Case Study: MyBlueHealth Mobile App — Provider Search Redesign

Overview

In 2015, I led the UX/UI design and front-end development of a mobile app that helped Blue Cross Blue Shield members find healthcare providers based on their insurance plan and needs. As the sole UX practitioner on a newly formed Agile team, I had three months to design, build, and launch a cross-platform app on both iOS and Android—with no time for new research, constant context-switching between design and development, and a mandate to solve growing member frustration with an outdated provider search tool.

We delivered on time. Members liked it (4.2 star rating, 2200+ installations). But the app was eventually discontinued when market changes made the core business model obsolete—teaching me a valuable lesson about validating strategy before execution.

ACT 1: The Challenge

Opening Hook:

"We had three months to design, build, and launch a mobile app on both iOS and Android. No time for new research. No breathing room. Just a tight deadline, a brand-new Agile team, and a provider search tool that members hated."

The Business Problem:

- Legacy web search tool based on an outdated product that didn't reflect new network tiers
- Poor usability resulting in low member satisfaction ratings
- **Negative feedback** accumulating from frustrated members
- Incoming network and product changes that would make provider selection even more confusing
- **Strategic bet:** Leadership believed a mobile app could solve the tier confusion problem and improve member experience

The User Pain:

Members struggled with:

- Understanding which providers were in their tier/network
- Navigating a search tool that didn't align with new insurance product structure
- Deciphering complex insurance terminology
- Using an old web tool that wasn't mobile-friendly
- Finding the right provider based on their specific needs and location

"The old tool wasn't just outdated—it was actively confusing members at a time when our network structure was becoming more complex."

Why the 3-Month Deadline:

Business set an aggressive timeline, likely driven by:

- Incoming network/product changes that would increase member confusion
- Competitive pressure (other insurers had mobile apps)
- Belief that a mobile app would help members navigate the new tier system

"Looking back, the urgency was set by business strategy—but the problem we were solving may have been bigger than an app could fix."

ACT 2: The Journey

My Role & The Team

My Role: Senior UX/UI Designer

I was the sole UX practitioner responsible for:

- All UX and UI design work
- Front-end development (constant context-switching)
- User flow diagrams
- Usability testing facilitation
- MVP definition
- Whiteboard design sessions and team collaboration

The Team:

- 5 developers
- Product Owner
- Lead stakeholder and director.
- Tester
- Customer experience representative
- Senior graphic designer (icons, logos, print materials)

"I wore multiple hats constantly—designing on whiteboards by day, coding by night, and facilitating user testing whenever possible. The pace was relentless."

Chapter 1: Building the Foundation (Fast Research)

"With no time for new research, I had to be scrappy. I leveraged everything we already had."

What I Used:

- Previous UX research study from our insights team
- Member feedback data from the old web tool
- Google Analytics showing pain points and drop-offs
- Low satisfaction ratings and complaints

The Research Challenge:

"This wasn't ideal. I would have loved to conduct fresh research, but the 3-month clock was ticking. I had to trust existing data and validate assumptions through rapid testing."

Key Findings from Existing Data:

- Current application was slow and didn't have up-to-date provider data
- Duplicate provider records confused members
- Data wasn't clean—providers in multiple locations with unexplained cost changes
- Members didn't understand how to enter plan information
- Tier levels weren't clear in search results
- Sorting logic made no sense to users

- Members wanted location-based search (home, work, current location)
- Need for simple, symptom-based search (not medical jargon)
- Color accessibility and design needed testing

"The data painted a clear picture: the old tool was failing on multiple fronts. We needed to simplify everything."

Chapter 2: Lean UX Under Pressure (Design Sprint)

"We used Lean UX principles: Build. Measure. Learn. But compressed into an impossibly tight timeline."

How We Worked:

The newly formed Agile team came together to storm, norm, and form quickly:

- Whiteboard sketching sessions with the entire team
- Defined MVP with business (must-haves, should-haves, nice-to-haves)
- Externalized work constantly (sticky notes, sketches, wireframes)
- Formulated and validated hypotheses based on current feedback and data
- Conducted early testing with rough concepts to unveil unexpected pain points
- Focused on creating features users really needed

Technical Decisions:

To move fast, I suggested using **Angular.js + Ionic framework**:

- Developers were already familiar with Angular.js
- Ionic had just released its first version in 2015 (perfect timing)
- Cross-platform hybrid app = one codebase for both iOS and Android
- Could ship beautiful mobile experiences quickly

Design Inspiration:

"I looked at apps that solved similar problems: Zillow for location-based search, Amazon for filtering complex results, and Oscar (a new insurance startup) for simplifying insurance concepts.

