

## Challenge 2: Enhancing Cardiovascular Disease Management



**David Osei - Heart Health Management**

### Demographics

Age: 65

Gender: Male

Ethnicity: African American

Location: Atlanta, Georgia, USA

Occupation: Retired Civil Engineer

Family Status: Married, lives with spouse

## Technical Skills and access

	Skill Level (0-10)	Access (0-10)
Preference for Digital Services	4	5
Health Apps	3	4
Health Portal (Web)	5	6
Telehealth & Video Consultation	5	4
Wearable & IoT Devices	4	3

## Biography

David is a 65-year-old retired civil engineer who has dedicated his life to serving his community. Living with hypertension and a history of heart disease, he actively participates in local health awareness programs and believes in the importance of education for health management. David is determined to maintain his health to enjoy his retirement and is committed to following a strict medication regimen, adopting a balanced diet, and engaging in regular physical activity.

## Medical Conditions

- Primary Condition: Hypertension
- Secondary Conditions/Comorbidities:
  - History of heart disease
  - Hyperlipidemia (high cholesterol)
  - Diabetes (pre-diabetic state)

## Behaviours when interacting with services

- Prefers in-person consultations and discussions with healthcare professionals.
- Takes notes during appointments to ensure understanding.
- Often brings a family member to appointments for support.
- Seeks clarification on medications and treatment plans.
- May hesitate to use online portals or digital communication due to low tech proficiency.

## Goals

- Maintain a healthy lifestyle to enjoy retirement.
- Minimise hospital visits and avoid major health incidents.
- Ensure adherence to medication and lifestyle regimen.
- Gain a better understanding of his health conditions and management options.

## Pain Points

- Difficulty navigating digital health platforms due to low tech skills.
- Limited access to personalised healthcare services that consider his unique needs.
- Long wait times for in-person appointments can be frustrating.
- Concern about the complexity of medication management and possible side effects.

## Key Challenges

- I need a clear and simple way to integrate my medications, allergies, and health conditions into a personalised treatment plan that ensures my safety and minimises the risk of side effects.
- I often feel overwhelmed by the healthcare system and need support to find the right resources and services tailored to my unique health needs.
- I would benefit from easily accessible educational resources that help me understand my health conditions and management strategies without relying heavily on technology.
- I want a system that allows me to communicate my preferences and concerns effectively to my healthcare providers, ensuring that my treatment plan aligns with my lifestyle and goals.
- I need a straightforward way to monitor my health metrics, like blood pressure and medication adherence, without the complexity of advanced technology that I find difficult to use.

## Empathy Map

### Says:

- "I just want to manage my health and enjoy my retirement."
- "Can you explain this to me again? I'm not great with all these apps and devices."
- "I prefer seeing my doctor face-to-face, it makes me feel more comfortable."
- "I don't want to take any risks with my medications."
- "I'm doing my best to stay active and stick to the diet, but it's hard sometimes."

### Thinks:

- "Is my medication really helping, or am I just following orders?"
- "I hope I'm not missing any signs of another heart attack."
- "Why do these health apps have to be so complicated? I wish it was simpler."
- "I need to keep my blood pressure under control, or else I might end up in the hospital again."
- "What if I forget to take my medication? I can't afford that mistake."

### Does:

- Sticks to a daily routine of taking medications and monitoring his blood pressure.
- Attends in-person doctor appointments, often bringing a family member for support.
- Participates in community health programs to stay informed about managing his heart disease.
- Avoids using complex digital health tools, opting for paper-based tracking or manual systems.
- Tries to stay active with light exercise, such as walking, and follows dietary guidelines.

### Feels:

- Anxious about his health and the potential for serious complications like a heart attack.
- Frustrated by the complexity of health technology and digital tools that he struggles to use.
- Grateful for the healthcare support he receives but worried about managing everything properly.
- Determined to maintain his health and independence without frequent hospital visits.
- Overwhelmed by the multiple medications, potential side effects, and the need for constant monitoring.

