

Assignment I (Phase-III): Features and Prioritization

STEP-1: Brainstorm Solutions

A. Problem Statement:

Patients managing their care across Apollo and non-Apollo hospitals cannot view or consolidate all medical records in one place. Records are fragmented, leading to repeat tests, manual file-keeping, and lack of trust in Apollo as their single health platform. This causes frustration, inefficiency, and lower engagement.

B. Root Causes Breakdown:

For Users (Self-care and Care-givers):

1. External records are hard to bring in, so patients cannot reliably ingest non-Apollo reports into Apollo and clinicians outside Apollo often do not accept Apollo outputs, causing repeats and gaps.
2. There is no unified personal and family health vault, so records live across files, photos, emails, and drives, making retrieval slow and error-prone.
3. The system lacks a longitudinal patient model, so uploads are stored as documents rather than structured encounters, results, diagnoses, and plans.
4. Auto-tagging and codification are weak, so key fields like test name, value, date, lab, and patient mapping are not consistently extracted for search and comparison.
5. Privacy and consent controls are coarse, so people hesitate to link sources or share records without granular scopes, expirations, and audit trails.
6. There is no clear value-for-upload, so users get storage without instant summaries, insights, or doctor-ready bundles, reducing the incentive to consolidate.
7. ABDM and DigiLocker integrations are not leveraged progressively, so verified imports and standardized identifiers are unavailable even as optional add-ons.

For Doctors and the users:

8. Clinicians do not get shared records in their workflow, so even when patients upload documents, doctors cannot easily view or use them during consults.
9. Follow-up orchestration is missing, so recommended reviews, repeat tests, and next steps are not translated into plans, reminders, and quick re-book flows. Also, no nudge for users on medication.

C. Solutions:

1. **How might we give patients one secure place for every record, from any source? and**

Drawing inspiration from CRED and ICICI iMobile App in reading the transaction records.

Solution: Users capture the photo with Camera or upload file or app reads the email related to medical record and pairing up with OCR + medical NER to auto-tag person, test, date, lab, and diagnosis. This provides users a vault/drive for all the medical records.

2. **How might we integrate non-Apollo medical systems seamlessly into Apollo's health record ecosystem (Account Aggregator for Health data)?**

Solution: Build API integrations with labs (e.g., Thyrocare, Orange labs), hospitals, and clinics for fetching the medical records and the user data (Like UPI linking multiple banks, create a "UPI for health data").

3. **How might we bring in structured summaries to the medical records and generate insights (like perfios)?**

Solution: Once the health records are available using OCR and Medical NER the documents are read and are structured in a timeline. It also gives a summary of the records so that users have a ready snapshot. It also makes a comparison between the records and gives a progress on the health condition.

4. **How might we use consolidated data to simplify follow-ups and continuity of care (like unmind)?**

Solution: Convert the available doctor recommendations into a plan with reminders, due dates, and quick rebook or test-reorder and medicines top-up. Visible on timeline for patient and caregiver.

5. **How might we use the consolidated data available, and allow users on personalized queries based on their medical history?**

Solution: A conversational Health Copilot that runs adaptive triage, explains in plain language. When a user tries to understand over a specific query for example, a B12

test on a particular date a chat bot would definitely help in resolving a query rather than a dashboard.

6. How might we reward users for consolidating their health data (value for upload)?

Solution: “Vault Rewards” to make every upload instantly valuable and habit forming. Right after a record is added, users see an Insight Card that summarizes captured results, trends, and next steps, and they earn Vault Points for quality actions like confirming low-confidence fields, linking a record to a follow-up, and organizing family profiles. Use rewards for availing discounts.

7. How might we compress a lifetime of records into a single, glanceable screen that a patient or clinician can understand in a shorter time?

Solution: A single, always-up-to-date Medical Passport that compresses a user’s history into one visual screen: current conditions, meds and allergies, key labs with trend arrows, recent visits, vaccines, and upcoming care. Everything expands on tap, but the first view is a clean summary designed for understanding in a shorter time.

