Project 1a1 and 1b1 prompts

Claude: https://claude.ai/share/62ae5979-2d88-4f26-b2b2-f22a8918a7b8
ChatGPT: https://chatgpt.com/share/68c77751-e3f0-800a-8805-37cf88ef775c

The prompt for 1c1 consists of a single large prompt that contains all previous information and instruction along with a final set of instructions. We did this because it all fit into context and was simpler.

Project 1c1 prompts

Healthcare + Food/Nutrition Delivery Integrated System: 30 Use Cases
1. Patient Registers and Verifies Account
Preconditions
Patient has received a registration invitation or self-registration is permitted.

Access to the patient registration portal.
 Main Flow

Patient navigates to the registration page.

Enters required details (name, DOB, contact info), sets password, and accepts consent/terms.

System sends an email verification link.

Patient clicks verification link; system activates the account with "Patient" role.

System logs the activation event for audit.
 Subflows

S1: Minor registration — guardian linkage and staff approval required.
 Alternative Flows

A1: Email already in use → prompt for account recovery.

A2: Identity verification fails → flag for manual review and notify patient.

2. Admin Creates HCP User with Specialty Role
Preconditions
Admin is authenticated and authorized for user management.
 Main Flow

Admin opens "User Management" interface.

Inputs user details (license ID, name, specialty).

Assigns appropriate roles (e.g., Licensed HCP, Optometry, OB/GYN).

System provisions access, logs the event, and sends notification.
 Subflows

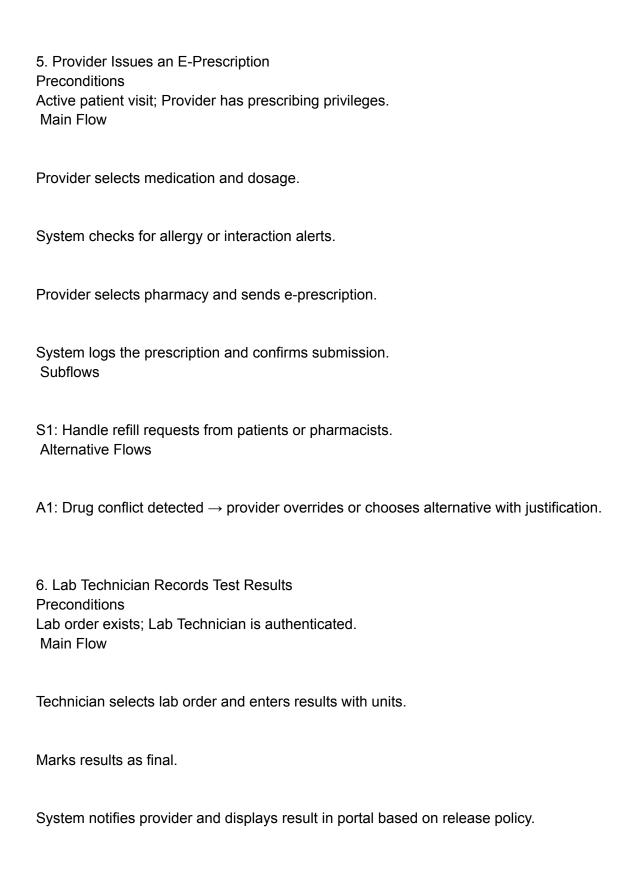S1: Bulk import of multiple HCPs via CSV upload.
 Alternative Flows

A1: License validation fails → notify admin, block creation.

A2: Duplicate record exists → prompt update instead of creation.

3. Nurse Records Patient Vitals During Check-in
Preconditions
Patient has a scheduled appointment; Nurse is authenticated.
 Main Flow

Nurse accesses today's schedule and selects the patient.

Records vitals (height, weight, BP, pulse, temperature).

Optionally inputs chief complaint or history.

Saves record; system timestamps and locks entry; logs the action.
 Subflows

S1: Auto-import vitals from connected devices.
 Alternative Flows

A1: Patient not on schedule → Nurse searches by MRN and logs walk-in.

