VA Mobile, core team

How Stuff Works

(As of March 2025)

VA

U.S. Department
of Veterans Affairs

Agenda

1 Overview of the systems and architecture.

2 Overview of stuff in the app works.

App code

The App

- Where the public code lives (va-mobile-app)
- Where the private code lives (va-mobile-app-private)
- Core permissions groups & code owners
  - flagship-mobile-team
  - flagship-mobile-reviewers
  - flagship-mobile-qa
  - flagship-mobile-write / admin
  - flagship-mobile-release-approvers
  - mobile-api-team
- Tech Stack
  - React Native (app)
  - Detox (End to end Tests)
  - React Testing Library (Unit Tests)
  - Github Actions (CI)
- Testing
  - TestFlight (iOS) & App Tester (Android)

The API

- Why does our API exist?
  - Upstream services
  - Cookies vs. Bearer Tokens
- Where the app code lives (vets-api)
- Permissions groups & code owners
  - mobile-api-team
- Tech Stack
  - Ruby on Rails
  - Github Actions (CI)
  - Jenkins (CD)

Documentation

The App

- App documentation
- Design Library documentation
- Design System documentation
- Team-level documentation storage
- How to update docs
  - Codespaces (repo)
  - Inline (team)

The API

- API Documentation

Infrastructure and automation

Access actually need to do work

- VA Github Org
- Mobile repo write access
- Firebase
- App Store Connect
- TestFlight / App Tester

Other maybe access

- Figma / Mural
- Google Analytics
- DataDog (API monitors)
- AWS
- Google Play
- Sentry (logging)
- Slack App (Slack alerts)
- Domo (data visualization)
- Google Cloud (service accounts)
- Big Query (Data Storage)
- PagerDuty
- SOCKS Proxy
- mobile repo admin
- TestRail

App Certs that need to be maintained yearly

- iOS Distribution cert (Feb.)
- iOS Development cert (Feb.)
- iOS Push Notifications cert (TBD)

Information on how to renew certificates

Ongoing things

- Continuous integration in pull requests
- Daily QA builds
- Daily Detox test runs (iOS/Android)
- Daily accessibility tests
- On-demand builds
- Firebase Crashlytics
- DataDog API monitors
- The release (next slide)

The Release

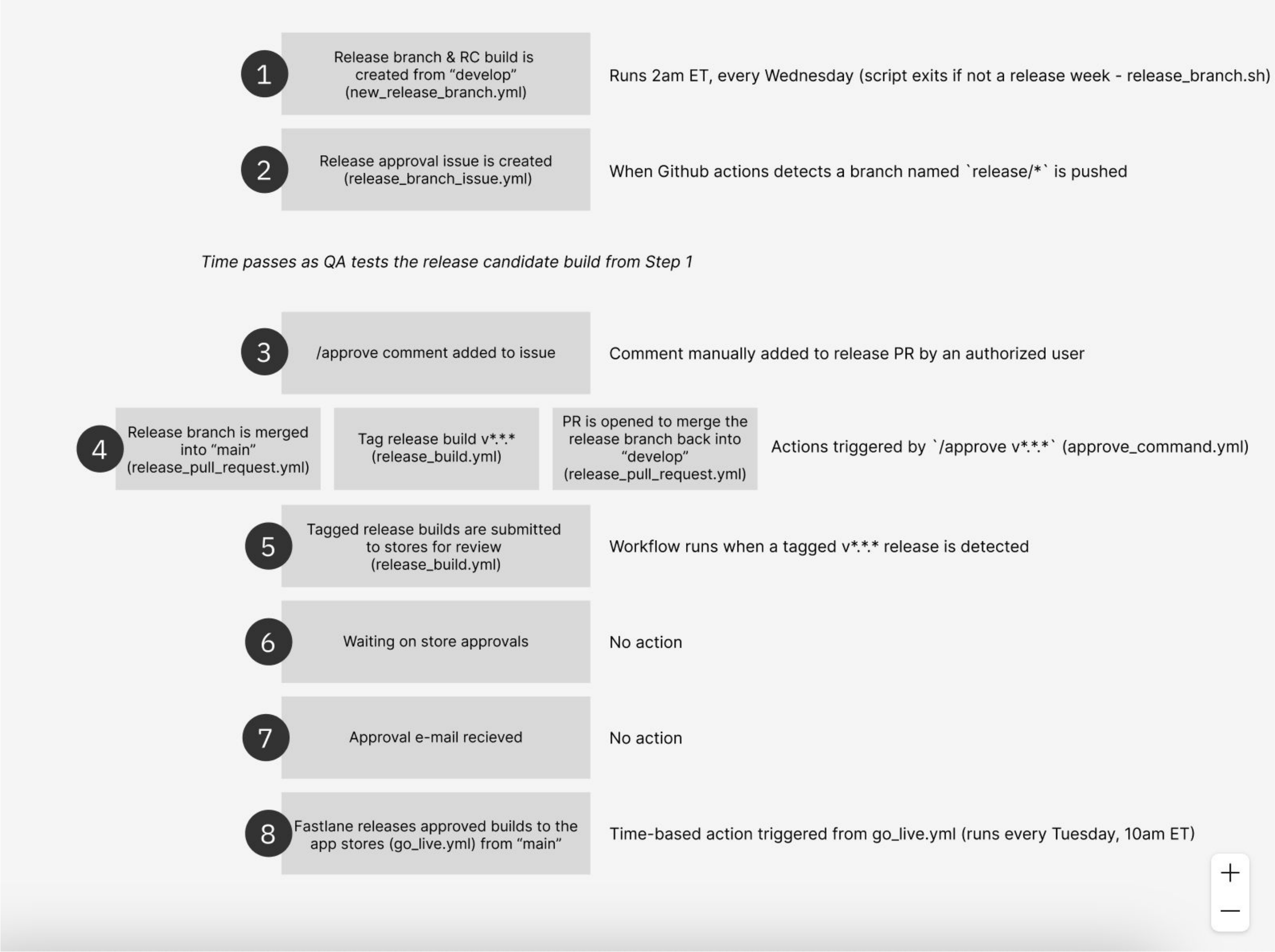
The App

- Every 2 weeks (Release Calendar)
  - Why?
  - Not subject to platform code freezes
- Slack app
  - #va-mobile-app
  - #va-mobile-app-alerts (DataDog)
  - #va-build-alerts (CI)

