

Patient Check-In (PCI) St. Louis Research Report

April 2022

Last updated: May 26, 2022

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Background

Check-In St. Louis Pilot UAT Report Readout | April 2022

The [patient check-in \(PCI\)](#) product is reimagining the ecosystem that allows a Veteran to check in for a medical appointment. The Modernized Check-In Experience Team created the portion of the ecosystem that enables a Veteran to utilize their mobile device to “check-in” through VA.gov. I.e., letting clinic staff know that the patient has arrived for their appointment.

High level view of Veteran check-in journey

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Pre-check-in  

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Start pre-check-in

We need to verify your identity so you can start pre-check-in.

Your last name

Last 4 digits of your Social Security number

[Continue](#)

Need help?

For questions about your appointment or if you have a health-related concern, call your VA provider.
[Contact your VA provider.](#)

For questions about how to fill out your pre-check-in tasks or if you need help with the form, please call our MyVA411 main information line at [800-698-2411](tel:800-698-2411) and select 0. We're here 24/7.

If you have hearing loss, call [TTY: 711](tel:TTY:711).

[Contact Us](#) [Veteran Programs and Services](#) [More VA Resources](#)


Check-in (day of appointment)  

Have an appointment? Check in with your smartphone

- 1 Text **check in** to **53079** OR scan this code with your camera.

To: **53079**

Message: **check in**


- 2 Wait until you get a text back with a link. This should only take a few seconds.
- 3 Tap on the link to start your check-in. Data charges may apply.

Can't scan the QR code? Text us instead [📞](#)
Need to update your information? Check in with a staff member instead [📞](#)



MSA

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Check in at VA

We need some information to verify your identity so we can check you in.

Your last name

Last 4 digits of your Social Security number

[Continue](#)

Need help?

Ask a staff member.

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You're checked in for your 1:00 p.m. ET appointment

We'll come get you from the **Cardiology Specialty Red Clinic #4** waiting room when it's time for your appointment to start.

[Go to another appointment](#)

Need help?

Ask a staff member.

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Veteran waits to be seen

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Our goals for this research

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- Evaluate effectiveness of check-in and pre-check-in experiences with Veterans and staff.
- Identify strengths, pain points and opportunities for improvements within the PCI ecosystem.
- Evaluate effectiveness of new poster that addresses low-vision concerns.
- Gain Veteran insights and opinions on product naming.
- Gain insights from VA staff on opportunities to integrate telephone appointments with pre-check-in and displaying patient record flags in VSE-CS.



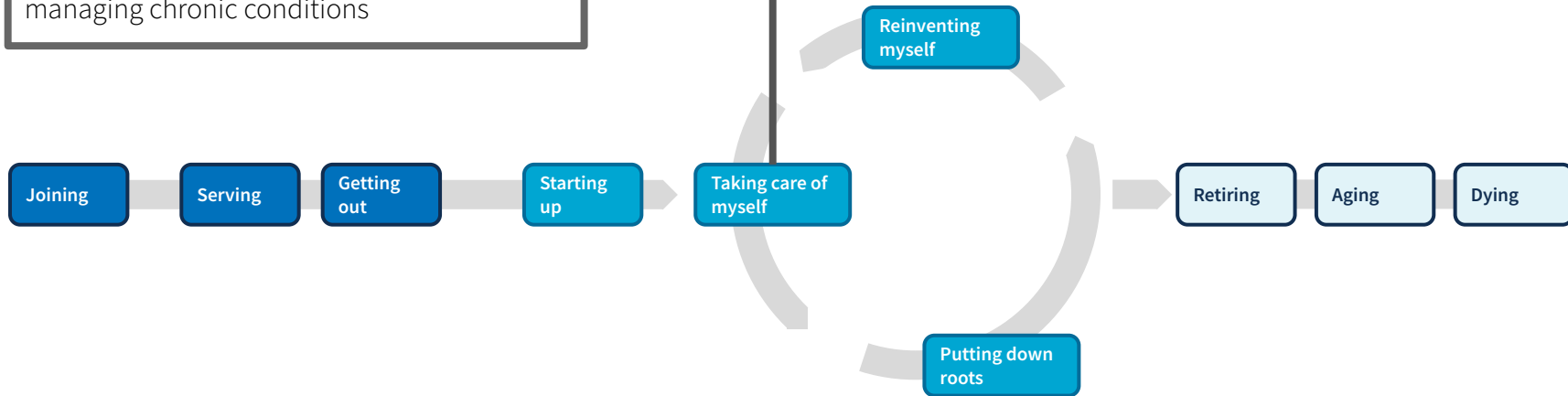
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How this research maps to the Veteran journey