I designed a flow where members could input insurance info once, then search by symptom and location—dramatically simpler than the old tool."

My Challenge:

"The hardest part was switching constantly between designer and front-end developer. I'd spend mornings whiteboarding with the team, afternoons coding, and late nights refining designs.

There was no time to breathe. The initial fast research, late-night design sessions, and constant hat-switching between design and development pushed me to my limits."

Chapter 3: Mid-Fidelity Testing (Prototype Validation)

"I skipped low-fidelity sketches—we didn't have time. I jumped straight to mid-fidelity wireframes using a prototyping tool."

Testing Approach:

- Built mid-fidelity wireframes to speed up the process
- Worked with our tester to get business buy-in
- Set up time in our UX insights laboratory for member feedback
- Used findings to build our backlog and scope the workload
- Conducted 6 group interviews to validate concepts

Key Findings:

- Members didn't know what plan they had or to look on their insurance card
- **Preferred list view** over map view as default
- Didn't understand navigation icons (older, less tech-savvy audience needed labels)
- Wanted to rate providers and save favorites
- Needed visibility into all provider locations and how tiers changed by location

Design Solutions:

- Added an example card on login showing which plan they were on, with important card information circled
- Switched default view to list view (kept map as secondary option)
- Added descriptive labels to all menu icons

- Added footer menu for iOS app users for better navigation
- Built ratings system and favorites list functionality
- Showed all provider locations on their detail pages
- Displayed tier information per location so members would know if another location cost more
- Used money symbols (\$ \$\$ \$\$\$) to represent tiers—intuitive for cost and helpful for users with color vision deficiencies

Chapter 4: Beta Testing (Real Devices, Real App)

"This round of testing was our most thorough and realistic. We brought in numerous iPads, new Android phones, and old Apple smartphones. We published a beta version outside the official stores so members experienced actual app performance."

Testing Approach:

- Published beta app for realistic testing
- Tested on various devices (iPads, Android phones, older iPhones)
- Conducted 12 usability tests with real members
- Observed actual app performance and loading times

Key Findings:

- Search terms still too complex: Even though we'd improved from the current site,
 members needed even more basic searchable terms
- Couldn't find advanced search: Link wasn't prominent enough for further filtering
- Too many filter options: Members got lost scrolling through all the choices
- Loading behavior confusing: How the app loaded content after search wasn't clear

Design Solutions:

- Mapped common search terms using Microsoft Azure: "ear," "back," "stomach," etc.
- **Used analytics to inform search:** Found top 20 searched terms from current site and mapped those to bring back relevant results

- Moved advanced search link directly underneath the search icon (greatly improved discoverability)
- Broke down filters into collapsible categories with only the top one open by default
- Refined search animations: Search minimized and moved up quickly, out of the way of results; expanded smoothly when clicked for editing

"We were making the app work for how real people think and search—not how insurance companies organize their data."

Chapter 5: Launch Success... Then Reality

"After months of exhausting work and countless late nights, we gave ourselves a 2-week buffer for app store approval. Both iOS and Android apps launched successfully on time."

Initial Success:

- Hit the 3-month deadline for both iOS and Android
- **2200+ installations** in first 6 months
- 4.2 average rating in both Apple and Google Play stores
- **Business granted 5 more months** for refinement and additional features

Refinement Phase (5 Additional Months):

Based on continued user feedback and testing:

- Improved search filtering to be even more intuitive
- Mapped normal user inputs to complex outcomes instead of forcing members to understand difficult insurance terminology
- **UI tweaks from continued testing:** Advanced search placement, reduced reliance on map view as its own separate screen
- Integrated map into list view for better context without switching screens

The Hard Truth:

"But as we refined the app, the market was shifting. The network and product changes that prompted the app's urgency ultimately made the app's core design obsolete. The tier system we'd built the entire experience around was changing. When the market and product structure

changed, the business decided to pull the app—not because it failed, but because it no longer solved the right problem."

"The app filled a niche at the time—but we'd built a solution to a problem that was about to disappear."

What to show: App store ratings and reviews

How to create it:

- Screenshots from Apple App Store and Google Play showing 4.2 rating
- Select positive user reviews (anonymized)
- Installation metrics visualization
- Caption: "Launch success: 4.2 stars, 2200+ installations in first 6 months"

What to show: Project timeline infographic

How to create it:

- Visual timeline showing:
 - Month 1-3: Design, development, testing, launch
 - Month 4-8: Refinement phase
 - Market changes leading to discontinuation
- · Key milestones marked
- Caption: "Project lifecycle: From 3-month sprint to 5-month refinement to market-driven sunset"

ACT 3: The Outcome

"We delivered on time. Members liked it. But we'd built a solution to a problem that was bigger than an app could fix."

