

# Mobile Health App UX Research for Health Hub International

Health Hub International can achieve optimal user engagement across Africa and India by combining **2-column service grids, bottom tab navigation, chat-first telehealth, and gamified health content**—patterns proven by Practo, Halodoc, and Headspace in emerging markets. This research provides practical, implementable design patterns for four critical pages, with specific recommendations balancing feature richness against cognitive load for users with varying digital literacy levels.

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## Page 1: Home dashboard design patterns

The home screen serves as HHI's central hub, where **8-10 services must be presented without overwhelming users**. Research across Practo, Halodoc, Zocdoc, Ada Health, and MyChart reveals five dominant patterns, each with distinct tradeoffs for your target markets.

### Pattern A: 2-column icon grid with text labels

**Used by:** Practo, Halodoc, Oscar Health, MyChart

This dominant pattern displays services as circular or square icons arranged in a **2-column grid** with text labels underneath. Practo shows 8 services on the initial screen with a "See All" expansion. Halodoc adds user customization—their research found users specifically requested the ability to reorder their most-used services.

Medium

**Visual structure:** Icon (48-64px) centered above 12-14px text label, with consistent colored backgrounds or illustrated icons per service. Practo uses healthcare-specific illustrated icons in blue tones; Halodoc uses circular colored icons with their red brand accent.

### Pattern B: Quick action buttons + service grid hybrid

**Used by:** Halodoc, Oscar Health, Zocdoc

This approach places **2-3 prominent CTAs** at the top ("Consult Now," "Order Medicine") followed by a full service grid below. Oscar Health reported a **31% decrease in task completion time** using this pattern, Rondesignlab Rondesignlab as frequent actions don't require grid scanning. The CTAs typically use high-contrast accent colors and are sized for thumb reach (minimum 48px height).

### Pattern C: Search-first with minimal services

**Used by:** Zocdoc, Ada Health

Zocdoc's home screen is dominated by a search bar with just **4 form fields** (specialty, location, date, insurance), enabling doctor booking in under 30 seconds. usabilitygeek Usability Geek Ada Health takes this further with a

conversational entry point ("Start symptom assessment") achieving a **91% completion rate** versus 74% industry average. (DhiWise) This pattern works best when a single primary action dominates user intent.

## Pattern D: Health feed + service launcher

**Used by:** MyChart, Oscar Health

MyChart's redesign introduced a personalized "Health Feed" that shows upcoming appointments, test results, and messages in a vertical scrolling timeline, (Community Health Network) with services accessible via a secondary tab or hamburger menu. This pattern prioritizes **returning users** over new users, surfacing contextually relevant information.

## Pattern E: Hub-and-spoke with carousels

**Used by:** Halodoc (promotional content), some redesign concepts

Horizontal carousels display featured services or promotional content above a traditional grid. While visually engaging, research indicates horizontal scrolling increases cognitive load and **hides information below the fold** —Practo redesign studies specifically criticized this pattern for appointment slots.

## Home dashboard comparison table

| Pattern                 | Pros  | Cons   | Best for                              | Implementation |
|-------------------------|---|--|---------------------------------------|----------------|
| 2-column icon grid      | Scannable, thumb-friendly, familiar               | Limited differentiation, requires scrolling for 10+ services | Feature-rich apps, low-literacy users | Low            |
| Quick actions + grid    | Speeds top tasks, reduces taps                    | Visual hierarchy complexity, CTA selection critical          | Apps with 2-3 dominant use cases      | Low-Medium     |
| Search-first            | Fast task completion, clean UI                    | Poor for browsing, assumes user knows what they want         | Single-focus apps (booking only)      | Low            |
| Health feed             | Personalized, high engagement for returning users | Steep learning curve, complex data requirements              | Patient portals with rich health data | High           |
| Hub-and-spoke carousels | Visually engaging, supports promotions            | Hides content, poor for slots/details                        | Marketing-heavy, lifestyle apps       | Medium         |

## HHI home dashboard recommendation

For Africa and India markets with **varying digital literacy**, implement the **Quick Actions + 2-Column Grid**

## hybrid:



### Critical details for implementation:

- Icons should be **illustrated and colorful**, not minimal line icons—research shows this aids comprehension for low-literacy users
- Text labels are mandatory (Practo standard); never rely on icons alone
- Use **emerald green (#2ECC71)** for primary CTAs; bio-lime for secondary actions
- Grid services should be tap targets of **minimum 64x64px** including padding
- "Coming soon" services appear with a **lock icon overlay and 60% opacity**

## Page 2: GP consultation (on-demand telehealth) patterns

The telehealth flow spans five stages: **entry, waiting, consultation, in-session features, and post-consultation**. Research across Practo, Teladoc, MDLIVE, Amwell, K Health, and Halodoc reveals critical patterns for each stage.