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Moments that matter

Veterans expect to be able to easily check in for their medical appointments, whether it's for acute care needs, speciality care or managing chronic conditions



For a fully detailed Veteran journey, go to

<https://github.com/departement-of-veterans-affairs/va.gov-team/blob/master/platform/design/va-product-journey-maps/Veteran%20Journey%20Map.pdf>

Serving and separation

Living civilian life

Retiring and aging

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OCTO-DE goals that this research supports

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Supported

Not supported

Veterans and their families can apply for all benefits online

Veterans and their families can find a single, authoritative source of information

Veterans and their families trust the security, accuracy, and relevancy of VA.gov

Veterans can manage their health services online

VFS teams can build and deploy high-quality products for Veterans on the Platform

Logged-in users have a personalized experience, with relevant and time-saving features

Logged-in users can update their personal information easily and instantly

Logged-in users can easily track applications, claims, or appeals online

Measures to increase

Completion rate of online transactions

Percent of applications submitted online (vs. paper)

Veteran satisfaction with VA.gov Benefit use and enrollment, across all business lines

Benefit value (in \$) delivered from online applications or transactions

Number of VA.gov users as a function of total Veteran population

Usage of digital, self-service tools

Measures to decrease

Time to successful complete and submit online transactions

Time to process online applications (vs. paper)

Call center volume, wait time, and time to resolution

Time from online benefit discovery to benefit delivery

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Specific questions we're looking to have answered

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- Are Veterans able to complete pre-check-in successfully from home? Do they understand the difference between pre-check-in and check-in?
- What friction points arise for Veterans during check-in? How easy or difficult is check-in to complete on VA.gov?
- What is the impact on the new poster addressing low vision concerns?
- How do Veterans refer to the check-in process?
- How do MSAs interact with Veterans during the check-in process? What impact does pre-check-in and check-in have on MSAs workflow?
- What are the overall impressions of check-in among Veterans and staff?
- How are patient record flags currently used by staff?
- How would adding telephone appointments to the pre-check-in experience impact staff workflow?



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Methodology

Our research methodology

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We visited St. Louis Healthcare System (St. Louis) to observe and conduct intercept interviews with Veterans when they arrived for medical appointments. We interacted with Veterans during the check-in process, documented how their experience went with PCI and asked follow-up questions to understand what went well and what didn't go well.

We were able to observe Veterans in multiple clinics at St. Louis VAMC, North County CBOC and Olive Street VA Clinic.

We also observed and interviewed a variety of VA staff at those clinics who have a role in PCI – MSAs, clinic administrators and clinicians.

The [research plan, conversation guide and session notes](#) can be found on VA's GitHub repository for additional information.



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Who we spoke with

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Veterans

- 59 Veterans were observed during check-in
 - 17 (29%) of the 59 Veterans either did not have a mobile device with a data plan or were unable or willing to use the mobile check-in process
 - Due to the intercept method used for this research, we were unable to collect demographic information that supports the VA's inclusive research guidelines

Staff

- 9 MSAs or clinic administrators
- 6 clinicians

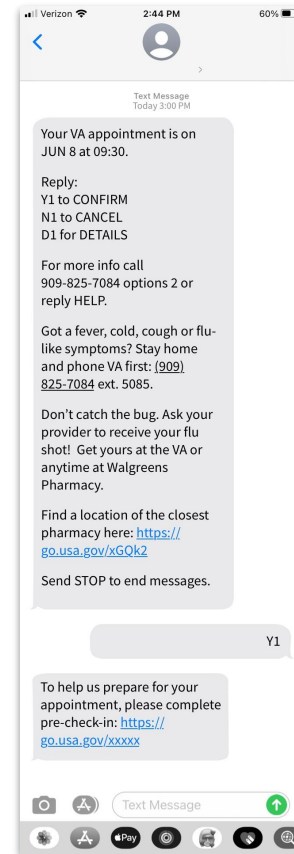
Note: Of the 42 (71% of total) Veterans that did begin the check in process, not all resulted in a “happy path” check-in.

