

Pill Pal

A6: Med-Fi Prototyping ReadMe

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Target Audience

Pill Pal is designed for individuals managing chronic conditions who struggle with medication adherence due to feelings of isolation and lack of social support. Our primary users include older adults (50+) taking multiple daily medications, younger adults with chronic conditions requiring consistent medication routines, and caregivers supporting family members with complex medication schedules. The app transforms medication tracking from a solitary burden into a shared, encouraging experience through voice technology and community support.

Design Tools

We used Figma as our primary tool to design the medium-fidelity prototype, taking advantage of its prototyping and collaboration features. The prototype is optimized for iOS, specifically the iPhone 16 Pro dimensions (402 × 874 pixels), though Pill Pal is designed to run on any mobile device.

Operating Instructions

All interactions are tap-based, with some screens supporting vertical scrolling. The experience begins with a simple, reassuring onboarding flow focused on privacy and personal health management. As users grow comfortable, they are gently introduced to the social and community features that make Pill Pal unique. The prototype flow is designed to start at authentication and progress through onboarding to the home screen, after which users can explore medication logging, care circle management, and community features.

Furthermore, the back arrow icon on the top left of screens allows navigation to the previous page while the bottom navigation bar provides quick access to core features: Home, Search, Calendar, Notifications, and Profile.

User Flows & Interaction Map

Authentication & Onboarding

Note: During onboarding, new users create their medication profile and care network. The prototype assumes some pre-existing data to demonstrate full functionality rather than showing empty states.

- Users begin at the Sign Up screen. Enter name ("Malisha L."), username ("malisha8"), and password (shown as dots for security).
- Phone number verification: Enter (+1) 123-456-7890 and tap Submit. The system sends a verification code.
- Code verification: Enter the 4-digit code received via SMS. Both "Didn't receive the SMS?" and "Resend code" options are available.
- Welcome screen introduces users with "Welcome, Malisha! Just a few more questions to get you started" with option to Start or skip.

Medication Setup:

- Prompt displayed on screen: "What medications do you take?" with 'Add more' options for users taking multiple medications.
- For each medication, fill out:
 - Medication name (autocomplete shows: Insulin, Iron Supplement, Lexapro)
 - Type dropdown (Insulin selected by default)
 - Dosage field
 - Time Duration selector
- Tap Next to continue or Cancel/Save to manage entries.

Social Features Introduction:

- Add members screen: "Connect with people to get reminded and remind them" with Add more button.
- Calendar sync: "Sync to your calendar for seamless reminder integration" with Connect to Google Calendar option.
- Monthly Tracker preview: Shows 7-day adherence visualization with insights about medication patterns (50% adherence rate shown).

Home Screen

The personalized dashboard greets users by name: "Hello, Malisha!" with current date display (ex. Monday, Oct 17th).

Main Elements:

- Search bar for finding medications or community content
- Insulin countdown widget: "Insulin dose in 10 mins!" with prominent Log button
- Overview section showing both personal status and care circle member tracking

Your Circles: Horizontal scroll through care circles and community groups. **Note:** Currently, tapping displays static content for demonstration.

Upcoming Reminders: Shows next scheduled medications with View All option.

Trending Posts: Vertical scroll through community content with engagement metrics (334 likes shown on vitamin supplements post).

Medication Management

Adding New Medications

Click the "Add new pill" option from the home screen or medication list.

- Name field: Enter medication name (example shows "vitamin D3")
- Description: "vitamin D supplement. For absorption, it is best to take it with a meal or snack that contains fat"
- Type dropdown: Select tablet, liquid, or other forms
- Dosage: Choose "Once a day" or custom frequency
- Medicine time: Set specific times to log medication
- Time Duration: Select "Indefinitely" or set end date
- Tap Save to confirm or Cancel to discard

Viewing Medication Details

The "View one pill" screen displays:

- Visual representation of the pill
- General Information section with dosage schedule (3 times, 4am | 3pm | 6pm)
- Track history showing 6/8 weeks left
- Quantity: 20/30 left
- Pill Dosage: 300 mg
- Next Dose: 3pm reminder

Calendar & Reminder Features

Schedule View

- Toggle between personal Schedule and Family's Schedule using top tabs
- Calendar grid shows August 17th, 2025 with date navigation arrows
- Color-coded medication indicators appear on scheduled days
- Add reminder button (+) allows quick scheduling from calendar view

Logging Medications

Note: The prototype simulates voice input through manual selection.

