Recommendations for the

Veteran Appointment Request Application (VAR)

This document contains recommendations to the Department of Veteran Affairs to increase the number of people using the **Veteran Appointment Request** application (**VAR**) as of July 14, 2017. This has been prepared by the United States Digital Service team at the VA.

Currently, only a few hundred appointments are self-scheduled through VAR each month, out of the hundreds of thousands of appointments the VA healthcare system provides.

# Access to Appointments

The most immediate roadblock to usage of the VAR tool is the lack of access to appointments, due to the limited number of available sites and types of appointments.

A “site” is a location as recorded by OI&T, which may be comprised of several facilities. For example, VA Boston is a single site in the Healthcare System, but contains three medical centers: West Roxbury, Brockton, and Jamaica Plain. When a site is made available in the system, the schedules of the associated medical centers are available.

At this time, users of VAR can only schedule appointments at 100 of the 168 VA sites. Several sites have requested a waiver so as not to be included in VAR at all; the remaining 141 sites are to be available within VAR by the end of the calendar year.

**Recommendation:** The VA should increase the number of available sites as quickly as possible. We should push for the remaining sites to be available more quickly. The sites that have requested waivers should be considered carefully, as this limits the availability of scheduling to only 84% of our sites nationwide.

Currently, users of VAR can only schedule appointments for Primary Care and Mental Health. Soon Audiology and Optometry appointments will also be made available. However, this still represents a subset of the types of appointments that can be scheduled in the system, greatly hampering Veterans’ ability to self-schedule.

**Recommendation:** The VA should make as many appointment types available as soon as possible.

The two restrictions above greatly reduce the usefulness of the VAR tool. Until these are resolved, wide adoption and usage will be hampered. Moreover, while these limitations are still in place, veterans are far more likely to have a frustrating experience in not being able to schedule an appointment at all – resulting in lower user satisfaction and eroding trust in the VA.

# User Experience Testing

For users to adopt VAR, they have to be able to use it and it needs to meet their expectations for functionality. Although VAR is using a template designed for mobile usage, it would be beneficial to do more user testing to improve the user experience. The most recent user testing on the application was reported in February 2017, and corrective actions given. However, crafting a good user experience cannot be done in a single session. More testing of the application on a regular basis would improve the tool, as features regularly change over time.

There were 25 participants in the February report. All but one rated their comfort with technology to be at least “Intermediate”, and most reported using their mobile device regularly (at least once a day). A group of candidates with a wider skill level with technology would likely reveal more undiscovered issues with the application.

**Recommendation:** The VA should do more frequent, ongoing user testing of its applications to ensure the best user experience. The participants should be selected so as to have a wide range of experience with technology, as well as different levels of ability in using the tools.

# Marketing & Content Strategy

To date, very little marketing has been done to advertise the VAR tool. There are several links from VA websites to VAR, and there has been mention of it in the MyHealth*e*Vet newsletter, but more could be done.

Due to the limitations of scheduling (see **Access to Appointments** above), any marketing strategy will probably have to be location-targeted to limit the audience to those Veterans near an available site. It is possible to location target advertising on social media platforms (e.g. Facebook or Twitter), as well as through conventional web advertising sources (e.g. Google AdWords). These sorts of paid advertising pushes can be very cost-effective by limiting the audience.

The large audience of existing VA mailing lists, such as **MyHealth*e*Vet**’s (**MHV**) newsletter, means that these will remain important pieces of the marketing strategy moving forward. However, until the limitations above are addressed, the impact of these may be less than ideal.

**Recommendation:** Use of conventional digital marketing methods can be used to selectively drive traffic to the VAR tool, while accounting for gaps in access to site locations.

A comprehensive assessment of the content and linking strategy of several VA sites could increase traffic to the VAR app. Well-placed, well-written content is the easiest way to let visitors to these sites know that VAR is available. Good content is also essential to a strong Search Engine Optimization (**SEO)** strategy, which is critical for users to organically discover the VAR tool.

As a part of the SEO strategy, the linking strategy of the websites must be reviewed. For instance, currently on the MHV website the only link to VAR is through a not-obvious image, featuring no search-engine-friendly text (typically provided in the form of text based content, alt text, or title attributes). This means that search engines will be largely unaware of VAR from the context of MHV. VAR should also be embedded in additional digital properties, such as facility locator, to allow users to complete logical next steps in a task (find a location and schedule an appointment).

**Recommendation:** A content strategy towards driving traffic to VAR should be created to include MHV, Vets.gov, and the main VA website.

# Service Availability and Testing

It has been reported that during previous high traffic times due to media pushes, slow loading and response times were experienced in mobile applications. The move to the “next-gen platform” – containerizing and using microservices to replace the old monolithic server application – was to increase the availability, reliability, and speed of the service. Completing this work will be critical for dealing with the increased load of more traffic to the site.

Several issues are blocking the server team from completion of this work. Most notably, to allow the new system to keep track of a person as they’re using the tool, a system layer of persistence is necessary. Typically, the Redis database engine is used for this, but use of this database has not been approved in the ATO, due to it not being covered by the TRM. However, the Vets.gov team has been using Redis and was allowed to use it under their ATO. This inconsistency in guidance is also noteworthy.

It is also highly advisable to do load testing of the server before attempting to drive more traffic to the site. By simulating many simultaneous users to a site or application, load testing helps engineers to identify potential problems that can arise as a result of unexpected traffic conditions.

**Recommendation:** The “next-gen platform” migration work should be complete before attempting to drive extra traffic to the VAR application. Additional support from leadership to help remove policy roadblocks will be necessary. The platform should be tested thoroughly to insure that it can handle the extra traffic.

# Metrics & Analytics

To accurately judge the impact of the VAR application, as well to discover issues with it, will require the collection of usage analytics. The **Digital Government Strategy** recommends the usage of the **Digital Analytics Program** (**DAP**) for gathering this data on all government websites. Since VAR is technically a web application, it should also be using DAP – but DAP can be used for native mobile applications as well.

Although there is currently work being done to use the Applicare tool to create a dashboard of metrics, DAP should still be used. This will allow the VA to have a comprehensive view of user behavior throughout the VA’s websites – for instance, it would be possible to track the acquisition of users from a search on Google, to the MHV homepage, to landing at the VAR app page in the VA App Store, to logging into the VAR app, and scheduling an appointment. This sort of end-to-end view can also reveal where in the process users ran into trouble and abandoned using the application, which is critical for discovering problems and prioritizing improvements.

**Recommendation:** VAR should implement DAP for analytics, as expected of all government websites. The statistics from DAP should be reviewed periodically to identify problems in the system and track the efficacy of marketing efforts.