What We Delivered:

Launched iOS + Android app in 3 months (on time, on scope)

- **2200+ installations** in first 6 months
- **4.2 star rating** across both app stores (strong user satisfaction)
- 6 group interviews + 12 usability tests conducted throughout development
- Successful 5-month refinement phase with additional features based on user feedback

Design & UX Achievements:

- Simplified complex insurance concepts into intuitive mobile interface
- Reduced search friction by mapping common terms to complex backend data
- Improved accessibility with tier visualization using money symbols (not just color)
- Consolidated multi-application workflow into single, seamless mobile experience
- Created cross-platform solution with one codebase (iOS + Android)
- Applied Lean UX principles under extreme time constraints

Technical Achievements:

- Successfully implemented Angular.js + Ionic framework for rapid development
- Integrated with Microsoft Azure for intelligent search mapping
- Built responsive, performant app that worked across devices (old and new)
- Published to both Apple and Google app stores within tight deadline

Business Reality:

The app filled a genuine member need and received positive ratings. However, when network and product changes rendered the tier-based search model obsolete, the business made the strategic decision to discontinue the app.

"The app worked. Members liked it. But we'd built a solution to a problem that was evolving faster than we realized."

Reflection

"This project was a crucible. For three months, I barely slept. I designed on whiteboards by day, coded by night, and facilitated user testing whenever I could squeeze it in. Switching between UX designer and front-end developer was mentally exhausting, but I'm proud we delivered on time with strong user ratings."

"But here's the hard truth: we built the wrong thing—or more accurately, we built the right thing for a problem that was about to disappear. The network changes that made the app urgent also made it obsolete."

What I'd Do Differently:

"If I were in charge, I would have pushed back on the timeline and built a functional prototype first—but paired it with extensive market and user research to validate whether a mobile app was actually the solution to the underlying business problem."

"More upfront research might have revealed that the network product changes were the real issue, and no amount of good UX could fix that structural problem. We could have discovered this at a fraction of the cost of building a full production app."

"Instead, we delivered a well-designed product that solved yesterday's problem. The app launch was successful, but the strategic foundation wasn't solid enough to sustain it."

What This Taught Me:

Strategy matters as much as execution: You can build a great product that still fails if it's solving the wrong problem. Good design isn't enough if the business case is built on shifting ground.

Push back on urgency when necessary: Sometimes "fast" is the enemy of "right." I proved I could deliver under extreme pressure—but I also learned when to question the premise and advocate for more upfront validation.

Validate the problem, not just the solution: Research should confirm you're building the right thing, not just building the thing right. We tested usability extensively but didn't validate whether an app was the right strategic response.

Rapid execution has limits: Lean UX works brilliantly for iterating on design—but it can't fix a fundamental misalignment between the solution and the evolving business reality.

Wear multiple hats, but know the cost: Being able to design and develop made us fast, but it also meant I couldn't give full attention to strategic questions that might have saved the project.

Document your process: Even if a product gets deprecated, the work and learnings still have value. The methods we used, the tests we ran, and the patterns we discovered informed future projects.

Why I'm Still Proud of This Work:

Despite the outcome, this project demonstrated my ability to:

Deliver under extreme pressure and tight constraints

- Lead UX work while simultaneously contributing to development
- Apply Lean UX principles in a real-world, high-stakes environment
- Facilitate cross-functional collaboration on a new Agile team
- Launch a quality product that members genuinely appreciated
- Learn from strategic misalignment and apply those lessons going forward

"We built something good. We just built it for a problem that was already changing. That's not a design failure—it's a strategic lesson I carry with me into every project."

Key Metrics Summary

Research & Testing:

- 6 group interviews
- 12 usability tests
- Multiple rounds of iteration based on user feedback

Launch Success:

- 2200+ installations (first 6 months)
- 4.2 average rating (Apple App Store & Google Play)
- Launched on time across both iOS and Android platforms
- 5-month refinement phase funded based on initial success

Project Scope:

- 3-month initial development timeline
- Cross-platform mobile app (iOS + Android)
- 8-person Agile team (developers, PO, stakeholders, tester, CX, designer)
- Full design, development, testing, and launch cycle

Note: App no longer available due to market and product changes that made the core business model obsolete.