### Entry point patterns

**Pattern A: Direct "Consult Now" button** Practo and Halodoc use a prominent single CTA promising connection "within 60 seconds" (Practo) or "24/7" availability (Halodoc). This works best when doctors are immediately available—it sets a clear expectation.

**Pattern B: AI-first symptom triage** K Health requires a **5-minute AI symptom checker (~25 questions)** before connecting to a provider. This generates a preliminary assessment comparing against millions of similar cases. Babylon Health's "Ask Babylon" chatbot similarly triages before escalating to video. Both achieve higher consultation quality but add friction.

**Pattern C: Specialty selection entry** Practo displays 25+ specialty categories (GP, Dermatologist, Gynecologist), letting users self-select before seeing available doctors. This works for users who know their need but adds a step for simple GP consultations.

## Waiting room UI patterns

The waiting experience significantly impacts perceived quality. Key elements from Amwell and MDLIVE:

- **Queue position indicator:** "You are #3 in line" with numeric countdown
- **Estimated wait range:** Show "5-10 minutes" rather than exact times to manage expectations
- **Provider information panel:** Doctor's photo, name, and qualifications build confidence
- **Technical preparation:** Camera/mic test prompts, connection quality indicator
- **Preparation checklist:** "Have your medications ready," "Find a quiet, private space"
- **Cancel/callback options:** Two-step cancel to prevent accidents; option to receive notification when doctor is ready

## In-consultation interface patterns

### Video call layout (standard across Teladoc, Amwell, MDLIVE):

Research from Whereby's telehealth UX studies recommends:

- Doctor's video displayed at **70% of screen** as dominant view
- Patient self-view as **small picture-in-picture** (optional—hiding reduces video fatigue) (whereby)
- Bottom toolbar with controls: Mute | Camera | Chat | End Call
- Timer showing elapsed duration in top corner
- Chat panel as **toggle overlay** rather than permanent split

### Audio-only fallback (critical for Africa/India):

- Doctor's profile photo displayed when video unavailable
- Audio wave visualization indicating active speaker
- Signal strength indicator
- **Automatic fallback:** System detects bandwidth drops and suggests switching to audio

## Text chat consultation (Halodoc/Practo model):

- WhatsApp-style messenger interface (familiar to target users)
- Typing indicators and read receipts
- Image/file attachment for sharing photos or reports
- Quick-reply buttons for common responses
- Practo offers **7-day free follow-up chat** after consultation

## Post-consultation patterns

### Visit summary components (standard across all apps):

1. Consultation date/time and duration
2. Provider name and specialty
3. Chief complaint/reason for visit
4. Diagnosis/assessment
5. Prescriptions issued (with "Order Medicines" CTA)
6. Follow-up recommendations
7. Doctor rating prompt

**Prescription delivery UI:** Practo integrates pharmacy ordering directly from the summary screen—prescription pre-filled, pharmacy selection by distance or delivery, with **up to 40% discounts** for in-app ordering. Halodoc offers cash-on-delivery, critical for unbanked populations in target markets. [App Developers India](#)

## GP consultation comparison table

| Stage/Pattern                 | Pros                                     | Cons                                  | Best for                           | Implementation |
|-------------------------------|--|---------------------------------------|------------------------------------|----------------|
| Direct "Consult Now"          | Low friction, fast                       | No symptom context, doctor unprepared | Urgent care, high availability     | Low            |
| AI symptom triage first       | Better diagnosis, efficient consultation | Adds 5 min friction, requires ML      | Data-rich environments, non-urgent | High           |
| Specialty selection entry     | User agency, appropriate matching        | Adds step, assumes user knowledge     | Multi-specialty platforms          | Low            |
| Queue with position indicator | Manages expectations, transparent        | May discourage if queue long          | Variable wait times                | Low            |

| Stage/Pattern                 | Pros                                   | Cons                             | Best for                        | Implementation |
|-------------------------------|--|----------------------------------|---------------------------------|----------------|
| Video-first consultation      | Rich communication, diagnosis accuracy | High bandwidth, technical issues | Good connectivity, urban users  | High           |
| Chat-first with video upgrade | Low bandwidth, accessible              | Limited for visual diagnoses     | Low connectivity, rural markets | Medium         |