The API

- Released daily in the afternoon
- Subject to platform code freezes

App Release Process



1 Release branch & RC build is created from “develop” (new_release_branch.yml)
Runs 2am ET, every Wednesday (script exits if not a release week - release_branch.sh)

2 Release approval issue is created (release_branch_issue.yml)
When Github actions detects a branch named `release/*` is pushed

Time passes as QA tests the release candidate build from Step 1

3 /approve comment added to issue
Comment manually added to release PR by an authorized user

4 Release branch is merged into “main” (release_pull_request.yml)
Tag release build v*.*.* (release_build.yml)
PR is opened to merge the release branch back into “develop” (release_pull_request.yml)
Actions triggered by `/approve v*.*.*` (approve_command.yml)

5 Tagged release builds are submitted to stores for review (release_build.yml)
Workflow runs when a tagged v*.*.* release is detected

6 Waiting on store approvals
No action

7 Approval e-mail recieved
No action

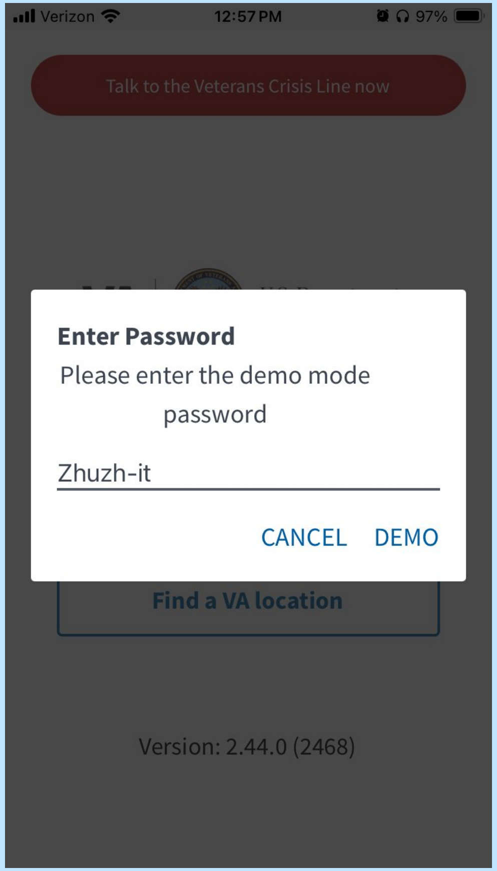
8 Fastlane releases approved builds to the app stores (go_live.yml) from “main”
Time-based action triggered from go_live.yml (runs every Tuesday, 10am ET)

- Release process docs
- Release issue example
- All workflows

App Features and Core Functionality

What is Demo Mode?

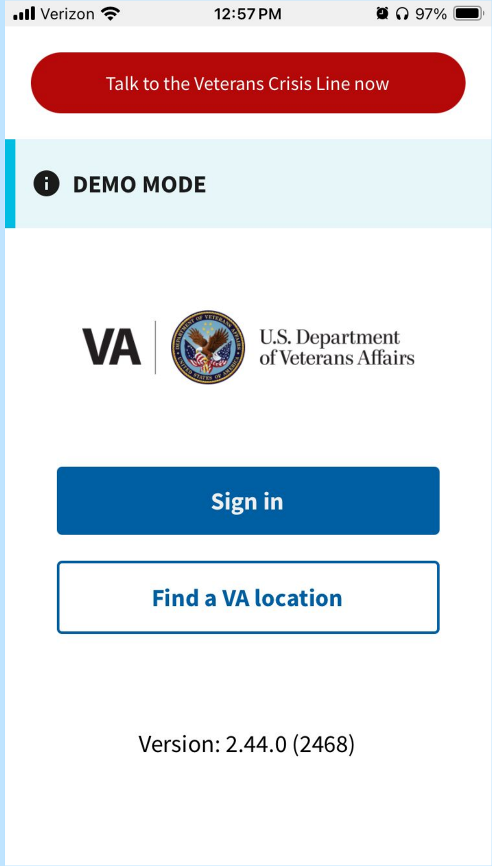
- The VA Health and Benefit App's Demo Mode mode provides a safe and non-production environment for users to interact and engage with the app's navigation, functionality, features, and designs.
- Demo mode is set up with a single fake user that is not tied to any production test account and allows users to access all of the app's latest offerings. Users can complete actions such as submitting a secure message or a prescription refill to experience the entire user journey without impacting other systems or teams.
- To access: Download the app from the app store and click the VA Logo 7 times. When prompted for the password type in 'Zhuzh-it' and click 'DEMO'. Success is indicated by the Demo Mode informational alert banner in SS#2. Clicking sign in with skip authentication and give you access to the demo mode app space.



Enter Password

Please enter the demo mode password

Zhuzh-it



DEMO MODE

Verizon
12:57 PM
97%
Talk to the Veterans Crisis Line now
VA
U.S. Department of Veterans Affairs
Sign in
Find a VA location
Version: 2.44.0 (2468)

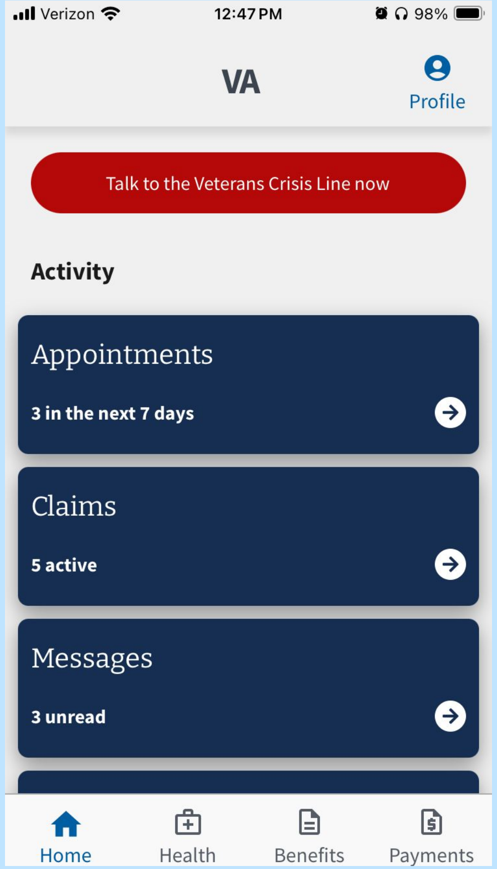
Feature Spotlights: HSP + Veteran Status Card

HSP (Homescreen Personalization)

- Objective: We believe that bringing personalized content to the VA mobile app's home screen to new and current app users will help users to keep up with and manage their current interactions across VA and find value in the app that they aren't discovering now.
  - Moved actionable items first and foremost in the app on the homescreen displaying relevant information on 'ActivityButtons' to jump users to their potential actions.
  - Preloaded significant amounts of app information on initial load to increase traversal speed of the app afterwards.
  - Significantly improved homescreen aesthetics.
  - Coincided with switch to React-Query state management.

