

404 Team Not Found

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Summary

In **low-access communities**, the **distance** to healthcare facilities is a significant barrier, making it challenging for residents to receive **timely care**. Coupled with **financial constraints**, these factors lead to disparities in **health outcomes**, leaving many without adequate support. The impact of Social Determinants of Health (SDoH) are:

Education: Undereducated populations are **30% less likely** to seek **preventive care**, contributing to a **60% increase** in **chronic illness** rates.

Economic Stability: Over **40% of low-income households** live below the poverty line, limiting healthcare access. Communities with higher income levels show **25% fewer hospitalizations**.

Environment: Poor access to facilities leads to a **40% higher prevalence** of **chronic conditions** like obesity, highlighting the importance of **community resources**.

Healthcare Access: Both of the areas have an average distance of **17.13 miles** to urgent care, as shown in the graph. This distance can be reduced to **8.57 miles** with our **proposed solution**, significantly lowering hospitalization rates by approximately **50%**. Our model predicts that this will effectively address the challenges of **distance** and **financial constraints**.

This slide presents the design prototype of our proposed solution—**Health Pods**. The next slide will explain how this model enhances **healthcare access gap** and tackles these critical issues.

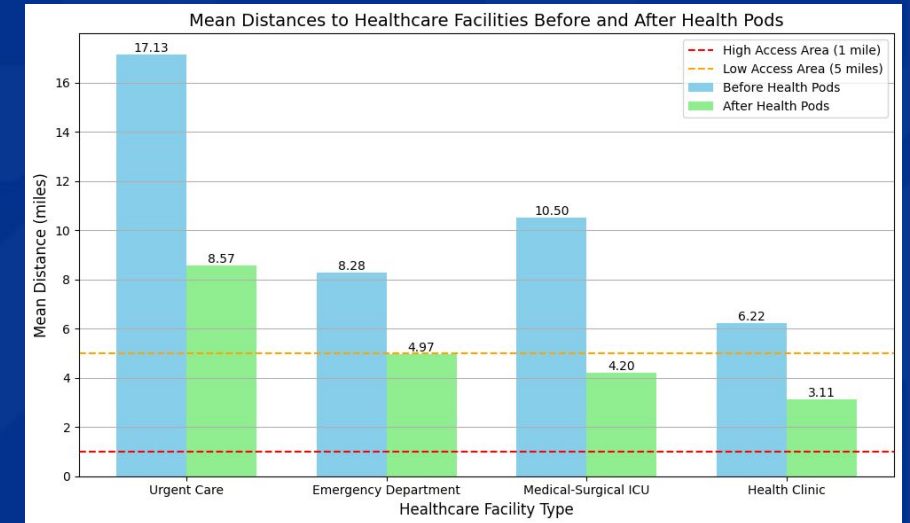


Figure 1: Bar Graph of Before and After the Health Pods

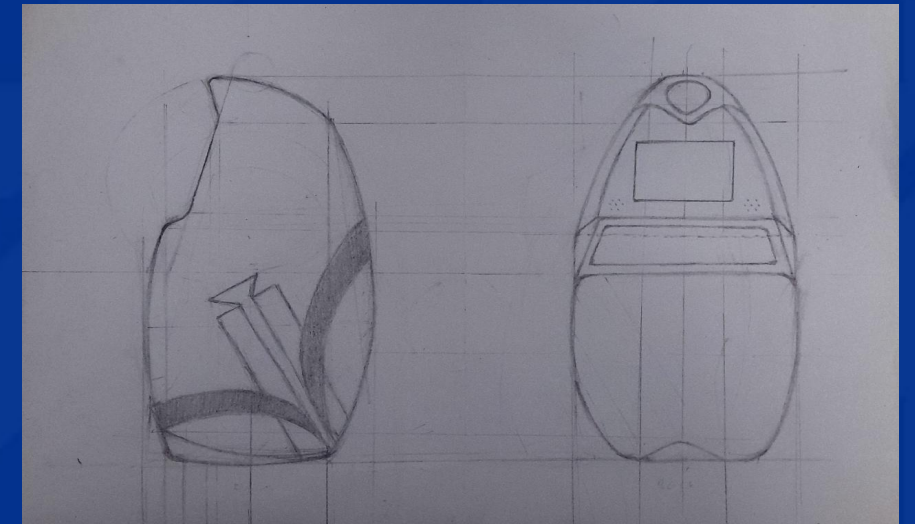


Figure 2: Prototype of our solution—Health Pods



Proposed Solution

To tackle the **healthcare access gap**, we begin with a **comprehensive survey** powered by **AI-trained models** that analyze data to pinpoint **underserved areas**. Using this data, **Health Pods** will be strategically deployed in identified **census tracts** and **local zip-codes**, significantly improving **healthcare accessibility** and addressing **critical gaps** where it's needed most.