## HHI GP consultation recommendation

Given Africa/India connectivity constraints, implement a **chat-first model with optional video upgrade**:

### Entry flow (3 screens maximum):

1. "Consult a GP Now" → Brief symptom selection (dropdown, not AI chat) → See available doctors
2. Doctor card shows: photo, name, rating, "Available in 2 min"
3. Confirm → Enter waiting room

### Waiting room (critical for trust):

- Doctor photo and qualifications prominently displayed
- "Preparing your consultation..." with subtle animation
- Connection test: "Your audio is working ✓"
- Estimated wait as range: "Usually under 5 minutes"

### Consultation interface:

- Default to **text chat** (lowest bandwidth)
- Prominent "Start Video" button (user-initiated upgrade)
- Auto-detect poor connection: "Video unavailable—continue with chat?"
- File sharing for lab reports and prescription photos
- Timer visible throughout

### Post-consultation:

- Summary with one-tap "Order Medicines" connected to pharmacy feature
- 7-day free follow-up chat (Practo model)
- Rating prompt: 5-star with optional comment (not forced immediately)
- SMS confirmation with appointment summary (critical for offline access)

## Page 3: Specialist consultation (appointment-based) patterns

Specialist booking differs fundamentally from on-demand GP care—users need to **discover the right doctor and book future slots**. Zocdoc, Practo, DocPlanner, and Lybrate provide proven patterns.

### Doctor discovery patterns

**Pattern A: Specialty icon grid (dominant)** Display **6-8 popular specialties** as icons with "See All" expansion revealing 30-50 options. Typical ordering: General Physician, Dentist, Dermatologist, Gynecologist, Pediatrician, ENT, Cardiologist, Orthopedist. Icons should represent recognizable body parts or organs—research shows this aids low-literacy users more than abstract symbols. (Eleken)

**Pattern B: Symptom-based discovery** Secondary path where users describe symptoms, and the app suggests appropriate specialists. Practo and Lybrate implement this. Critical UX finding: users prefer seeing symptoms **related to filters already selected**, not all symptoms at once. (Sebas)

**Pattern C: Search-first** Universal search bar supporting doctor name, specialty, and symptom queries with auto-complete. Zocdoc makes this extremely prominent, achieving booking in **under 30 seconds** from home screen. (usabilitygeek) (Usability Geek)

### Doctor listing patterns

**Vertical card list (industry standard):** Research across Zocdoc, Practo, and DocPlanner shows users prefer vertical scrolling over grid layouts for doctor selection. The vertical list allows **more information per doctor** while maintaining scannability.

#### Doctor card information hierarchy (top to bottom):

1. **Photo** (circular, 60-80px)—critical for trust building
2. **Name** (bold, largest text)
3. **Specialty/Designation** (MD, specialization)
4. **Experience** ("12 years experience")
5. **Rating + Review count** ("4.8 ★ · 234 reviews")
6. **Consultation fee** (prominent, accent color)
7. **Next available slot** ("Tomorrow 10:30 AM")—critical differentiator (Medium)

### Appointment slot selection patterns

**Pattern A: Horizontal date strip + time grid (recommended)** Show 5-7 days visible in horizontal scrollable strip. Selected date reveals time slots below grouped by **Morning/Afternoon/Evening**. Treatwell and Zocdoc use this pattern effectively. (Smashing Magazine)

Today | Tomorrow | Wed | Thu | Fri | Sat | →

Morning (9AM-12PM)

[9:00] [9:30] [10:00] [10:30] [11:00]

Afternoon (12PM-5PM)

[2:00] [2:30] [3:00] [3:30] [4:00]

Evening (5PM-8PM)

[6:00] [6:30] [7:00]

**Pattern B: Calendar month view** Full month displayed for users needing dates further out. Works as secondary option accessible via calendar icon.