Veteran Research Findings

Pre-check-in use

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- **When asked if Veterans remember completing pre-check-in, almost all either thought, a) they completed it by confirming their appointment through text, or b) they weren't aware it existed.**
- One Veteran mentioned that they receive too many text messages from the VA to easily spot the pre-check-in message. (**"It looks like all the other messages."**) They suggested that they may be more inclined to see the text message if it wasn't an immediate response tied to the appointment confirmation.
- Most Veterans were unaware of pre-check-in's value to them.



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Veterans arriving early at clinics

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- We observed many Veterans arriving 1 hour early (i.e., 30 minutes prior to check-in availability) for their scheduled medical appointments as a result of a number of reasons:
 - Travel arrangements
 - Provider/clinical staff recommendation
 - Typically requires caregiver assistance
- We learned that it can be frustrating for Veterans, especially those that require caregiver assistance, to wait to check in to only learn that they have to stand back up and see the MSA to confirm their information.
- We also heard from clinicians that they like to know if their patients are there early because there's a chance they can be seen earlier (especially for morning appointments).

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Poster placement learnings

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- If posters weren't in line of sight of Veterans between them entering the clinic and walking up to the MSA counter, then Veterans often missed them altogether.
- In turn, this created a small waiting line at some clinics (for staff to provide help).
- Check-in posters were often competing with others for real estate.



Note: Some posters were altered to include a VA logo (we suspected for authenticity and credibility).

Poster use

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- Veterans chose to use SMS text vs. QR code equally.
- However, many Veterans had difficulty using the QR code:
 - Had never encountered
 - Outdated photo app that doesn't recognize QR codes
 - Hard to tap link when scanned
 - Didn't realize that they needed to click "send" on the text message
- No Veteran mentioned having difficulties being able to read the new poster.


Have an appointment? Check in with your smartphone

1 Text **check in**
to **53079**

To:
53079

Message:
check in

OR scan this code
with your camera.



2 Wait until you get a text back with a link.
This should only take a few seconds.

3 Tap on the link to start your check-in.
Data charges may apply.

Can't scan the QR code? Text us instead ☺

Need to update your information? Check in with a staff member instead ☺

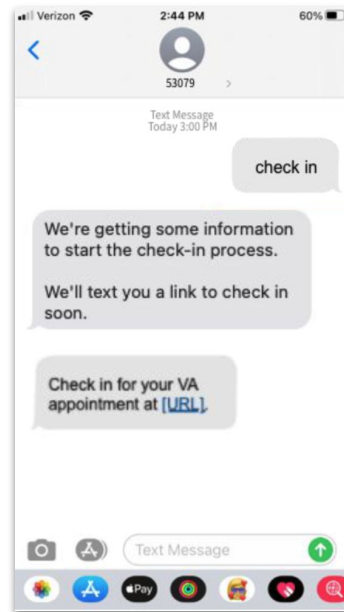


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Text message and VA.gov response timing

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- Initial response from CHIP/VeText following “check in” was immediate. The second message from CHIP/VeText took 3-15 seconds on average to arrive. Although not a lengthy time, it had the potential to create a line at the MSA counter.
- Depending on the strength of cell service for the Veteran’s mobile device, it took anywhere from 5-15 seconds on average to load VA.gov.
- And, at times, we observed that the Contact Information page was slow to load. There were a few scenarios where the bottom of the page loaded first, requiring the Veteran to scroll up to view the question.



