Mobile screening app

Delivery plan & team backlog

Planning baseline | 22 October 2026 | Draft for stakeholder review

Outcome

Digitise the supplied hearing and vision screening form for field screeners. Preserve all source fields, enable vision-only, hearing-only and combined screening, and record screener-led outcomes and referrals.

Scope and proposed additions

Source scope: 6 basic-information controls (date and place split), 62 Yes/No controls, 1 family hearing-history details field and 5 screener-opinion fields: 74 controls total. Proposed workflow additions: screening mode, progress, draft/resume, validation, review and completion. Production recommendations requiring scope approval: login/access roles, protected record storage, synchronisation and export.

Prototype limits

The mockup demonstrates fields and navigation using synthetic input only. It stores answers only in memory for this session; it has no authentication, server, clinical scoring, real referral transmission or durable record storage. Signature is a typed-name placeholder pending a decision about drawn signatures or an attestation flow.

Decisions required before build

Clinical owner approves English terminology, the repeated concern question, adult applicability and the source's qualitative referral wording. No automated score or decision threshold is in scope without a separately approved specification.

Confirm target platforms, minimum devices, app language strategy and distribution route. English is the requested baseline; Hindi is a separate product decision.

Confirm age unit, required fields, maximum text lengths, identifier uniqueness, permitted sex entries and whether unknown/not applicable is allowed. Retain Yes/No until approved changes exist.

Confirm consent and guardian process, staff permissions, retention/deletion, shared-device protections, signature method and whether offline work is essential.

Confirm whether outcomes mean an actual referral already made or a recommendation. The prototype retains the source wording "Referred" and does not transmit referrals.

Indicative delivery sequence

Weeks 1-2: PM and clinical owner approve scope/content/policy; designer maps workflow; QA prepares traceability. Gate: agreed requirements and versioned field list.

Weeks 2-3: designer finalises interaction and accessibility specifications; developer sets architecture and data model. Gate: tested prototype and accepted handoff.

Weeks 3-6: developer builds forms, modes, opinion, drafts and approved services; QA tests incrementally. Gate: feature complete and field coverage reconciled.

Weeks 7-8: reliability, privacy, accessibility, device testing, screener pilot and defect correction. Gate: UAT plus clinical content approval.

Week 9: controlled rollout, training, monitoring and support handover. Timing is indicative and depends on staffing, offline/service scope and approval turnaround.

Effort and staffing assumptions

Estimates below are person-days, not promised calendar durations. Assumes one shared PM, one designer, one full-time app developer with service skills, one tester and an available clinical reviewer. Authentication, sync and service work may require a separate backend developer. Teams should re-estimate after the design and architecture gate.

Project manager: 23 person-days.

Designer: 18 person-days.

App developer: 46 person-days.

Testing team: 21 person-days.

Dependencies and scope choices

DEV10 is conditional on offline/sync approval. If excluded, remove it from QA04 dependencies. DEV09 and DEV11 depend on production record/storage/export requirements. DEV12 and QA06 run iteratively: initial accessibility fixes precede final QA06, then regression confirms the release candidate. The indicative schedule requires overlap and may extend if one developer owns all app and service work.

Project manager

PM01 | Approve scope and audience

Subtasks: Confirm child/adult scope; settings; Android/iOS priorities; users and approver

Done when: Signed scope and named clinical owner

Depends on: None | Estimate: 2 person-days

PM02 | Approve source and English content

Subtasks: Review all 62 Yes/No items; resolve duplicate vision question; confirm ambiguous wording and age units

Done when: Versioned content signed by form owner and clinical reviewer

Depends on: PM01 | Estimate: 3 person-days

PM03 | Define screening policy

Subtasks: Confirm Yes/No handling; decide unknown/not applicable policy; manual referrals; separate-mode completion

Done when: Decision log includes adult applicability and no invented scoring

Depends on: PM02 | Estimate: 2 person-days

PM04 | Define operational and data policy

Subtasks: Confirm consent/guardian process; access roles; retention; data export; offline need; shared devices

Done when: Approved operational and privacy requirements

Depends on: PM01 | Estimate: 3 person-days

PM05 | Plan delivery and dependencies

Subtasks: Estimate with teams; choose platform; assign owners; set budget, milestones and risk register