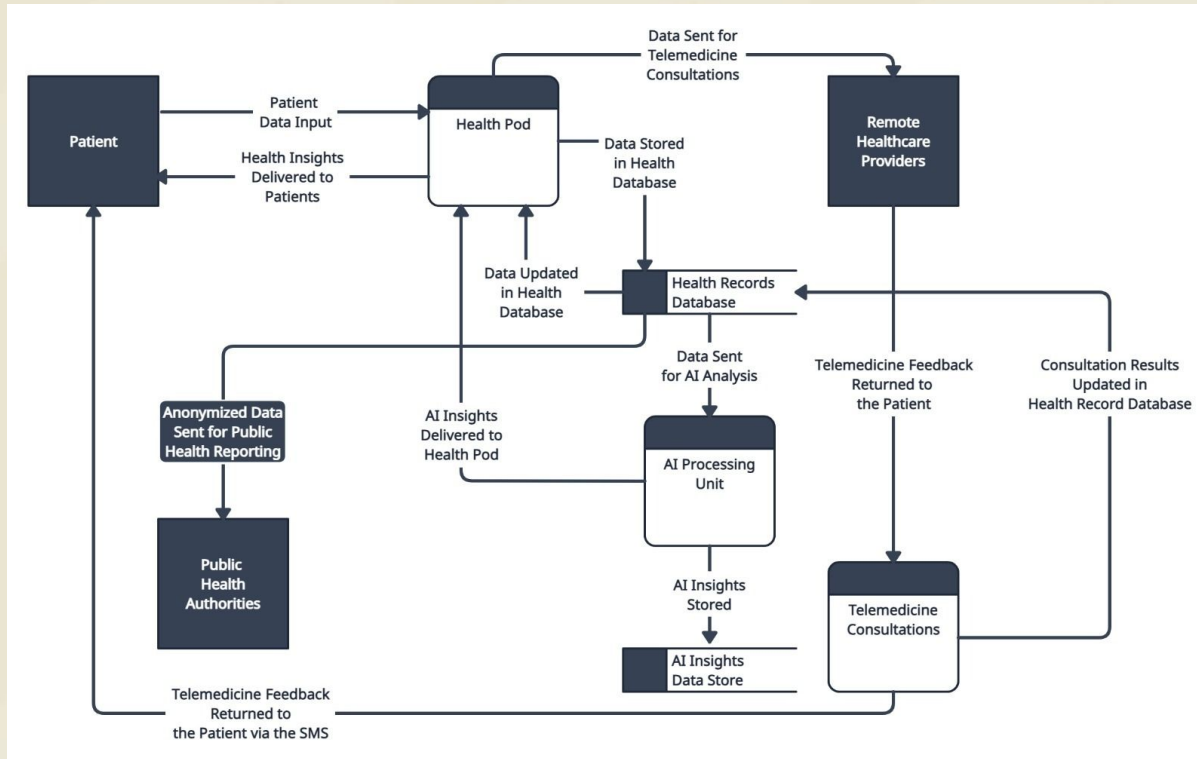


Figure 3: Data Flow Diagram of our Software in Health Pods

Given to the **left**, a **data flow diagram** illustrates how our software works, from the **patient** to **remote healthcare providers** and even **public or federal health authorities**, ensuring seamless integration and data management. Some of the key features of our models are:

Health Pods: Each mobile **Health Pods** will contain in-built **weight scales** to **BP monitors** and **LiDAR cameras** for basic health check-ups, allowing users to visit anytime for regular health checks for free until a serious emergency occurs.

AI-Driven Health Insights: Based on user data, these Pods will provide **personalized health assessments** by analyzing metrics such as **BMI**, **BP**, and **GL**. This approach enables **early detection** of health issues, reducing emergency care needs by **25%**.

Telemedicine Integration: Telemedicine improves access for **40%** of low-access residents, enabling **timely consultations**. Data will be verified for early detection and generate **personalized medication lists**.