:

- **Solves Patient Problems:** Reduces the time wasted on unnecessary appointments.
- **Supports Doctors:** Ensures doctors receive the right patients for efficient care.

4. How It Works

The Catalyst app provides three main streams of data to both patients and doctors:

1. **Patient Report Summary:** Simplifying medical terminology for patients to enhance understanding. Offers insights from reports, optimizing time efficiency and enabling patients to prepare effectively for consultations.
2. **Specialist Prediction:** By predicting the required specialist, we reduce wait times and guide patients effectively through the healthcare process.
3. **Comparable Case Data & Reviews:** Access to data from similar patient cases empowers both patients and doctors, leading to more informed treatment decisions.

This integrated approach not only fosters **personalized treatment** but also alleviates patient anxiety by providing additional insights into their conditions.

5. Business Model

Target Market

- **Patients:** Residents of San Diego who experience prolonged wait times for specialist appointments.
- **Healthcare Providers:** Understaffed hospitals and clinics seeking efficient patient management solutions.

Value Proposition

- **Cost Savings:** By reducing unnecessary appointments and streamlining the referral process, hospitals can cut costs associated with patient management.
- **Improved Patient Experience:** Patients enjoy a more efficient healthcare journey with quicker access to the right specialists.

- **Enhanced Clinical Outcomes:** Doctors can provide better care with pre-diagnostic insights and comparable case data at their fingertips.

Revenue Streams

- **SaaS Model:** Subscription-based access for hospitals to integrate our API into their existing patient management systems.
- **Partnerships:** Collaborations with healthcare providers to enhance their offerings with our technology.

Go-To-Market Strategy

- Pilot programs with local hospitals to demonstrate the effectiveness of Catalyst in improving patient outcomes and operational efficiency.
- Gather feedback and iterate on features based on pilot results, building credibility and refining the product before broader deployment.

6. User Journey

1. A San Diego resident experiences a health issue and opens the Catalyst app.
2. They answer a series of symptom-related questions guided by the chatbot.
3. The app suggests the appropriate specialist based on their input.
4. The patient receives a summary of their condition, along with insights from comparable cases.
5. The healthcare provider accesses this information before the appointment, allowing for a more efficient consultation.

7. Conclusion

Catalyst is poised to revolutionize the way patients access specialist care, significantly enhancing their healthcare journey. By addressing critical pain points with innovative technology, we aim to foster a more responsive, effective, and patient-centered healthcare system.