VSC (Veteran Status Card)

- Objective: Veterans would benefit from an easy-to-access official Veteran ID card to use for receiving discounts and other private-sector benefits. There is currently no simple way to attain an ID like this. The current processes are cumbersome and long and not well known by Veterans. A widely accepted Veteran ID within the mobile app could prove a very useful feature for Veterans and greatly increase usage of the app.



Verizon 12:47 PM 98%

VA

Profile

Talk to the Veterans Crisis Line now

Activity

Appointments

3 in the next 7 days

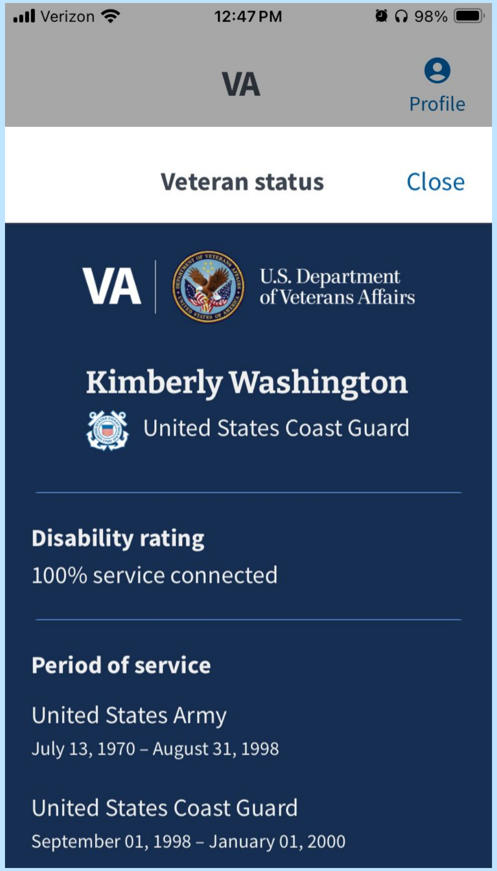
Claims

5 active

Messages

3 unread

Home Health Benefits Payments



Verizon 12:47 PM 98%

VA

Profile

Veteran status Close

VA | U.S. Department of Veterans Affairs

Kimberly Washington

United States Coast Guard

Disability rating

100% service connected

Period of service

United States Army

July 13, 1970 – August 31, 1998

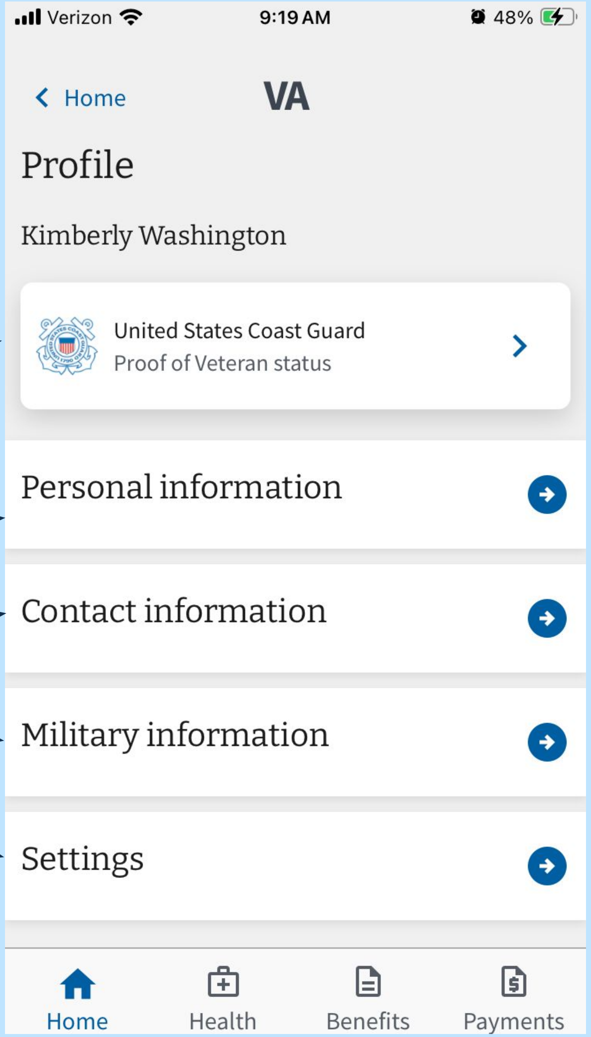
United States Coast Guard

September 01, 1998 – January 01, 2000

Profile Screen Contents

1. Secondary link to view Veteran Status Card
2. Personal Information page – Preferred Name EE/DOB display
3. Contact Information page – Mailing/Home Address, Phone #’s, Email
4. Military Information page – Display only, shows period of service.
5. Settings – Access to Touch ID/Notifications/App Sharing/Privacy Policy/an opt in for User Research Participation. Developer screen!

Developer screen is ONLY available in Demo Mode.