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MSAs still interacted with most Veterans

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- Most MSAs still interacted with Veterans because of their proximity to the clinic entrance. Other reasons included:
 - Veterans may not have seen the check-in posters
 - MSAs offered to assist them through the check-in process, e.g., to get them comfortable
 - Some Veterans needed assistance using their mobile device
- **“It was much easier since you helped me.”** - Veteran
- There were moments that MSAs reached “hard stops” with Veterans either as a text or on VA.gov. In a few of those scenarios, MSAs didn’t know how to correct the issue and instructed the Veteran to try again, which led to a repeat failure (and frustrating experience for both).
- Although MSAs ensured all Veterans were checked in to VSE-GUI, many still messaged providers in Teams to let them know their patients had arrived (likely due to technical issues the clinic has previously experienced with check-in).



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When asking Veterans what to call PCI

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- Most Veterans didn't have a response when prompted on what they would call the check-in process. However, a few Veterans suggested the following:
 - Check-in
 - Mobile check-in
- In addition, there's been at least one staff member saving "53079" in Veteran's phones as "VA Check In," and instructing them to use this contact for subsequent check-ins. We witnessed this contact saved on multiple phones. Other Veterans often asked, **"Can we save this number and use it again?"**



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Overall Veteran perception of check-in

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For those that were able (e.g., have a cell phone, data plan, able to use cell phone, etc.) and willing to use mobile check-in, using it still had a mixed sentiment among Veterans. Returning patients were the most confident using check-in, often checking in from their car or as they walked into the clinic. Younger Veterans – although, we didn’t have a way of verifying age – seemed to have an easier time adjusting to the new process.

Positive

“It [mobile check in] was better than the kiosk.”

“It was super easy to get checked in.”

“Love how it works. It works really well.”

“I like not having to wait in a long line.”

“It was hard at first, but it’s been good now.”

Somewhat negative

“Don’t use a cell phone. Never do.”

“It would have been easier if I had just spoken to them [MSA].”

“It was pretty difficult.”

“What are they going to have us do next?”

Veterans and staff that we observed at the eye clinic were less enthusiastic about the check-in process compared to other clinics, likely because it’s difficult for many within this population to use their mobile device effectively.



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A few Veterans also asked about...

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- If there's plans to include travel reimbursement within check-in.
- If they're able to make changes to their information (vs. having an MSA update their information in the back of house systems).
- Their caregiver being able to check-in for them (on the caregiver's mobile device).
- Checking in for walk-in appointments for blood work, etc.



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Staff Research Findings

MSA's overall impressions on how it's going

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The most common complaint received is that cellular service isn't very good in many locations, which prohibits check-in among Veterans. The second most common complaint is technical issues. E.g., where there is lag seeing data in VSE-CS or the system [or one of the applications] is down for everyone or specific users.

“Some Veterans don't get good cellular service in the office. In addition, many of the Veterans do not have unlimited plans, so they get charged for each text message. Sometimes, cellular service may be turned off too and the Veteran doesn't know how to connect to WiFi or turn off airplane mode.” - MSA

“[There's] potential to reduce work and improve wait times when the system is functioning properly and [when] Veterans have more fully adopted it.” - MSA

“It has impacted our work for the better. But, it really hurts us when the system is slow.” - MSA



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The impact on MSA's jobs were varied by clinic

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“Work has increased and we get yelled at by patients [exclaiming] that check-in is difficult, takes too long and that they shouldn’t have to use a phone.” - MSA

However, we’ve identified training as a major factor on whether their job seems greatly impacted or not. I.e., how comfortable they are with the new processes and staff tools. Not only is it the amount of training, but also whether or not they’ve been told and/or trained to use VSE-CS, in addition to VSE-GUI. Of course, clinic type and staffing at the clinic (e.g., amount, personnel, etc.) are also factors.

What was new to us is that some MSAs are using and have been instructed to use VSE-CS. Thus, direction on how to use these systems had some inconsistencies across clinics or even individual MSAs.

There’s a variety of reasons why MSAs may be using VSE-CS. E.g., it’s how they’ve been trained, how their clinic operates for managing patients during their visit, whether clinicians use VSE-CS at the clinic or for reasons we haven’t yet learned.

We also learned that MSAs in some clinics were more persistent in requiring Veterans to use mobile check-in vs. simply using VSE-GUI to check them in manually.