4. Physician Documents Office Visit with Diagnosis
Preconditions
Vitals recorded (optional); Physician is authenticated.
 Main Flow

Physician opens patient chart and visit session.

Reviews history, medications, allergies.

Adds diagnosis (ICD) and treatment plan (orders/referrals).

Signs and finalizes the note.
 Subflows

S1: Add chronic condition to problem list (if applicable).
 Alternative Flows

A1: Allergy/interactions flagged → physician adjusts or overrides with documentation.

5. Provider Issues an E-Prescription

Preconditions

Active patient visit; Provider has prescribing privileges.

Main Flow

Provider selects medication and dosage.

System checks for allergy or interaction alerts.

Provider selects pharmacy and sends e-prescription.

System logs the prescription and confirms submission.

Subflows

S1: Handle refill requests from patients or pharmacists.

Alternative Flows

A1: Drug conflict detected → provider overrides or chooses alternative with justification.

6. Lab Technician Records Test Results

Preconditions

Lab order exists; Lab Technician is authenticated.

Main Flow

Technician selects lab order and enters results with units.

Marks results as final.

System notifies provider and displays result in portal based on release policy.

Action is logged in the audit trail.
 Subflows

S1: Critical value triggers immediate notification to provider.
 Alternative Flows

A1: Identifier mismatch → reject entry, log error, and request correction.

7. Secure Patient–Clinic Messaging
Preconditions
Both sender and recipient accounts are active; messaging feature enabled.
 Main Flow

Patient sends a non-urgent message via portal.

Message is delivered to clinic inbox.

Nurse triages and replies or escalates to provider.

Thread is saved in patient chart.
 Subflows

S1: Attach files/images (e.g., progress photos, logs) to message.
 Alternative Flows

A1: Urgent content flagged → auto-reply instructs patient to seek emergency care.

8. Optometry Visit – Eye Care Documentation
Preconditions
HCP assigned Eye-Care role; appointment scheduled.
 Main Flow

HCP opens eye exam template.

Records vision measurements, refraction, IOP, slit-lamp findings, fundus exam.

Enters diagnosis and plan (e.g., Rx for glasses/contact lenses).

Signs note; option to print or export Rx.
 Subflows

S1: Upload images (e.g., OCT, retinal scans).
 Alternative Flows

A1: Device error → manual entry with notation; imaging reattempt queued.

9. OB/GYN Prenatal Visit Documentation
Preconditions
HCP has OB/GYN role; patient marked as pregnant.
 Main Flow

HCP opens prenatal template.

Records gestational age, vitals, fetal heart rate, labs.

Updates care plan and problem list (e.g., GDM risk).

Schedules next visit; signs note.
 Subflows

S1: Add predefined prenatal lab panel.
 Alternative Flows

A1: High-risk result triggers referral to MFM.

10. Compliance Officer Reviews Audit Logs
Preconditions
Compliance Officer role authenticated; has audit console access.
 Main Flow

Officer filters logs by date, user, or patient.

Reviews access records for policy violations (e.g., unauthorized access).

Exports logs for investigation.

Logs completion of the review.
 Subflows

S1: Auto-generate and email monthly audit summary.
 Alternative Flows

A1: Audit data missing → create incident and escalate to IT for resolution.

11. Patient receives a produce prescription (food is medicine)
Preconditions
Patient qualifies under produce-prescription program; has active clinic account.
 Main Flow

Provider marks patient eligible and issues digital produce prescription via EHR.

Prescription is stored, visible to patient in portal.

Patient redeems with partner vendors (online or in-person).

Redemption is recorded in EHR; provider sees adherence summary.
 Subflows

S1: Aggregated redemption data exported for evaluation by program teams.
 Alternative Flows

A1: Vendor rejects due to patient credentials → patient notified to contact clinic.
 Aligns with Food-is-Medicine produce prescription programs using EHR for outcomes tracking PMC+1.

12. Dietitian provides Culinary Medicine eConsult via EHR
Preconditions
Patient referred; dietitian or culinary-medicine expert has active role.
 Main Flow

Provider opens eConsult interface in EHR.

Drafts request; dietitian responds with tailored nutrition guidance.