Verizon 9:19 AM 48%

< Home VA

Profile

Kimberly Washington

United States Coast Guard
Proof of Veteran status >

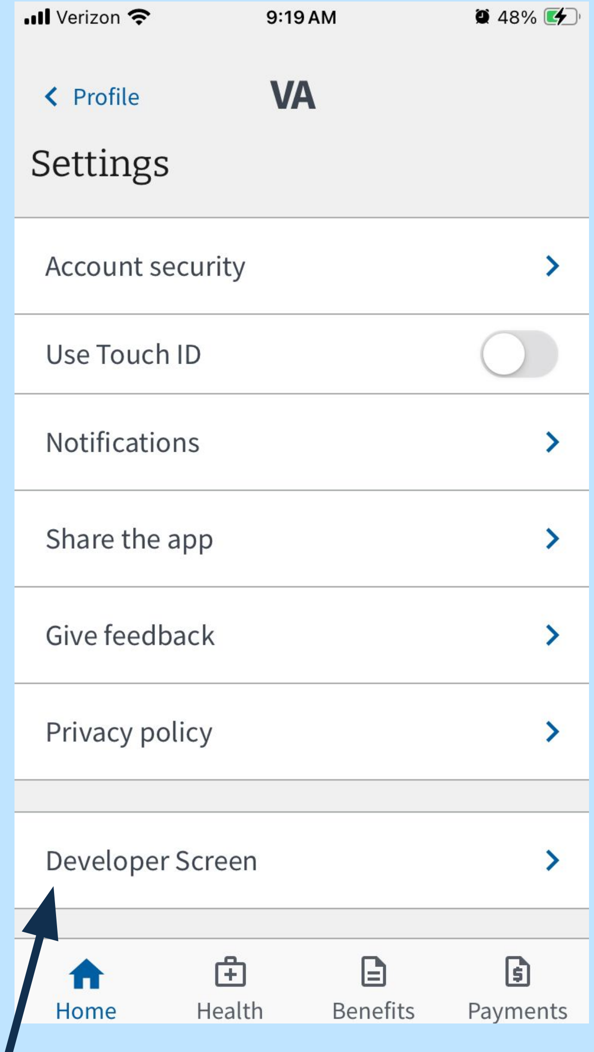
Personal information

Contact information

Military information

Settings

Home Health Benefits Payments



Verizon 9:19 AM 48%

< Profile VA

Settings

Account security >

Use Touch ID

Notifications >

Share the app >

Give feedback >

Privacy policy >

Developer Screen >

Home Health Benefits Payments

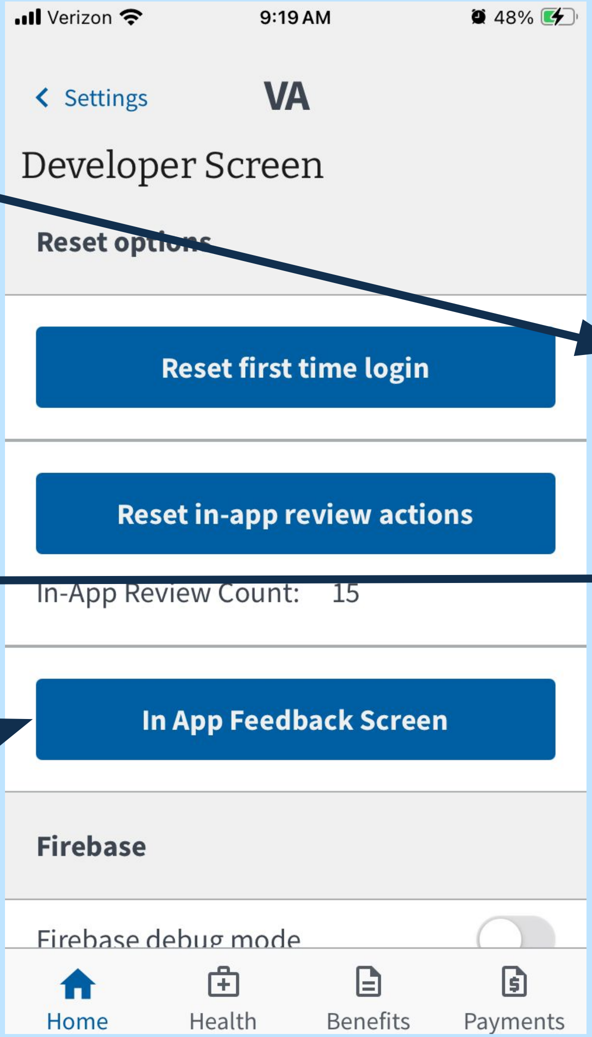
Developer Screen Contents + Functionality

Remote Config and Waygate/AF setup (More on next slide)

Override Api Calls:

This section will allow you to override the demo mode default api responses and replace them with either a network error, backend override (BE Availability Framework), or other error codes you can supply. This is an attempt to create a simplified way for UX, FE, and QA to see various error/edge cases in UI to ensure their accuracy during development and QA.