Done when: Baselined backlog, staffing and schedule

Depends on: PM02; PM03; PM04 | Estimate: 2 person-days

PM06 | Manage sprints and change control

Subtasks: Run planning and demos; track blockers; maintain decisions and risks; approve scope changes

Done when: Accepted stories and visible dependency tracking

Depends on: PM05 | Estimate: 6 person-days

PM07 | Coordinate pilot and release

Subtasks: Recruit pilot users; organise training; collect UAT; triage issues; obtain release approval

Done when: UAT signed; support owner and release checklist agreed

Depends on: QA07 | Estimate: 3 person-days

PM08 | Support rollout and handover

Subtasks: Stage rollout; monitor issues; hand over support; review pilot outcomes

Done when: Support guide and post-launch review complete

Depends on: PM07; DEV13 | Estimate: 2 person-days

Designer

DS01 | Map field workflow

Subtasks: Interview screeners; map combined/separate screening; low-connectivity and adult cases

Done when: Journey covers starting, saving, review and completion

Depends on: PM01 | Estimate: 2 person-days

DS02 | Create information architecture

Subtasks: Group fields; number questions; define section progress; define navigation

Done when: Every source field maps to a screen and ID

Depends on: PM02; DS01 | Estimate: 2 person-days

DS03 | Create accessible design system

Subtasks: Define type, spacing, contrast and touch targets; radio controls; input and error states

Done when: Reusable components support large text and screen readers

Depends on: DS02 | Estimate: 3 person-days

DS04 | Design all source screens

Subtasks: Design registration, all eight screening groups, hearing details and screener opinion

Done when: All 74 source-derived controls represented, including split date/place

Depends on: DS03 | Estimate: 4 person-days

DS05 | Design workflow states

Subtasks: Draft/resume; unanswered fields; mode changes; signature; review; completion; sync conflict if enabled

Done when: Empty, loading, error and success states documented

Depends on: PM03; PM04; DS04 | Estimate: 3 person-days

DS06 | Test prototype with screeners

Subtasks: Run representative tasks; test wording and navigation; capture accessibility issues

Done when: Issues prioritised and critical usability issues resolved

Depends on: DS05 | Estimate: 2 person-days

DS07 | Deliver handoff and design review

Subtasks: Provide specs, content IDs and component states; review implemented screens

Done when: Developer handoff accepted; visual QA completed

Depends on: DS06 | Estimate: 2 person-days

App developer

DEV01 | Choose architecture and set up project

Subtasks: Choose cross-platform/native approach; repositories; environments; build pipeline

Done when: Android/iOS target builds run with automated checks

Depends on: PM05 | Estimate: 3 person-days

DEV02 | Build versioned form data model

Subtasks: Create field schema and response enums; source IDs; screen mode; questionnaire version

Done when: All fields mapped; blank distinct from No; no default answers

Depends on: PM02; PM03; DEV01 | Estimate: 3 person-days

DEV03 | Implement client registration

Subtasks: Build name, age/unit, sex, registration, date and place; validation

Done when: Approved validation works without inventing sex categories

Depends on: DS04; DEV02 | Estimate: 2 person-days

DEV04 | Implement vision screening

Subtasks: Build 28 vision questions; three outcomes; separate repeated questions

Done when: All vision fields save independently with Yes/No controls

Depends on: DS04; DEV02 | Estimate: 4 person-days

DEV05 | Implement hearing screening

Subtasks: Build 27 hearing questions; four outcomes; family-history details

Done when: All hearing fields and details persist correctly

Depends on: DS04; DEV02 | Estimate: 4 person-days

DEV06 | Implement screener opinion

Subtasks: Build referral comment, observations, inference, place and signature; clear/re-sign

Done when: All five fields persist; signature is accessible and reviewable

Depends on: DS05; DEV02 | Estimate: 3 person-days

DEV07 | Implement modes and completion

Subtasks: Route combined/vision/hearing; back navigation; review and missing answers

Done when: Inactive module excluded; switching modes never silently loses data

Depends on: DEV03; DEV04; DEV05; DEV06 | Estimate: 3 person-days

DEV08 | Implement drafts and local resilience

Subtasks: Save/resume; interrupted sessions; encrypted storage; app restart recovery

