Cigna Senior Project – Build Set Proposal

A) Specialty Access Hub (EM)

Plain English: help clinics move expensive infusions from the hospital to lower-cost safe settings (ambulatory center or home), and keep patients showing up.
How it answers Cigna's 4 problems:

- Provider/patient scheduling: WhatsApp/SMS links + clinic kiosk/CHW tablets to book slots; automatic batching by village/route so no one travels twice.
- Asynchronous telemedicine: store-and-forward intake (photos/labs) that syncs when online; doctors review later and approve site-of-care.
- Appointment follow-up: shared-phone flows (patient, caregiver, or CHW number), voice IVR nudges, and paper QR cards that work at kiosks.
- Prescription adherence: visit-day pill packs + voice notes in local language; CHW checklist for side-effects and missed doses.

Compensating requirements baked in:

- Offline-first: all actions queue locally; sync over 2G when available.
- Mobile-first/only: Android Go app + lightweight web kiosk; no desktops assumed.
- Easy localization: strings + audio prompts in resource files; icon-first UI for low literacy.
- Resilience: retry/backoff sync, power-loss safe storage, conflict-resolution rules.

Why it fits Cigna: expands provider-enablement around specialty (CuraScript/Accredo), shows hard savings (site-of-care shift), and can be sold on a per-case + performance fee.

B) Biosimilar Switch Kit (EM)

Plain English: make it easy and safe to move patients from costly brand biologics to approved lower-cost biosimilars.
How it answers Cigna's 4 problems:

- Scheduling: auto-queues eligible patients when their next dose is due; books the switch visit.
- Asynchronous telemedicine: clinician records a short consent + baseline via offline form; supervising pharmacist/physician reviews later.
- Follow-up: day-3/day-14 symptom check via IVR or CHW visit; red-flag workflow if issues arise.
- Adherence: simple calendar card, refill SMS in local language, CHW home reminder if two doses missed.

Compensating requirements baked in:

- Offline-first: printable one-page protocol + QR; data captured offline and synced later.
- Mobile-first: clinician and CHW apps; patient can use USSD for basic confirmations.
- Localization: country formulary table (allowed products, interchangeability notes); language packs.
- Resilience: on-device audit log; fallbacks to paper forms that scan/parse later.

Why it fits Cigna: directly advances specialty affordability and biosimilar adoption; clean pay-for-switch + shared-savings model.

Shared module: FollowUp & Adherence Spine

Use this in both A and B so everything matches Cigna's ask out of the box.

- Scheduling core: works with no personal device (kiosk, CHW tablet, caregiver phone, or clinic landline).
- Async telemed core: "store & forward" notes/photos/consent that sync when connectivity returns.

- Follow-up core: multi-channel nudges (IVR, SMS, WhatsApp, USSD), plus CHW route lists for field visits.
- Adherence core: voice tips in local dialects, pictogram instructions, cultural tailoring (e.g., fasting periods, traditional remedies), escalation to CHW after misses.
- Tech: offline queue, conflict resolution, string/audio localization, low-power mode, and tamper-evident logs.

What you'll demo in 12 weeks (realistic MVP)

Weeks 1–2: Foundations
- Country pack v1 (languages, formulary/allowed products, consent text).
- Offline data model + sync engine (queue, retry, merge).

Weeks 3–6: Build
- Spine: scheduling, IVR/SMS/USSD nudges, CHW route lists.
- Access Hub minimal: 2 infusion drugs, site-of-care rules, appointment card + QR.
- Switch Kit minimal: eligibility rules for 1 biologic class, printable protocol, day-3/day-14 follow-ups.

Weeks 7–9: Field polish
- Low-literacy UI (icons + audio), WhatsApp deep links, kiosk mode.
- Paper fallback: forms with QR; scan to ingest when back online.

Weeks 10–12: Pilot + measures
- 1 hospital + 2 satellite clinics (or 1 IDN).
- KPIs to match Cigna priorities:
- % infusions moved to lower-cost sites (savings per case).
- Successful biosimilar switches; net cost reduction per patient.
- Showed-up rate (no-shows ↓), adherence persistence at 30/60/90 days.
- % interactions completed offline and synced later (proves resilience).

Compliance & safeguards (EM realities)

Data minimization + consent: short, audio-backed consent; store only what's needed; on-device encryption.
Connectivity ladder: USSD → SMS/IVR → WhatsApp → data; every flow has a no-data path.
No-device users: clinic kiosk tickets + CHW home visits ensure inclusion.
Cultural fit: community leader voice-overs; pictograms; respect fasting/holiday calendars in reminders.
Quality guardrails: switch only to regulator-approved biosimilars; automatic block if a product isn't on the country's allowed list.