In App Feedback Screen click-to-see



Verizon 9:19 AM 48%

< Settings VA

Developer Screen

Reset options

Reset first time login

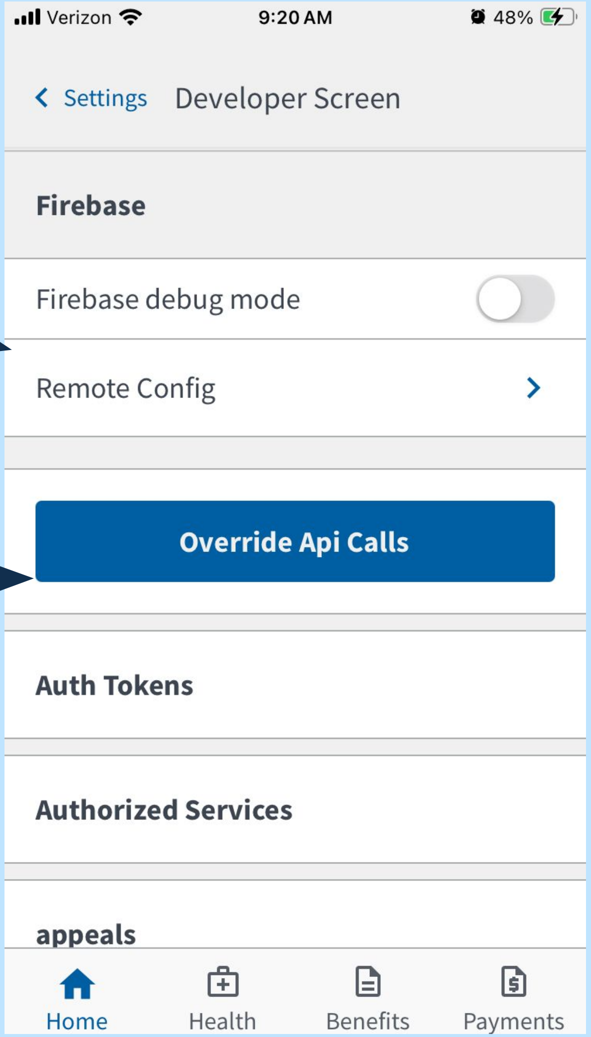
Reset in-app review actions

In-App Review Count: 15

In App Feedback Screen

Firebase

Firebase debug mode



Verizon 9:20 AM 48%

< Settings Developer Screen

Firebase

Firebase debug mode

Remote Config >

Override Api Calls

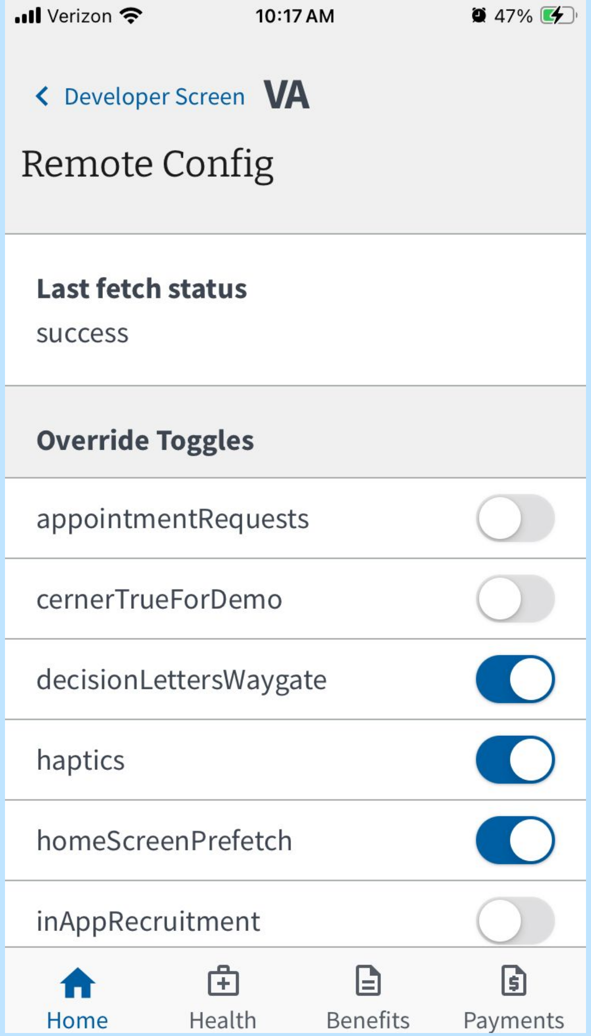
Auth Tokens

Authorized Services

appeals

Remote Config and Availability Framework

Remote config is how we can store in progress work in the mobile app, or disable a feature entirely on short notice if we need to. These override toggles exist to flip on/off the functionality in combination with ‘Apply Overrides’ button at the bottom of the list.