Guided info appears in patient's chart and portal.
 Subflows

S1: Attach food logs/images; dietitian includes tailored recipes.
 Alternative Flows

A1: No dietitian available → system schedules callback or recommends outside services.
 Based on Culinary Medicine eConsult examples ResearchGate.

13. Integration: Dietary/nutrition orders transmitted to food-service system
Preconditions
Patient in inpatient or long-term care; plan includes specialized diet.
 Main Flow

Clinician orders diet (e.g., heart-healthy) in EHR.

System applies HL7 standards and transmits to food-service engine.

Food delivered correctly; delivery confirmation logged.
 Subflows

S1: Default parameters from previous order auto-carry over (with modifications).
 Alternative Flows

A1: Communication failure → alert admin and retry.
 Mirrors HL7-based nutrition order integration andeal.orgHealthcare Integration Engine.

14. Patient logs food delivery orders in portal
Preconditions
Patient receives meals via affiliated delivery services; portal integrated.
 Main Flow

Patient connects to food delivery partner via patient portal.

Once purchase/delivery completes, nutritional summary appears in portal.

Summary flows into EHR for provider review.
 Subflows

S1: Patient manually enters meal and photos if auto-sync fails.
 Alternative Flows

A1: Delivery data missing → patient prompted to fill manually.

15. System recommends meals using personalized recommendation engine
Preconditions
System uses user preferences, diet restrictions, and nutrition guidance.
 Main Flow

Patient logs in; system suggests meals based on dietary needs and preferences.

Patient selects recommendation and orders via integrated vendor.

Order, along with nutrition data, recorded.
 Subflows

S1: Cold-start user gets category suggestions; learns preferences over time.
 Alternative Flows

A1: Recommendation fails → show generic healthy menu instead.
 Inspired by iFood's recommendation engine arXiv.

16. Provider reviews redemption and health outcomes data for produce prescriptions
Preconditions
Patient has redemption activity logged; EHR linked to outcome metrics.
 Main Flow

Provider opens outcome dashboard.

Reviews correlation between produce prescription redemptions and biomarkers (e.g., HbA1c).

Adjusts future prescriptions accordingly.
 Subflows

S1: Data exported for grant reporting.
 Alternative Flows

A1: Insufficient data → provider encouraged to counsel manually.

17. Mobile nutrition app syncs food logs to EHR
Preconditions
Patient app approved and connected to EHR (via FHIR/HealthKit).
 Main Flow

Patient logs meals in app.

App syncs summary to EHR.

Provider views logs and provides feedback.
 Subflows

S1: Wearable data (calories, steps) also synced.
 Alternative Flows

A1: Sync fails → patient prompted to upload CSV.
 Based on PGHD, wearable and app integrations NatureBlueWhaleApps.

18. Dietitian schedules and delivers telehealth nutrition sessions
Preconditions
Dietitian with portal access; patient scheduled.
 Main Flow

Dietitian uses portal to launch HIPAA-compliant video session.

Shares meal plans, nutrition charts, assigns tasks.

Session recordings or summaries stored in EHR.

Subflows

S1: Group session templates used for multiple patients.
Alternative Flows

A1: Connectivity issues → fallback to phone consultation.
Inspired by Healthie-like telehealth nutrition tools healthie-backup.webflow.io.

19. External food service "order engine" integration
Preconditions
Hospital partners with food-service SaaS provider (like MealSuite).
Main Flow

EHR submits bulk diet schedule via API.

MealSuite processes and schedules deliveries.

Confirmation and logs return to EHR.
Subflows

S1: Daily automated sync.
Alternative Flows

A1: Delivery slot filled → system reschedules and notifies stakeholders.
Based on MealSuite's EHR integration mealsuite.com.

20. Clinical decision support: nutrition alerts during prescribing
Preconditions
Provider prescribing medication with dietary contraindications.
Main Flow

Provider attempts prescription (e.g. warfarin).

System checks meals/food logs for vitamin K-rich foods.

If conflict, system alerts provider with dietary counseling suggestions.
 Subflows

S1: Offer patient printable dietary guidelines.
 Alternative Flows

A1: Provider overrides with documentation.