1. Tap the Log button from any schedule view
2. Medication popup shows "1 pill" with 12:00 pm timestamp
3. Tap "Finish logging" to complete
4. Success screen displays: "Great job! 😊" with streak tracking (5+ days shown)
5. Confirmation message: "Woohoo, 5+ days streak! 🔥 "

Care Circle Navigation

The Care Circle main screen displays member cards with:

- Profile pictures and names (Min J. shown)
- Current medication status with time indicators
- Visual progress tracking for the day

Managing Care Circles:

- Your Care Circles tab shows private family groups
- Individual member profiles display their monthly adherence calendar
- Members can send gentle reminders through the interface

Community Features

Exploring Communities

The Explore page includes:

- Search bar for finding specific topics
- Category pills: All, #Diabetes, #Insulin, #Supplements
- My Community Circles section showing joined groups
- Trending posts with author information and engagement metrics
- Recommended groups: "T1 Diabetes Support Grp" and "Professional Endocrinologists"

Joining a Group

1. Select a community like "Insulin Research Group"
2. View group description and member count (334 members)
3. Tap Join button
4. Confirmation modal: "Congrats! You just joined the Insulin Research Group. Now you can write and post articles and connect with the members in the circle!"
5. Tap Confirm to complete

Creating Posts

Note: Media upload is not currently implemented in the prototype.

- Navigate to a community and look for the create post option
- Add title: "Key Principles of Vitamin Supplements"
- Write content with formatting options
- Add relevant hashtags (#Vitamins, #Supplements)
- Choose to post as yourself or anonymously
- Submit through View full post option

Engaging with Content

Posts display:

- Author information (Min J., member0423)
- Read time (3 min read)
- Full article text with proper formatting
- Engagement buttons: likes (334), dislikes (25), comments, and shares
- Bottom navigation remains accessible for quick navigation

Analytics & Tracking

Monthly Tracker Features:

- Insights view: "In the past 7 days, your dosage were" with visual adherence patterns
- Stats view: Detailed calendar showing medication completion per day
- Visual indicators: Green circles for completed doses, empty circles for missed doses
- Date range: Full monthly view (August 2025 shown)
- View Analytics button for deeper insights into patterns

NOTE: The prototype currently shows static analytics data. Actual implementations would include personalized insights based on actual usage patterns.

Limitations

Our current prototype simulates voice interaction through pre-populated text fields and manual dropdown selections rather than actual speech recognition, requiring users to tap through medication logging flows that would be voice-activated in the final product. Real-time synchronization features such as live care circle member status updates, medication adherence tracking across devices, and instant community post engagement are represented through static screens that demonstrate the intended functionality without dynamic data flow. The prototype's authentication system shows SMS verification with a predetermined code (displaying fields for (+1) 123-456-7890), while actual database integration for storing user profiles, medication histories, and Google Calendar synchronization remains conceptual.

The comprehensive medication features shown in the designs including drug interaction warnings, dosage recommendations, and the autocomplete medication database (currently showing only Insulin, Iron Supplement, and Lexapro) are represented through limited placeholder content that demonstrates user flow. Moreover, community features display static engagement metrics and predetermined post content like Min J.'s vitamin supplement article with 334 likes, rather than allowing actual content creation, real-time interaction, or authentic peer support discussions.

Wizard of Oz Techniques

1. Voice Recognition Simulation

When users tap the prominent "Log" button on the home screen, the prototype displays pre-populated medication dropdowns and time selectors that represent what natural voice input like "I just took my insulin" would capture in the functional app. This simulation allows us to test the accessibility benefits of voice-first medication logging without implementing actual speech recognition technology. The interface shows "Insulin dose in 10 mins!" and medication confirmation screens that would typically be triggered by voice commands, enabling us to validate whether users with any visual impairments find this interaction pattern more comfortable than traditional text input.

2. Intelligent Reminder Optimization

While Pill Pal aims to use machine learning to suggest optimal reminder times based on user routines and adherence patterns, the prototype currently displays manually crafted time suggestions (09:00 am and 21:00 pm slots) that represent common medication schedules. The "Great job! 5+ days streak!" celebrations and monthly tracker showing "50% adherence rate" demonstrate the type of personalized insights the algorithm would generate. These predetermined patterns allow us to test whether users respond positively to adaptive reminder scheduling without building the complex predictive engine.

3. Community Content Curation

Since establishing partnerships with medical professionals and training content moderators requires extensive preparation, we populate the community sections with pre-vetted posts like Min J.'s "Key Principles of Vitamin Supplements" article (showing 334 likes and thoughtful responses). The Insulin Research Group's 334 members and recommended communities like "T1 Diabetes Support Group" represent the quality of peer support we expect after implementing our planned moderation system. This curated content demonstrates how the platform will foster supportive discussions while preventing medical misinformation, though actual user-generated posts and real-time moderation are not yet functional.