Remote Config

Last fetch status

success

Override Toggles

appointmentRequests ○

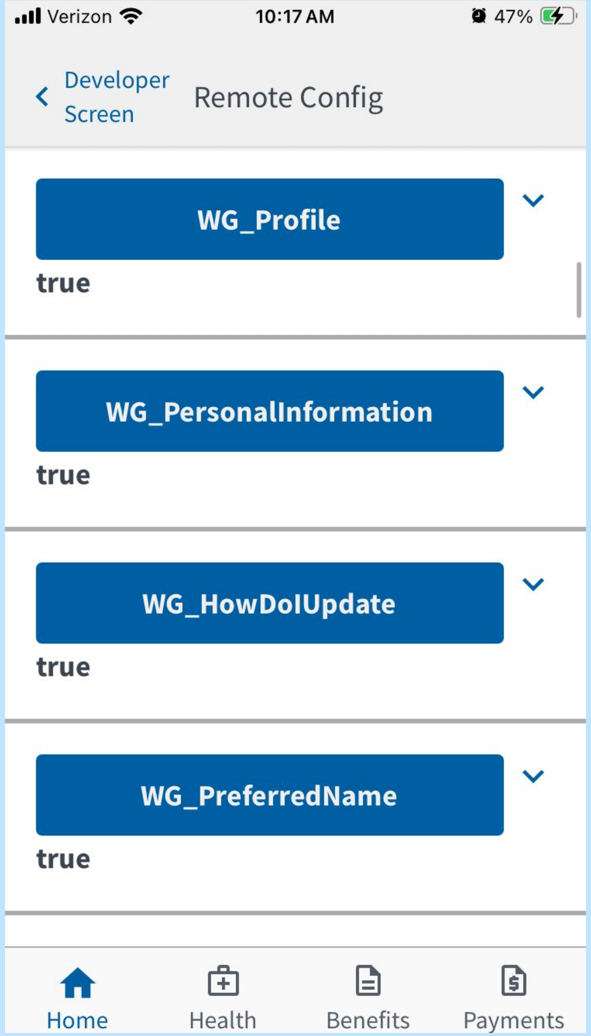
cernerTrueForDemo ○

decisionLettersWaygate ●

haptics ●

homeScreenPrefetch ●

inAppRecruitment ○



WG_Profile

true

WG_PersonalInformation

true

WG_HowDoIUpdate

true

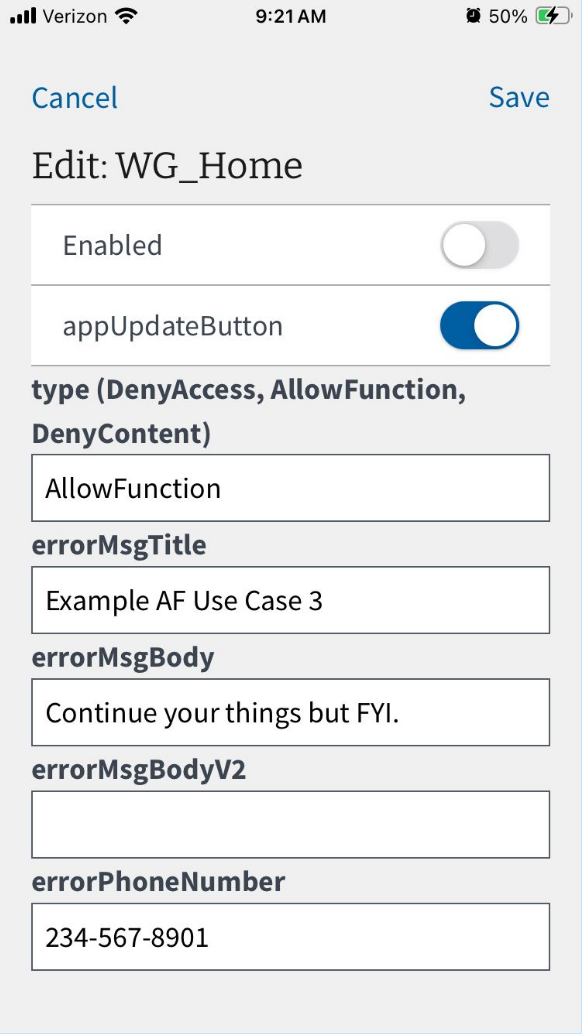
WG_PreferredName

true

Availability Framework/Waygates are how we can interact with every screen in the application to potentially provide a hard stop or alert for users that something is/could be going wrong in their session. This is for emergency situations where we don't have a more valid response capability. There are 3 use cases:

- **DenyAccess:** A native Alert stops the user from navigating to the screen.
- **AllowFunction:** Nothing on the screen changes except there is an alertbox with supplied details at the top. Yellow colored bar.
- **DenyContent:** The screen loads but its contents are completely replaced by the given alertbox information. Red colored bar.

Availability Framework Allow Function Example



Edit: WG_Home

Enabled ○

appUpdateButton ●

type (DenyAccess, AllowFunction, DenyContent)

AllowFunction

errorMsgTitle

Example AF Use Case 3

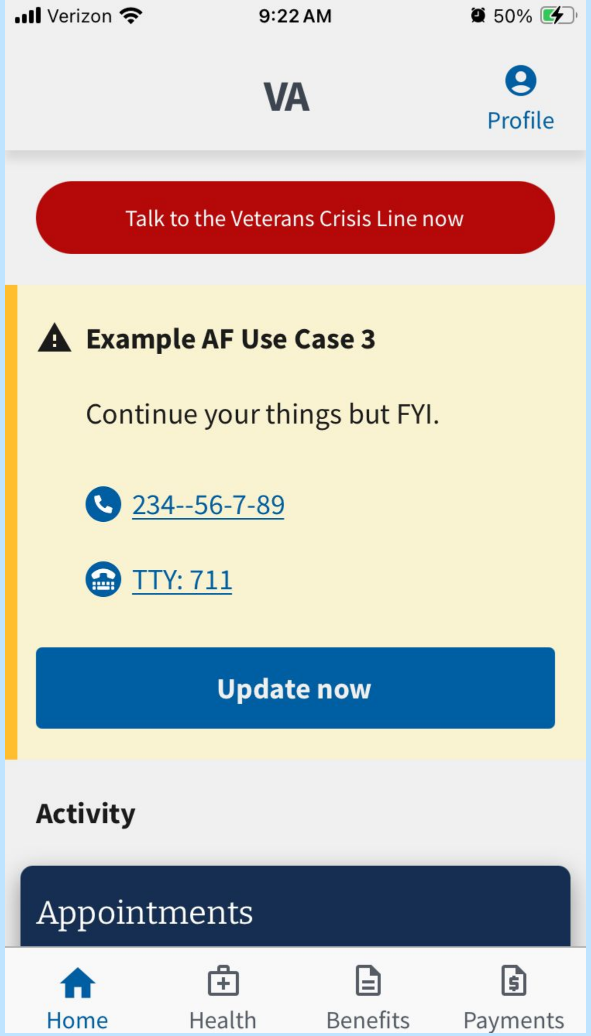
errorMsgBody

Continue your things but FYI.

errorMsgBodyV2

errorPhoneNumber

234-567-8901



Example AF Use Case 3

Continue your things but FYI.

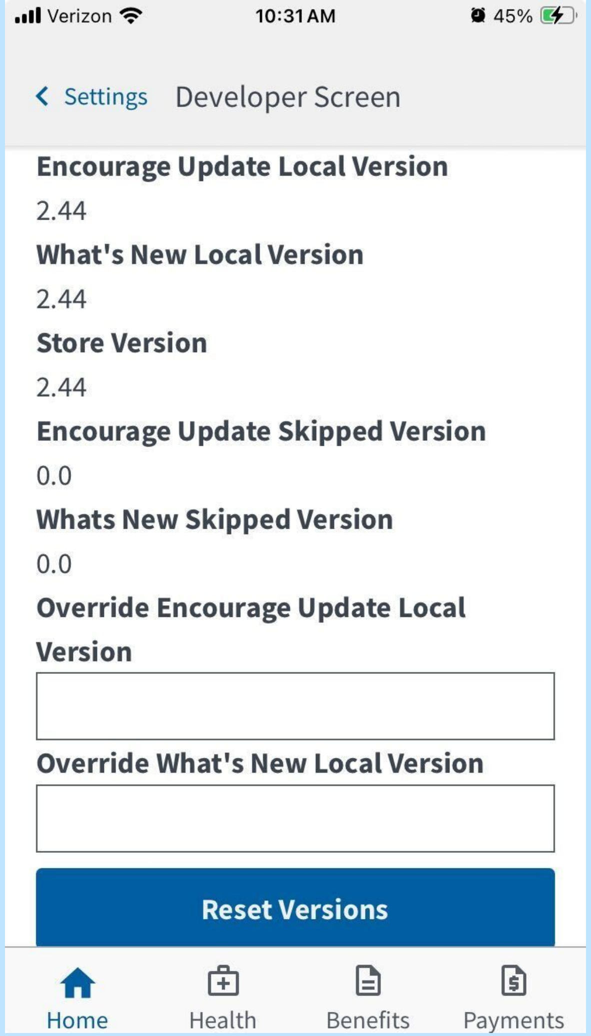
234--56-7-89

TTY: 711

Encouraged Update

The desired outcome of this feature will be that Users update the app prior to any auto-update they may have enabled, and potentially new users to the app (after this feature is implemented) who don't enable auto-updates will also update the app upon seeing the alert. Over a long period of time, those users who continue to be on old APIs will taper off as they decide in their own time to update the app.