21. Ordering food for in-clinic patient via app integration
Preconditions
Patient visiting clinic with fasting or special dietary needs.
 Main Flow

Clinician orders snack or meal via integrated food ordering interface.

Patient receives voucher to collect from cafeteria or delivery kiosk.

EHR logs order and delivery time.
 Subflows

S1: Special meals (gluten-free, diabetic) selected by dietary restriction.
 Alternative Flows

A1: Cafeteria closed → coupon transfers to vendor app.

22. Nutrition-specific consent management and privacy
Preconditions
Both healthcare and food delivery modules implemented.

Main Flow

Patient configures privacy: what nutrition/order data can be shared with providers.

System enforces consent across dashboards and external integrations.
 Subflows

S1: Emergency override needs audit and patient notification.
 Alternative Flows

A1: Consent denied → module disabled; patient still gets generic guidance.

23. Tax and compliance workflow: produce prescription documentation
Preconditions
System captures reimbursement-eligible produce prescription data.
 Main Flow

System aggregates redemption data and patient eligibility.

Generates tax-compliant reports and receipts for payer/reimbursement.

Staff reviews and signs off.
 Subflows

S1: Export compatible with IRS or state Medicaid claims.
 Alternative Flows

A1: Discrepancies flagged for audit by compliance officer.
 Based on produce-prescription reimbursement policies PMC+1.

24. Nutrition analytics and population health reporting

Preconditions
Aggregate data available (food orders, nutrition sessions, biomarkers).
 Main Flow

System generates dashboards: program reach, biomarker improvements.

Admin exports for policy reports and funding proposals.
 Subflows

S1: Stratification by demographics, diet type, frequency.
 Alternative Flows

A1: Data completeness insufficient → report delayed and flagged.

25. CRM integration for nutrition program outreach
Preconditions
CRM exists with patient contact data.
 Main Flow

Nutrition program triggers campaign (e.g., seasonal produce reminder).

CRM sends SMS/email; logs interactions back into EHR.

Responses surface in patient record for providers.
 Subflows

S1: Automated follow-up for non-responders.
 Alternative Flows

A1: Opt-out requests honored in sync.

26. Mobile app delivery reminders tied to medication schedule
Preconditions
Patient app configured; med schedule synced.
 Main Flow

System syncs meal delivery with medication times.

App nudges patient: "Your low-sodium meal arrives at 7 PM — take medication after meal."

Confirmation feedback logged.
 Subflows

S1: Alert rescheduled if delivery delayed.
 Alternative Flows

A1: Delivery canceled → system prompts to reorder or adapt medication.

27. Lab-driven nutrition intervention workflow
Preconditions
Lab results available indicating poor nutrition (e.g., low albumin).
 Main Flow

Lab triggers alert in EHR.

System auto-recommends nutrition consult or meal-delivery program.

Provider approves; referral and meal plan initiated.
 Subflows

S1: Auto-schedule dietitian consult.
 Alternative Flows

A1: Patient declines → note placed and monitored.

28. Emergency diet provision during inpatient fasts
Preconditions
Patient for procedure on fast; needs nutrition-safe alternatives.
 Main Flow

EHR flags fasting status.

Staff places order for approved clear-fluid meal.

System delivers to bedside; logs confirmation.
 Subflows

S1: Alternate menu if fasting cancelled.
 Alternative Flows

A1: Patient fails fasting → system auto-updates fasting status.

29. Produce delivery scheduling for homebound patients
Preconditions
Patient enrolled in home nutrition program.
 Main Flow

Patient requests produce box via portal.

Delivery scheduled with timeslot.

EHR logs delivery; provider can review adherence.
 Subflows

S1: Recurring weekly scheduled delivery.
 Alternative Flows

A1: No delivery slots → notify and propose alternatives.

30. Audit of nutrition data and food delivery access
Preconditions
Full logging enabled for food orders, dietitian notes, last-mile data.
 Main Flow

Compliance officer filters events (who accessed nutrition logs and orders).

Reviews for policy violations (e.g., data access not needed for care).