Done when: Draft recovery tested; production storage meets approved policy

Depends on: PM04; DEV07 | Estimate: 4 person-days

DEV09 | Implement service and access control

Subtasks: API; authentication; roles; secure record storage; audit events; questionnaire version

Done when: Authorised access only; audit trail and record ownership verified

Depends on: PM04; DEV02 | Estimate: 6 person-days

DEV10 | Implement sync if offline approved

Subtasks: Retry queue; deduplication; conflict handling; sync indicators

Done when: No loss/duplicates after network interruption and retry

Depends on: DEV08; DEV09 | Estimate: 4 person-days

DEV11 | Implement approved record export

Subtasks: Generate English summary with answers, outcomes and screener notes; authorised sharing

Done when: Export matches stored record; no automatic clinical classification

Depends on: DEV07; DEV09 | Estimate: 3 person-days

DEV12 | Harden and resolve defects

Subtasks: Unit/integration checks; accessibility; large text; low-end device performance; fixes

Done when: Release candidate passes agreed quality gates

Depends on: QA02; QA03; QA04; QA05 | Estimate: 5 person-days

DEV13 | Package and deploy

Subtasks: Signing; store/internal distribution; configuration; rollback and support docs

Done when: Approved build distributed and rollback rehearsed

Depends on: QA07; PM07 | Estimate: 2 person-days

Testing team

QA01 | Create test strategy and traceability

Subtasks: Map all field IDs; define devices; modes; data fixtures; acceptance criteria

Done when: Every field and source ambiguity has a test or tracked decision

Depends on: PM02; PM03; PM04 | Estimate: 2 person-days

QA02 | Verify content and field coverage

Subtasks: Compare every label/example to approved English; check source page mapping; duplicate retention

Done when: Zero missing fields or changed clinical meaning

Depends on: DEV04; DEV05; DEV06 | Estimate: 3 person-days

QA03 | Verify forms and navigation

Subtasks: Test Yes/No changes; unanswered; dates; age; long text; mode switching; signature clear

Done when: No invalid completion or unintended overwrites

Depends on: DEV07; DEV08 | Estimate: 3 person-days

QA04 | Verify data reliability

Subtasks: Restart; interrupted save; retry; offline conflicts if enabled; export parity

Done when: No record loss, duplicates or answer/export mismatch

Depends on: DEV08; DEV09; DEV10; DEV11 | Estimate: 4 person-days

QA05 | Verify privacy and access

Subtasks: Test permissions; cross-user access; logout; device data; logs; transport; retention

Done when: No unresolved critical access or data exposure defects

Depends on: DEV09; PM04 | Estimate: 3 person-days

QA06 | Verify usability and accessibility

Subtasks: TalkBack/VoiceOver; keyboard; large text; contrast; device matrix; slow devices

Done when: Core flow completes on target devices with assistive technology

Depends on: DS07; DEV12 | Estimate: 3 person-days

QA07 | Run UAT and release regression

Subtasks: Observe screeners; clinical content sign-off; regression; defect retest; release report

Done when: No open blocker/critical defects; UAT and clinical approvals recorded

Depends on: QA02; QA03; QA04; QA05; QA06; DEV12 | Estimate: 3 person-days

Acceptance and handover

Coverage: every source-derived field has an ID, screen, storage key and test. No Yes/No response is preselected. Repeated questions retain independent values.

Clinical: approved terminology and applicability; outcomes remain manual; no scoring or automatic referral. Stored form version appears in exports.

Reliability: no data loss on interruption; retries cannot duplicate records if sync is enabled; exports reproduce answers exactly.

Accessibility: labelled controls, visible errors, large text, touch targets and successful screen-reader completion of core flows on agreed platforms.

Release: signed UAT; no unresolved blocker/critical issues; migration and rollback plans; training and named support owner.

Risks: source ambiguity (PM02), adult/unknown-answer policy (PM03), shared-device data exposure (PM04/DEV09), network data loss (DEV08/DEV10), clinical reviewer availability (PM05), scope growth (PM06).

Handover pack: approved field specification, design components, source code, build instructions, test report, deployment guide and support/runbook.