8. Candy Crush for your health

Solution: Think of the Preventive Health Navigator like Candy Crush for wellbeing: your 0–100 score is the progress bar for the current “level,” and weekly Top Movers are the three best combos to clear it with one tap. If you skip a step, the board “reshuffles” to an equivalent action so momentum isn’t lost, while red-flag blockers force a priority move to urgent care or a GP before you continue. Each completed quest triggers a visible score bump, streaks unlock care-aligned boosters (lab discounts, GP vouchers), and advancing levels maps to steadily reaching your target health band with clear, game-like feedback on what moved the score and why.

9. Inspired by how banks fetch KYC from Digilocker.

Solution: Option for ABDM and DigiLocker linking to let users pull verified medical records into the Vault with explicit, time-boxed, and revocable consent. After the user authenticates on the official consent screens and selects scopes and date ranges, records are imported to the same timeline, marked with a “Verified Source” badge and full provenance like facility and accreditation, and can be searched, bundled for doctors, or deleted independently of the link. Privacy and security are first class with least-privilege tokens, encryption, audit logs, and one-tap revoke or unlink. An optional periodic sync keeps the Vault current, and clear controls show active consents, last

sync, and status. This reduces manual uploads, improves clinical trust, and speeds care; success will be measured by link rate among Vault users, error-free import rate, and setup time under two minutes.

10. Inspired by crypto wallet

Solution: Blockchain-backed Health Vault where each verified medical record is minted as a Data NFT, giving patients verifiable ownership and full control of their health data. Each NFT stores immutable provenance—issuer, timestamp, and accreditation—on a secure blockchain, while the actual health documents remain encrypted off-chain. Patients can grant or revoke access to doctors through on-chain consent, ensuring every share or view is transparently logged and auditable. This approach combines the security and traceability of blockchain with the privacy of encrypted storage, enabling trusted interoperability between hospitals, labs, and users.

Solution	Short Description	Key Assumption	Category
Universal Health Vault (Camera · File · Email ingest)	One secure vault for all records; capture via camera/upload/email with OCR + medical NER to auto-tag person, test, date, lab, diagnosis and place it on a unified timeline.	If ingestion is frictionless and auto-tagging is reliable, users will centralize records in one place.	High Confidence
“Account Aggregator for Health Data” Integrations	Build pull-based APIs with major labs/hospitals to fetch verified records into the vault, modelled after account-aggregator style consent.	Partners will expose stable APIs and users will link accounts if value is obvious.	Low Confidence
Structured Summaries and Insights	Convert documents into structured encounters and results; generate summaries, trends, and comparisons so patients and doctors get instant clarity.	Actionable summaries reduce cognitive load and build trust in uploaded external records.	High Confidence

Follow-up Orchestration	Turn recommendations into plans with reminders, due dates, quick rebook/test-reorder and medicine top-ups; show on a shared timeline.	Timely nudges and one-tap actions increase adherence and repeat usage.	High Confidence
Health Copilot (Triage + Care Reasoning Card)	Conversational assistant that explains terms, runs adaptive triage, defaults to GP unless clear specialty indicators, and shows a one-screen reasoning card.	Safe, comprehensible guidance reduces misrouting and improves first-contact care.	Low Confidence
Vault Rewards	Immediate “Insight Card” after each upload plus points for confirming fields, linking follow-ups, organizing family profiles; streaks, badges, levels and Care Quests; discounts as utility.	Immediate value and light gamification make consolidation a habit.	Low Confidence
Medical Passport (One-Screen Summary)	A single, glanceable screen that stays current and shows conditions, meds, allergies, key lab trends with arrows, recent visits, vaccines, and upcoming care, with tap-to-expand details.	Clinically prioritized, always-fresh summaries reduce cognitive load and speed decisions for patients and clinicians.	High Confidence
Preventive Health Navigator (Candy Crush for Your Health)	A 0–100 explainable Preventive Health Score with sub-scores, Top Movers weekly quests, live rerouting, red-flag guardrails, and	An explainable score paired with immediate, low-friction actions and care-aligned rewards will	High Confidence

	one-tap bookings that turn scattered records and wearables into turn-by-turn preventive actions.	convert passive record-keeping into sustained weekly care and safer engagement.	
Progressive ABDM/DigiLocker Linking	Optional, revocable consent flows to import verified records; show provenance and “Verified Source” badge; offer periodic sync and clear consent controls.	Clear, granular consent with visible provenance will increase verified imports and clinician acceptance.	Moonshot
Blockchain-backed Data NFTs	Mint each verified record as a Data NFT with on-chain consent and immutable provenance; documents stored encrypted off-chain.	On-chain trust and auditability will materially improve interoperability and clinician acceptance at scale.	Moonshot