Encouraged Update Example



Developer Screen

Encourage Update Local Version

2.44

What's New Local Version

2.44

Store Version

2.44

Encourage Update Skipped Version

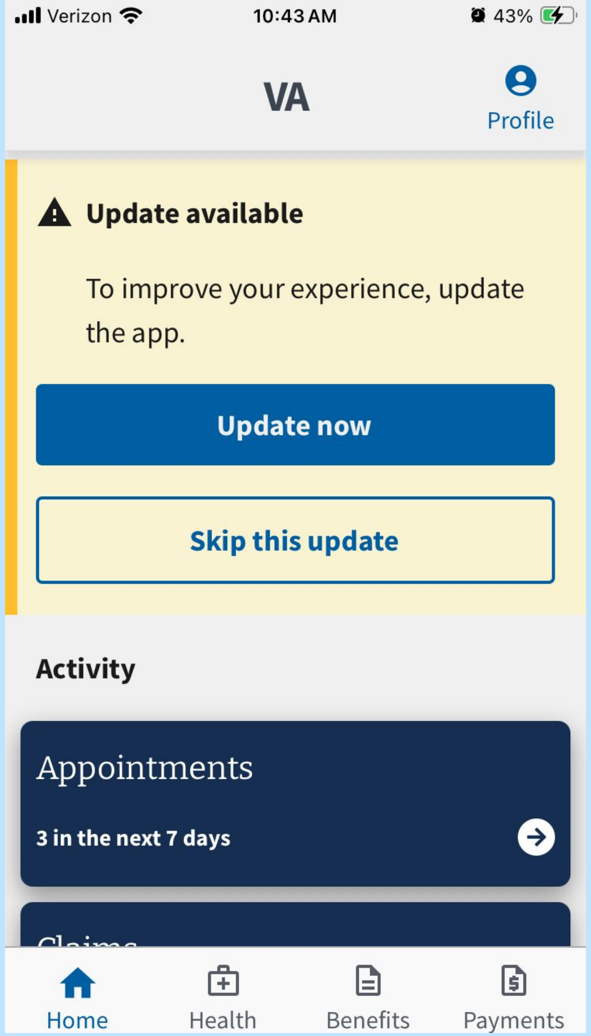
0.0

Whats New Skipped Version

0.0

Override Encourage Update Local Version

Override What's New Local Version



Update available

To improve your experience, update the app.

Activity

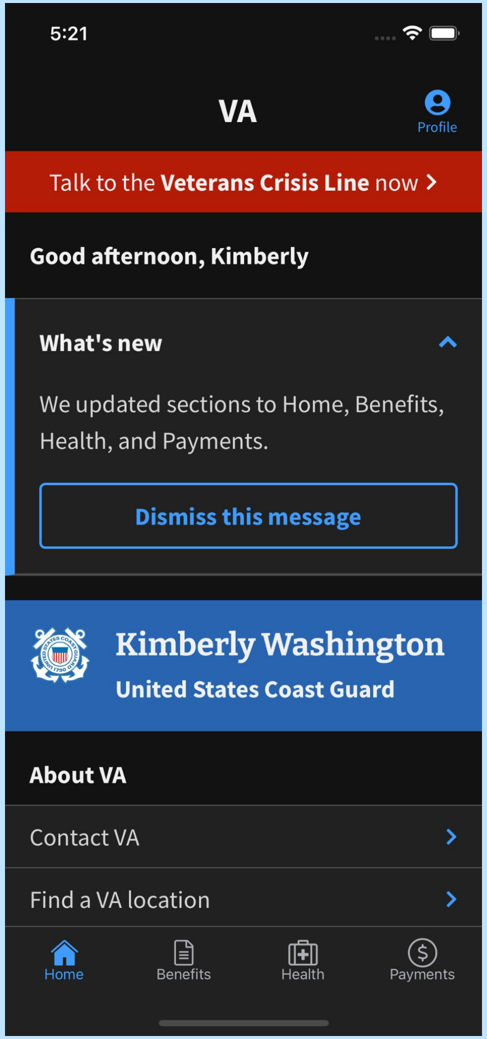
Appointments

3 in the next 7 days

In App 'What's New'

In App What's New is a way to announce to users the newly available features in a given taken update. Can include bulleted lists and be dismissed easily by a user.

What's New Example



5:21

VA

Profile

Talk to the **Veterans Crisis Line** now >

Good afternoon, Kimberly

What's new

We updated sections to Home, Benefits, Health, and Payments.