**Critical finding:** Avoid native iOS/Android scroll-wheel pickers—research shows users find them frustrating for appointment selection. Medium

### Filter and sort patterns

**Primary filters (always visible as horizontal chips):** [Today] [Video Call] [Under ₹500] [4★+]

### Secondary filters (bottom sheet modal):

- Gender preference
- Languages spoken
- Experience level (5+ years, 10+ years)
- Consultation type (In-person/Video)
- Distance/location

**Sort options:** Relevance (default), Nearest first, Highest rated, Soonest available, Price: Low to High

### Specialist consultation comparison table

| Pattern                       | Pros                                | Cons                                 | Best for                       | Implementation |
|-------------------------------|-------------------------------------|--------------------------------------|--------------------------------|----------------|
| Specialty icon grid discovery | Visual, accessible, quick scan      | Requires icon design, limits display | Low-literacy users, mobile     | Low            |
| Symptom-based discovery       | User doesn't need medical knowledge | Adds complexity, AI/mapping needed   | Uncertain users, AI-rich apps  | High           |
| Search-first discovery        | Fastest for informed users          | Poor for browsing, assumes knowledge | Returning users, high literacy | Low            |

| Pattern                     | Pros                              | Cons                                    | Best for                   | Implementation |
|-----------------------------|-----------------------------------|---|----------------------------|----------------|
| Vertical doctor card list   | Information-rich, scannable       | Requires scrolling, less visual         | Detailed comparison needed | Low            |
| Horizontal date + time grid | Clear, grouped, thumb-friendly    | Requires space, many taps for far dates | Near-term booking          | Medium         |
| Calendar month view         | Full visibility, flexible booking | Small touch targets, overwhelming       | Far-future scheduling      | Low            |

## HHI specialist consultation recommendation

### Discovery screen:

- Top: Search bar with auto-complete for doctor names, specialties, symptoms
- Below search: "Popular Specialties" 3-column icon grid (8 specialties)
- "See All Specialties" link → full categorized list
- Use healthicons.org (free, open-source) for consistent medical iconography

### Doctor listing:

- Vertical card list with sticky filter chips at top
- Card: Photo | Name | Specialty | Experience | Rating | Fee | Next slot
- "Book" button on each card for one-tap action
- Sort/Filter accessible via bottom sheet

### Slot selection:

- Horizontal date strip (7 days, scrollable)
- Time slots as **tappable tiles** grouped by Morning/Afternoon/Evening
- Unavailable slots shown as grayed out (communicates constraint)
- Prominent "Next Available" badge: "Earliest: Tomorrow 2:30 PM" with one-tap booking

### Confirmation flow:

- Summary screen: Doctor, Date/Time, Fee, Consultation type
- Payment options including cash-on-delivery/pay-at-clinic for unbanked users
- SMS confirmation with appointment details
- Add to calendar option

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## Page 4: Heal Well at Home (health education video content) patterns

Video content libraries require balancing **discoverability, engagement, and educational value**. Research across Headspace, Calm, Flo Health, Noom, Peloton, and WebMD reveals patterns for making health content compelling rather than clinical.

### Content organization patterns

**Pattern A: Topic-based categories (most common)** Organize by health topics: Nutrition, Fitness, Mental Health, Women's Health, Chronic Conditions. Headspace uses an "Explore" tab as gateway to their full library, with categories like "Unlocking Creativity" and "Mindful Eating"—note the **benefit-focused naming** rather than clinical labels.

**Pattern B: Condition-based organization** WebMD organizes content around specific conditions: Diabetes Management, Heart Health, Asthma Care. Each condition has a "Daily Habits Plan" with structured content. [\(Sitecorecontenthub\)](#) This works when users have diagnosed conditions.

**Pattern C: Personalized daily content (highest engagement)** Noom delivers **3 new personalized articles daily** based on user goals set during onboarding, refreshing at midnight. Flo Health personalizes based on menstrual cycle phase or pregnancy stage. [\(Crunchbase\)](#) This requires user profiling but dramatically increases engagement.