Generates audit reports with actions.
 Subflows

S1: Regular monthly auto-report to board.
 Alternative Flows

A1: Missing logs → issue alert and tech escalation.

Stakeholder Biases
1. Program Administrators / Funders vs. Patients
Bias: Administrators face pressure to demonstrate cost-effectiveness and measurable
outcomes. They may emphasize metrics (e.g., redemption rates, program reach) over
patient-centered concerns like user convenience or autonomy.

Conflict: A produce-prescription program might prioritize redeemable value tracking and
structured reports, even if it makes the redemption process cumbersome for patients—creating
friction or reducing usability.

Evidence: Challenges around data-sharing burdens, evaluation, and funding sustainability are often highlighted by administrators, sometimes at the expense of user-centered design. chlpi.orgMDPI

2. Clinicians vs. EHR System Designers (Best Practice Alerts)
Bias: System designers or organizations may embed alerts to optimize institutional goals—such as reducing readmissions or promoting specific services—not necessarily aligned with patient benefit.

Conflict: A best-practice alert might nudge a physician toward certain diagnoses or referrals to avoid penalties, rather than what's best for that individual patient's care.

Evidence: There's documented concern about best-practice advisories that favor hospital/organizational goals or industry interests (e.g., pharma) over patient well-being. PMC

3. Retail Partners / Food-Service Vendors vs. Providers / Health System
Bias: Vendors want to maximize sales and operational efficiency, potentially pushing standardized orders or packaged meal options that may not align well with clinical dietary prescriptions.

Conflict: A provider prescribes tailored heart-healthy meals, but the vendor's offerings or app workflow only support generic or pre-set standard meals—diluting clinical intention.

Evidence: Implementing produce prescriptions requires alignment across providers, clinics, and retailers to ensure that program design works nicely for all. MDPI

4. Healthcare Providers vs. Technical Implementation Teams or Researchers
Bias: Providers aim for simplified, efficient workflows and patient care interactions. In contrast, tech teams or research staff may prioritize data collection, tracking, or interoperability—even if it complicates provider workflows.

Conflict: To capture robust evaluation data, technical teams might require excessive documentation or popup alerts in the provider's workflow, leading to provider resistance due to time burden.

Evidence: Studies describe operational barriers such as staffing constraints, learning curves, and integration challenges faced by healthcare providers implementing produce prescription programs. ResearchGateMDPI

5. Privacy/Compliance Officers vs. Program Outreach Staff
Bias: Compliance officers focus tightly on protecting patient data and minimizing legal risk, stressing strict consent requirements and access restrictions.

Conflict: Outreach staff or CRM teams may want to send personalized, nutrition-related reminders or use data to optimize messages—but strict privacy rules may severely limit their ability to do so, hindering engagement efforts.

Evidence: Privacy concerns and HIPAA burdens are frequently cited as barriers to effective implementation and data sharing in produce-prescription programs. chlpi.orgMDPI

Summary & Context
The core 10 iTrust2 use cases remain essential for clinical functions such as registration, visits, prescriptions, and audit.

20 new nutrition/food-delivery-oriented use cases expand system scope to embrace modern "Food-is-Medicine" workflows, eConsults, app integrations, dietary order systems, analytics, compliance, mobile reminders, and CRM.

These align with real-world trends like produce prescription programs, meal recommendation engines, culinary medicine, EHR-foodservice integrations, mobile health sync, and compliance needs.

E.g.: Integration using HL7 for diet orders andeal.orgHealthcare Integration Engine.

Food-is-Medicine produce prescriptions via EHR PMC+1.

Culinary-medicine eConsults ResearchGate.

Personalized recommendation engines like iFood arXiv.

Telehealth nutrition platforms like Healthie healthie-backup.webflow.io.

Mobile health integration with EHR and Dietitian workflows NatureBlueWhaleApps.

Food-service integrations like MealSuite mealsuite.com.

The above is a series of use cases and all related information regarding the construction of a minimal viable product for a healthcare EMR. I want you to narrow this list down to just the absolutely necessary functionality. You should select the top 10 most important use cases that constitute a minimal viable product. You should justify why you are not using the other 25 options and you should also justify why you are including the top 10.