Clinicians raised concerns, but positive outlook

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- **Clinicians in multiple clinics were frustrated at VSE-CS and said it doesn't work. E.g., pointing to concern around time it takes for statuses to update.** Their work has increased considerably, which is negatively impacting patient care. They are constantly having to go to the waiting room to look for patients. Then, they have to stop and assist Veterans with check-in.
- Two OT's were very unhappy with VSE-CS, primarily because of its slowness in updating patient statuses, but also how it was rolled out. **"No one knew about it; neither staff or Veterans."**
- **However, when VSE-CS is working as it's supposed to, they like it.** For example, in the dermatology clinic, the nurse who functions as a coordinator between the front office and the nurses uses VSE-CS and really likes it. They're able to easily see if and when a patient has arrived.



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Customer service drives positivity, adoption

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- The Speciality Care clinic at St. Louis VAMC had a staff member dedicated to helping Veterans with mobile check-in.
- The excellent customer service this individual brought to the clinic was overwhelming positive and felt by many Veterans.
- Even still, they said, at times half the waiting room could be happy, while the other half is much less tame because of one individual with a negative outlook affecting the entire room.



Staff's recommendations for VSE-CS, etc.

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- Many clinicians mentioned they'd like to see alerts in VSE-CS that persist to notify them that patients are checked in and ready to be seen. Or, highlight the row when statuses change.
- Would like to see visual indicators, like sounds, colors, flashing, etc., to know that the screen has refreshed and there is new information.
- One OT requested that alerts be sent to their VA pager when a patient checks in. This solution was proposed because the OT does not have a laptop and has to go back to their office to find out if their patient has arrived. (Other clinics also had clinicians that don't have easy access to a computer.)
- Adding last 4 digits of SSN in VSE-CS seemed helpful to most clinicians and MSAs.
- Two clinicians talked about the need for an "other" option in the VSE-CS's Workflow dropdown that offered an open text box. E.g., to document which provider the patient is with or enter information specific to their clinic. (It was mentioned this option was available in the previous system.)
- The MSAs in the Speciality Care clinic would like the patient summaries to print out automatically when the patient checks in. They'd like to see the patient's future appointments added to the Patient Summary, as well as current medications, but not discontinued medications.
- One nurse would like the ability to use filters to shorten the list of patients by check-in status in VSE-CS, such as only show checked-in patients.



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When asked about patient record flags

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Staff at each clinic responded differently on the need for adding patient record flags to VCE-CS.

- MSAs don't always look at the patient record flags, depending on how busy they are. Most know who the patients are and their needs.
- "We don't use patient flags. Not useful in VSE-CS. We typically see the flags in CPRS and acknowledge them." - Clinician
- "Would like to see patient flags added to VSE-CS on the Workflow List as an indicator near the patient name (or in a new column). Hover text would be great. I want to avoid clicking to get the information." - Nurse
- "The flag should pop up when the patient checks in." - Nurse
- Some clinics use national, local, behavioral or both types of flags.
- Two OT's said patient flags are not needed in VSE-CS. Patient flags are in CPRS and it would be overkill to have them in both places.



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Each clinic handles phone appointments differently

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- Some clinics do more telephone appointments than others, typically based on the speciality, acuity of injuries, reason for visit, etc. E.g., physical therapy can't not do phone appointments.
- The pre-registration process varies between clinics. E.g., MSA may call before or after the appointment – depends on how busy they are – or sometimes a nurse will call.
- One clinician was asking whether or not they could check a patient in through VSE-CS since MSAs aren't involved with VSE GUI/check-in for telephone appointments. Sometimes, the MSA will mark them as a “no show” the following day because it appears the patient never arrived.