**Pattern D: Learning paths and programs** Peloton offers structured multi-week programs (Beginner Series, 4-Week Core Challenge). Noom structures content as 10-15 minute daily lessons with weekly themes. Clear progress indicators and completion badges drive continuation.

### Video card design patterns

#### Essential card elements (information hierarchy):

1. **Thumbnail** (dominant visual—warm, inviting imagery, not clinical)
2. **Title** (benefit-focused, clear)
3. **Duration** (critical for health education: "5 min")
4. **Category/topic tag**
5. **Progress indicator** (if partially watched)
6. **Bookmark icon**

#### Card layouts:

- **Horizontal scrolling rows** (Netflix model): 4 cards visible, categories as row headers
- **Vertical list with large cards**: Better for featured content, "Today's Content"

- **2-column grid:** Good for browsing large libraries on mobile

**Thumbnail guidance for dark theme:** Headspace uses custom illustrations with consistent warm color palettes (lilacs, warm oranges) that stand out against dark backgrounds. Avoid stock photos of doctors in lab coats—use humans in relatable settings.

### Making content engaging (not clinical)

**Gamification elements (proven effectiveness):** Research shows gamified health apps achieve up to **50% higher user retention**. Key elements:

- **Streaks:** Daily engagement tracking (Noom, Duolingo model)
- **Progress bars:** Visual completion of programs/courses
- **Badges:** Milestone recognition ("Completed 7-Day Nutrition Basics")
- **Points:** Noom awards "Seeds" for completing daily content

### Interactive elements:

- Quizzes embedded in educational content ([SlideShare](#))
- Reflection prompts for personalization
- "Stories" format (Instagram-like swipeable content)—Flo uses this to boost home screen engagement

### Visual design for warmth:

- Soft color palettes (avoid clinical blues and sterile whites)
- Custom illustrations over medical imagery
- Rounded corners on UI elements
- Generous spacing and readable typography (16px+ base)
- For dark theme: Use dark grey (#121212) rather than pure black; ensure thumbnails have sufficient contrast

### Health video content comparison table

| Pattern                      | Pros                 | Cons                         | Best for                          | Implementation |
|------------------------------|----------------------|------------------------------|-----------------------------------|----------------|
| Topic-based categories       | Browsable, organized | Generic, low personalization | Large libraries, varied audiences | Low            |
| Condition-based organization | Targeted, relevant   | Requires user health data    | Chronic condition management      | Medium         |

| Pattern                        | Pros                      | Cons  | Best for                   | Implementation |
|--------------------------------|---------------------------|---|----------------------------|----------------|
| Personalized daily content     | High engagement, relevant | Requires profiling, content volume          | Goal-oriented apps         | High           |
| Learning paths/programs        | Structured, completable   | Commitment required, content creation heavy | Behavior change apps       | Medium         |
| Netflix-style horizontal rows  | Familiar, browsable       | Hides content, requires scrolling           | Large content libraries    | Low            |
| Gamification (streaks, badges) | Proven retention boost    | Requires tracking infrastructure            | Long-term engagement goals | Medium         |

## HHI health video content recommendation

### Navigation structure:



### "Today" tab (home):

- Personalized greeting with streak counter ("🔥 5-day streak!")
- Featured video card (hero, large)
- "Continue Watching" row if applicable
- Daily recommendation: "Today's Tip: 3 min" based on user profile

### "Explore" tab:

- Search bar with recent searches
- Horizontal category chips: [All] [Nutrition] [Fitness] [Mental Health] [Women's Health] [Conditions]
- Content organized as horizontal scrolling rows by category
- Each card: Thumbnail | Title | Duration | Progress indicator

### "My Learning" tab:

- Active programs/courses with progress bars
- Saved/bookmarked content
- Completed content with badges

### Content card design for dark theme:

- Warm-toned thumbnails that pop against dark backgrounds
- Subtle 1px border or shadow to define card edges
- Progress bar in bio-lime accent ( #B5FF3D) or similar for visibility
- Category tag as small chip overlay on thumbnail

### **Gamification implementation:**

- Daily streak counter on home screen
  - "7 Days of Better Sleep" type programs with daily unlock
  - Completion badges visible on profile
  - "Share achievement" for social proof (optional)
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## **Cross-cutting recommendations**