Dismiss this message

Kimberly Washington

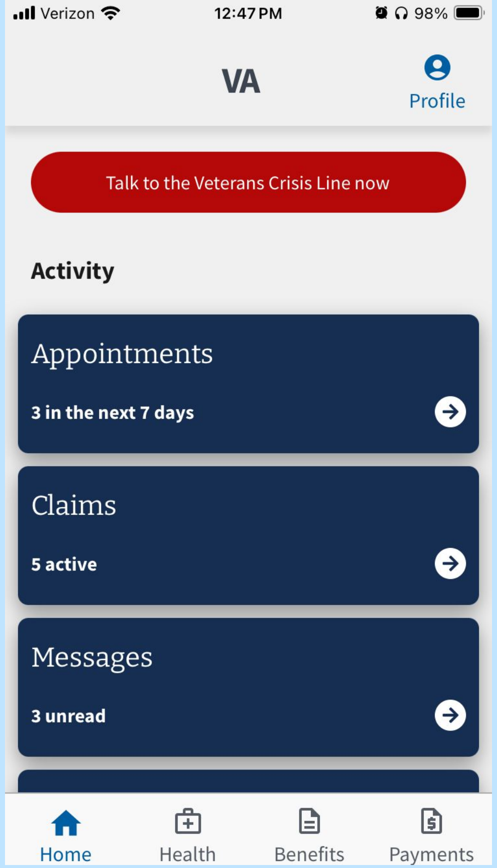
United States Coast Guard

About VA

Contact VA >

Find a VA location >

Home | Benefits | Health | Payments



Verizon 12:47 PM 98%

VA

Profile

Talk to the Veterans Crisis Line now

Activity

Appointments

3 in the next 7 days

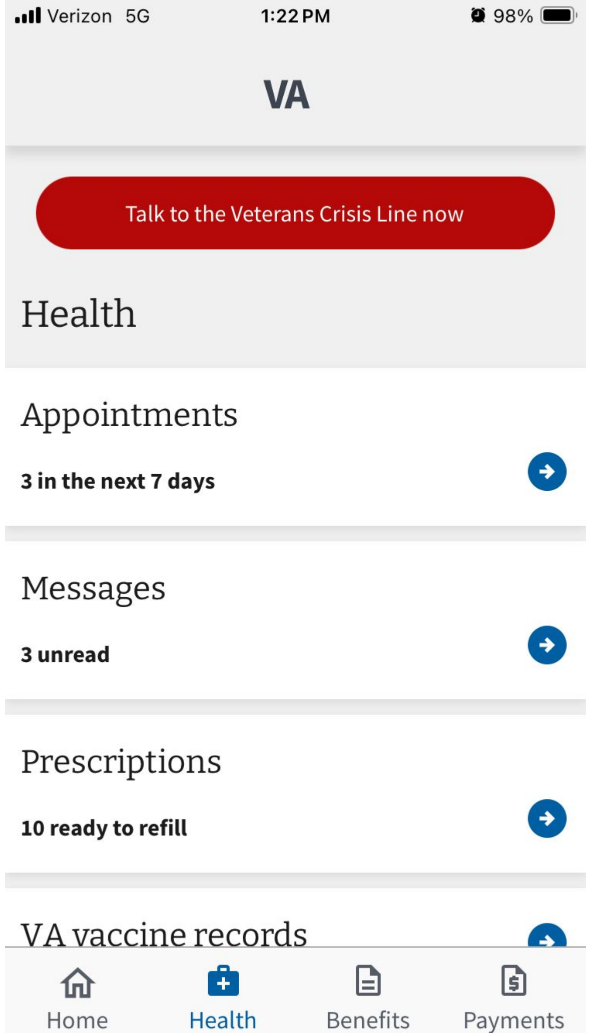
Claims

5 active

Messages

3 unread

Home | Health | Benefits | Payments



Health

Appointments

3 in the next 7 days

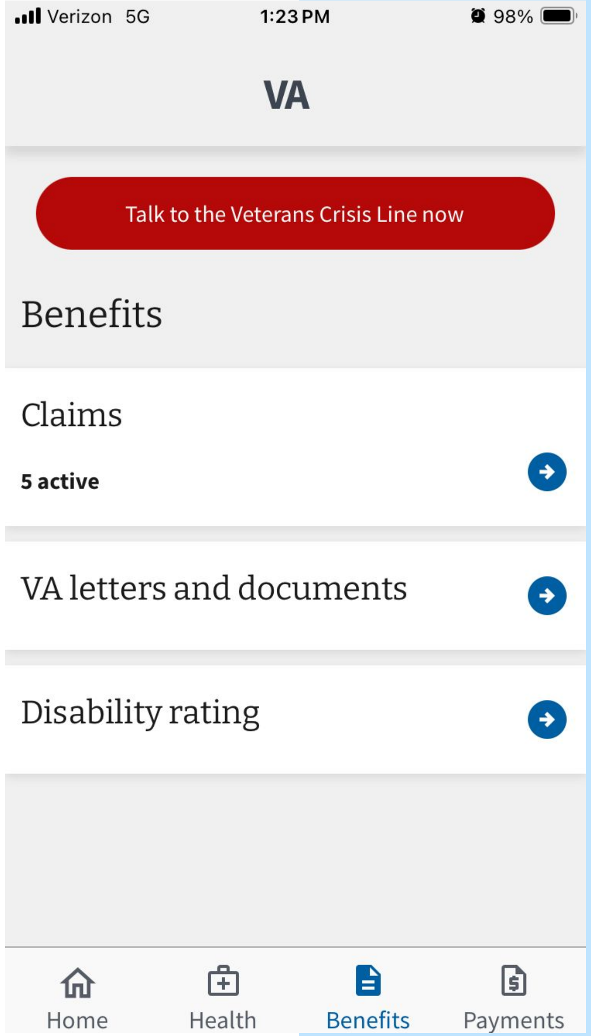
Messages

3 unread

Prescriptions

10 ready to refill

VA vaccine records



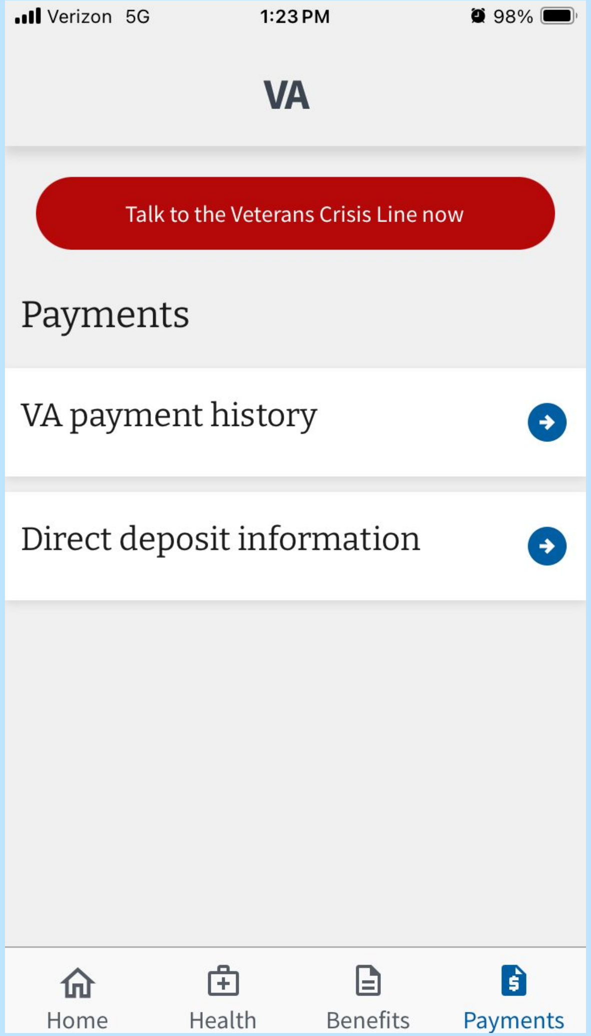
Benefits

Claims

5 active

VA letters and documents

Disability rating



Payments

VA payment history

Direct deposit information

VA Mobile, core team

Questions?