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Summary of Key Findings

Summary of key findings

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Veteran-facing experience

- Many Veterans feel they shouldn't have to use their own phone to check in at the VA. However, younger Veterans and returning patients have adopted mobile check-in with less resistance.
- Pre-check-in was not widely used by Veterans because it's overlooked and conflated with the initial appointment confirmation message.
- Veterans were frustrated that they had to wait to check in when arriving too early for appointments.
- The new poster addressing low vision concerns was successful, but requires additional testing with Veterans that identify as having low-vision.
- If posters weren't in line of sight of Veterans between entering the clinic and walking up to the MSA counter, then Veterans often missed them altogether.
- Network and cell signal strength are variable between clinics and individuals, which greatly affects the speed and efficacy of PCI. E.g., 3-15 seconds to receive second text message from CHIP/VeText, 5-15 seconds for VA.gov page to load.
- Veterans appreciate the help from MSAs when checking in. However, it's increased the workload of many MSAs.

Summary of key findings, cont.

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Staff-facing experience

- MSAs see value in allowing editing of demographic information in pre-check-in.
- Some staff felt that the roll out lacked proper communication and training. The amount of training MSAs received was a major factor on whether they felt their job was greatly impacted.
- Some MSAs were using VSE-CS, which was not the original intent, to either avoid the “lag” between VSE and VSE-CS, use fewer applications or for reasons we do not yet understand.
- Technical and network issues have been the root of some staff unhappiness, however most see the potential of check-in once those issues are resolved.
- Staff had a variety of recommendations for VSE-CS, including more visual alerts for status changes, open text box option for Workflow status, adding last 4 digits of SSN and filtering options in Workflow.
- Some staff see value in adding patients flags to VSE-CS, while others are content with using CPRS.
- Each clinic handles pre-registration differently for patients with telephone appointments.



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Recommendations and Next Steps

Recommendations and next steps

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Pre-check-in

- Explore opportunities to increase utilization of pre-check-in with Veterans (and ensure it doesn't "get lost").
 - Test new text messages (e.g., test moving the pre-check-in link into initial confirmation text message)
 - Send text message at a different time or day after confirming their appointment
 - Send pre-check-in message multiple times, if not completed
 - Explore email for pre-check-in
- Consider implementing editing of demographic information in pre-check-in to add value for Veterans.

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Recommendations and next steps, cont.

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Check-in

- Consider implementing a push text message on day of appointment instead of relying on a poster in the clinics, e.g., pushing the check-in link out to Veterans (knowing that Veterans are arriving earlier than 30 minutes). And, consider increasing the check-in window beyond 30 minutes.
- Look for opportunities (via an audit) to provide more context in error messages on VA.gov pages to expedite check-in process for Veterans and staff.
- Explore opportunities to improve the CHIP/VeText response when 0 appointments are found. E.g., avoid Veteran confusion if/when directed to va.gov/find-locations.
- Work with engineers to replicate (and correct, if possible) the scenario where users are starting lower on the page after identity verification.

Check-in poster

- Consider finding a way to include the “30 minute window” message into the poster to increase Veteran satisfaction. In addition, consider adding a VA logo to the poster to add credibility and authenticity.
- Look into creating recommendations and guidelines for poster placement in clinics.

Recommendations and next steps, cont.

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Staff-facing applications

- Continue to look for opportunities to improve lag time between VSE-GUI and VSE-CS.
- Share findings with stakeholders and training team about the impact that the amount of training has on MSA's workload. I.e., with a goal to create better consistencies on how staff use these applications, how they work with Veterans to get checked in and how to mitigate when Veterans reach hard stops within the application.
- Talk to more MSAs to understand why they're using VSE-CS.
- Share findings with stakeholders and training team on successes of a dedicated staff member helping Veterans with mobile check-in.
- Work with VSE-CS team to understand and prioritize suggested improvements to VSE-CS. E.g., more visual alerts for status changes, open text box option for Workflow status, adding last 4 digits of SSN, filtering options in Workflow List, etc.



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Recommendations and next steps, cont.

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Feature enhancements

- Talk with additional staff to understand if patient record flags are desirable in VSE-CS.
- Cross-reference telephone appointment findings with usability testing findings to determine if additional gaps exist prior to piloting.
- Prioritize feature enhancements with PCI product owners, including:
 - Integration of travel reimbursement into check-in
 - Ability for caregivers to check in for Veterans
 - Expansion into walk-in appointments



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Thank you

[Condensed presentation \(this report\)](#)

[Full presentation](#)



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