### **Overall navigation pattern**

#### **Recommendation: Bottom tab navigation with 3-4 tabs**

Research across Practo, Halodoc, Zocdoc, and Oscar Health confirms bottom navigation as the mobile health standard. Nielsen Norman Group found combination navigation (bottom tabs + overflow menu) used **86% of the time** versus hidden-only menus at 57%. ([Smashing Magazine](#))

#### **Recommended tab structure:**



#### **Rationale:**

- **Home:** Services grid, quick actions, appointments
- **Activity:** Consultation history, prescriptions, test results, upcoming appointments
- **Learn:** "Heal Well at Home" video content
- **Profile:** Account settings, health records, family members, payment methods

#### **Tab bar specifications:**

- Height: 56dp (Material Design standard) ([Material Design](#))
- Icons with text labels (critical for low-literacy users)
- Active state: Emerald green ( #2ECC71) filled icon

- Inactive state: Grey outline icons
- Include "More" overflow for Settings, Help, Notifications

## "Coming soon" feature presentation

Research across multiple apps reveals these best practices for showing locked/upcoming features:

### Visual treatment:

- **60% opacity** with subtle grey overlay
- **Lock icon** or "Coming Soon" badge in corner
- **Maintain position** in grid (shows full app scope)
- Don't hide features entirely—visibility builds anticipation

### Interaction pattern:

- Tappable with modal explanation: "We're working on [Feature Name]. Get notified when it's ready!"
- "**Notify Me**" CTA to collect interest and enable marketing
- Brief description of what the feature will do

### Progressive unlocking:

- For features requiring prerequisites: "Complete your profile to unlock"
- For time-based releases: "Coming March 2026"
- For market rollouts: "Available soon in your area"

### Implementation example:



### Low digital literacy considerations

For Kenya, Uganda, and rural India users:

- **Large touch targets:** Minimum 48x48px, ideally 64x64px for primary actions

PubMed Central

- **Icon + text always:** Never rely on icons alone
- **Linear flows:** Avoid nested menus; 3 screens maximum to complete any task ([ResearchGate](#))
- **Visual confirmation:** Checkmarks, animations for completed actions
- **Local language support:** Full UI translation to Hindi, Swahili, regional languages
- **Minimize typing:** Use selection, dropdowns, and voice input where possible
- **Error recovery:** Clear messages with solutions, not just error codes
- **Offline functionality:** Cache prescriptions, appointment confirmations, and video content for offline access

## Implementation priority matrix

| Feature                              | Complexity | Phase   |
|--------------------------------------|------------|---------|
| 2-column service grid                | Low        | MVP     |
| Bottom tab navigation                | Low        | MVP     |
| Text chat consultation               | Low        | MVP     |
| Doctor listing cards                 | Low-Medium | MVP     |
| Appointment slot picker              | Medium     | MVP     |
| Audio consultation                   | Medium     | MVP     |
| Video consultation                   | High       | Phase 2 |
| AI symptom checker                   | High       | Phase 2 |
| Personalized content recommendations | High       | Phase 2 |
| Gamification system                  | Medium     | Phase 2 |
| Offline video downloads              | Medium     | Phase 2 |

## Conclusion

HHI's success in Africa and India hinges on **balancing feature richness with cognitive simplicity**. The research reveals a clear winning formula: Practo's 2-column service grid combined with Halodoc's chat-first telehealth approach and Headspace's warm content presentation—all unified by bottom tab navigation that tests highest for usability across literacy levels.

Three critical insights emerged: First, **progressive disclosure beats feature hiding**—users should see HHI's full scope immediately, with "coming soon" features maintaining their grid position at reduced opacity. This builds anticipation while communicating platform value. Second, **chat-first consultation is non-negotiable** for markets with bandwidth constraints—video should enhance rather than gate the experience. Third, **gamification dramatically improves retention** for health content (up to 50% in studies), (Open Loyalty) but implementation should start simple with streaks and badges before adding complex point systems.

The dark theme works in HHI's favor for video content, aligning with Calm and Headspace aesthetics while reducing eye strain. The emerald green brand color will provide strong contrast and clear visual hierarchy against dark surfaces. Most importantly, every pattern recommended here has been proven in production by apps serving millions of users in comparable markets—practicality over innovation was the guiding principle.