STEP 2: Prioritize Smartly (From Possibility to Focus)

Solution	Impact (1-3)	Confidence (1-3)	Effort (1-3)	Score
Universal Health Vault (Camera, File, Email ingest with OCR + NER)	3	3	2	4.5
“Account Aggregator for Health Data” Integrations	3	2	3	2
Structured Summaries and Insights (timeline, trends, comparisons)	3	3	2	4.5
Follow-up Orchestration (plans, reminders, one-tap rebook/refill)	3	3	2	4.5
Health Copilot (Triage + Care Reasoning Card)	3	3	3	3
Vault Rewards	2	2	1	4
Medical Passport (One-Screen Summary)	3	3	1	9
Preventive Health Navigator (Candy Crush for Your Health)	3	2	2	3
Progressive ABDM/DigiLocker Linking	3	1	3	1
Blockchain-backed Data NFTs	1	1	3	0.33

STEP 3: Wireframe Your Top Ideas

Universal Health Vault

Apollo Health — Home — Overview

[Home](#)
[Upload](#)
[Records](#)
[Insights](#)
[Care Plan](#)

Your Health, All in One Place

- Primary CTA: Upload New Record

KPIs

- Records • Tests • Insights • Upcoming

Recent Records

Record 1 • tags • date

Record 2 • tags • date

Record 3 • tags • date

Record 4 • tags • date

Record 5 • tags • date

Record 6 • tags • date

Upload — Capture & Import

[Home](#)
[Upload](#)
[Records](#)
[Insights](#)
[Care Plan](#)

Take a Photo

- CTA: Open Camera

Upload Files

- CTA: Choose File

Import from Email

- CTA: Connect Email

Drag & Drop

- Dropzone

Structured Summaries and Insights

Medical Records — List & Filters

[Home](#)
[Upload](#)
[Records](#)
[Insights](#)
[Care Plan](#)

Global Search + Filters

- Search by name, type, tag | Filter

24 Total Records

12 Lab Tests

5 Reports

Records list

Record Title • source • date • tags • download

Record Title • source • date • tags • download

Record Title • source • date • tags • download

Record Title • source • date • tags • download

Record Title • source • date • tags • download

Record Title • source • date • tags • download

Record Title • source • date • tags • download

Health Insights — Trends & Status

[Home](#)
[Upload](#)
[Records](#)
[Insights](#)
[Care Plan](#)

Your Health Summary

- Improving • Stable • Needs Attention

Cholesterol

- Current value • Optimal range
- Last tested

Blood Pressure

- Current value • Status
- Last tested

Vitamin D

- Current value • Status

HbA1c

- Current value • Status

Follow-up Orchestration

Care Plan — Tasks & Upcoming

Home

Upload

Records

Insights

Care Plan

Today's Tasks

Take Metformin • time / notes • checkbox

Blood Sugar Check • time / notes • checkbox

Cardiology Follow-up • time / notes • checkbox

Take Evening Medication • time / notes • checkbox

Upcoming Appointments

Quarterly Health Checkup

• Doctor • Date/Time • Location

• CTAs: Reminder | Reschedule

Eye Examination

• Doctor • Date/Time • Location

• CTAs: Reminder | Reschedule

Upcoming Appointments

Home

Upload

Records

Insights

Care Plan

Upcoming Appointments

Appointment Card 1

• Title • Doctor • Date/Time • Location

• CTAs: Set Reminder | Reschedule

Appointment Card 2

• Title • Doctor • Date/Time • Location

• CTAs: Set Reminder | Reschedule

Quick Actions

Refill Rx

Book Test

Schedule

Reminders