4. Care Circle Synchronization

Because implementing real-time multi-user data synchronization requires complex backend infrastructure, we simulate care circle interactions through static screens showing Min J.'s medication status at different times throughout the day. The Family's Schedule view displays predetermined adherence patterns with green checkmarks and yellow pending indicators that would normally update instantly when family members log their medications. While we aspire to integrate with existing family sharing APIs and cross-device synchronization, the prototype uses these static states to validate whether users find value in mutual accountability features before investing in the technical infrastructure.

5. Medication Database Integration

The autocomplete suggestions showing "Insulin, Iron Supplement, Lexapro" represent a fraction of the comprehensive FDA drug database we plan to integrate, which would include thousands of medications with interaction warnings and side effect profiles. Currently, we manually populate medication details like "vitamin D supplement: For absorption, it is best to take it with a meal" to demonstrate the educational value users would receive. This limited dataset allows us to test the medication management workflow without licensing expensive pharmaceutical databases or implementing complex drug interaction algorithms.

Hard-Coded Items

User Profile Information

All user profiles including "Malisha L." (username: malisha8), phone number (+1) 123-456-7890, and the greeting "Hello, Malisha!" are pre-populated throughout the

prototype. Profile pictures for care circle members like Min J. and medication histories showing 7-day adherence patterns at 50% compliance are statically designed.

- **Why:** Currently we do not have active users on Pill Pal and implementing dynamic profile creation in Figma would require significant additional effort without substantial benefit for demonstrating our medication adherence concept. Pre-populating Malisha's profile allows us to showcase the personalized experience users would receive, including streak celebrations ("Woohoo, 5+ days streak!") and tailored medication reminders.

Medication Database

The medication list is limited to Insulin, Iron Supplement, Lexapro, and Vitamin D3 with predetermined dosages (300mg), schedules (3 times: 4am | 3pm | 6pm), and descriptions ("vitamin D supplement: For absorption, it is best to take it with a meal or snack that contains fat").

- **Why:** Pill Pal aims to integrate with comprehensive pharmaceutical databases, but licensing and implementing FDA drug information requires partnerships we have not yet established. Hard-coding common medications allows us to demonstrate the medication management workflow, including the autocomplete functionality and detailed pill information screens, without the complexity of real drug interaction data.

Community Content & Engagement

All community posts including Min J.'s "Key Principles of Vitamin Supplements" article, the 334 likes, 25 dislikes, and "3 min read" metrics are pre-determined. The Insulin Research Group's 334 members and recommended communities like "T1 Diabetes Support Grp" display static membership counts.

- **Why:** Since Pill Pal does not yet have an active user community generating authentic discussions about medication experiences, we crafted representative posts that would demonstrate the supportive, educational content we expect after implementing our moderation guidelines. This approach allows us to showcase the community features' potential value without requiring real users to generate content during testing.

Care Circle Synchronization

The Family's Schedule showing medication adherence for Min J. and other care circle members uses predetermined checkmarks and timing patterns. The status updates

indicating when members have taken medications (green checkmarks) or have pending doses (yellow indicators) are static representations.

- **Why:** Implementing real-time multi-user synchronization would require backend infrastructure and multiple test accounts that exceed Figma's prototyping capabilities. Hard-coding these states allows us to demonstrate how mutual accountability works within care circles, showing both successful adherence and opportunities for supportive reminders, without building complex server architecture.

Calendar & Time-Based Features

The calendar displays August 17th, 2025 as the current date with predetermined reminder slots at 09:00 am, 12:00 pm, and 21:00 pm. The monthly tracker shows a fixed 7-day pattern, and all timestamps like "Insulin dose in 10 mins!" countdown are static.

- **Why:** Dynamic time calculations and real calendar integration cannot be simulated in Figma without extensive conditional logic. Pre-setting these temporal elements allows us to illustrate the time-sensitive nature of medication adherence, including countdown timers and streak tracking, while maintaining consistency across all prototype screens.

Notifications & Encouragement Messages

Success messages ("Great job! 😊"), streak celebrations ("5+ days streak! 🔥"), and confirmation dialogs ("Congrats! You just joined the Insulin Research Group") use templated language. SMS verification shows a predetermined code field rather than generating actual codes.

- **Why:** While Pill Pal will eventually integrate with device notification systems and SMS gateways, modeling dynamic message generation in a static prototype would not enhance our ability to test core user flows. These templated messages demonstrate the encouraging, supportive tone we plan to maintain throughout the app while allowing us to focus testing on navigation and feature discovery rather than message customization.

Link to Figma:

<https://www.figma.com/design/CJEoHTdfWY0r80fqVCekek/147-A6-Med-Fi-Protoype?node-id=1-1327&t=0T7La9NWNwKpqKfA-0>