

VA's Video Telehealth Tablets, Access to Mental Health Care, Suicide Risk Assessment, and Suicidal Behavior among rural and urban Veterans

Suicide Prevention Cyberseminar Series

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Agenda

1. Impact of VA's video telehealth tablets on mental health access, emergency department (ED) visits, and suicide-related ED visits among rural Veterans with mental health needs.
2. Impact of tablets on an expanded cohort including urban Veterans to examine disparities
3. Impact of tablets on suicide-related VA hospitalizations and potential rural-urban differences
4. Impact of tablets on patients diagnosed with substance use disorder
5. Finally, we discuss VA's Suicide Risk Identification Strategy (Risk ID) modified in November 2020, when VA implemented a universal screening requirement that may be particularly advantageous for rural Veterans.



From: **Mental Health Service Use, Suicide Behavior, and Emergency Department Visits Among Rural US Veterans Who Received Video-Enabled Tablets During the COVID-19 Pandemic**

Potential Disparities in the Impact of VA Tablets on Psychotherapy Use, *Under Review*

Impact of VA Tablets (and Telehealth) on suicide-related hospitalizations and suicide deaths and potential disparities, *Ongoing and future work*

Impact of VA's video telehealth tablets on substance use disorder care during the COVID-19 pandemic, *forthcoming in JSAT (Journal of Substance Abuse Treatment)*

PLOS ONE

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RESEARCH ARTICLE

VA's implementation of universal screening and evaluation for the suicide risk identification program in November 2020 -Implications for Veterans with prior mental health needs



From: **Mental Health Service Use, Suicide Behavior, and Emergency Department Visits Among Rural US Veterans Who Received Video-Enabled Tablets During the COVID-19 Pandemic**

Mental Health Service Use, Suicide Behavior, and Emergency Department Visits Among Rural US Veterans Who Received Video-Enabled Tablets During the COVID-19 Pandemic

Gujral, K., Van Campen, J., Jacobs, J., Kimerling, R., Blonigen, D., & Zulman, D. M. (2022). Published in *JAMA Network Open*.

Background: Suicide rates among rural and urban residents

- U.S. suicide rates are at their highest since World War II, with > 0.5 million suicides during 2001-2015.
- Suicide is increasingly affecting U.S. residents in rural vs. urban counties (17.32 vs. 11.92 per 100,000 people).
- Veterans' suicide rate has consistently been 1.5 times that of non-veterans.
- Veteran patients in rural (vs. urban) areas are more likely to die by suicide.
- The COVID-19 pandemic intensified risk factors for suicide which disproportionately affect rural residents such as social isolation, intimate partner violence, and firearm access.

Mental Health Service Use, Suicide Behavior, and Emergency Department Visits Among Rural US Veterans Who Received Video-Enabled Tablets During the COVID-19 Pandemic

Gujral, K., Van Campen, J., Jacobs, J., Kimerling, R., Blonigen, D., & Zulman, D. M. (2022). Published in *JAMA Network Open*.

Background: Access to mental health care and suicide prevention care

- Many Veterans have mental health conditions that frequently go untreated due to access barriers and concerns about stigma.
- Reduced interaction with routine health care during the pandemic exacerbated access problems and reduced opportunities to screen and treat residents for suicide risk, challenging suicide prevention efforts.
- The pandemic's silver lining, the expansion of telehealth, may improve access to mental health care and help prevent suicides, and especially for rural or underserved Veterans who face greater access barriers and are at higher risk for suicide.
- However, there is a lack of evidence on the effectiveness of telehealth for suicide prevention.

Mental Health Service Use, Suicide Behavior, and Emergency Department Visits Among Rural US Veterans Who Received Video-Enabled Tablets During the COVID-19 Pandemic

Gujral, K., Van Campen, J., Jacobs, J., Kimerling, R., Blonigen, D., & Zulman, D. M. (2022). Published in *JAMA Network Open*.

Background: VA's video-enabled tablets to improve access to care

- VA has been leading efforts to expand telehealth to address access issues among Veterans residing in rural areas.
- In 2016, VA's Offices of Rural Health (ORH) and Connected Care (OCC) began distributing video-enabled tablets to Veterans with access barriers to facilitate their participation in home-based telehealth.
- VA's tablet distribution efforts escalated during the COVID-19 pandemic. As of August, 2022 there were approximately 130,000 tablets in circulation.
- About 93% of all VA-issued tablets were issued during the pandemic. Approximately 31% of the tablets issued during the pandemic were issued to Veterans living in rural areas.

Mental Health Service Use, Suicide Behavior, and Emergency Department Visits Among Rural US Veterans Who Received Video-Enabled Tablets During the COVID-19 Pandemic

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Objective:

- Given the lack of evidence about telehealth's effectiveness for suicide prevention and potential threats to mental health care access and suicide prevention care during COVID-19, VA's escalated tablet distribution during the pandemic presented an opportunity to pilot a scenario in which rural Veterans face one less barrier to accessing home-based telehealth: smart device-ownership.
- Focusing on rural Veterans with indicated mental health needs, we evaluated the impact of VA's video-enabled tablets issued during COVID-19 (March 2020 to April 2021) on the monthly frequency of:
 - Mental health visits for psychotherapy and medication management (video and across all modalities)
 - Comprehensive Suicide Risk Evaluation (CSREs) (video and across all modalities)
 - Emergency department (ED) visits,
 - Suicide-related ED visits
 - Suicide Behavior and Overdose Reports (SBORs)

Mental Health Service Use, Suicide Behavior, and Emergency Department Visits Among Rural US Veterans Who Received Video-Enabled Tablets During the COVID-19 Pandemic

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Intervention: VA's Video-enabled Tablets

- Veterans were eligible to receive VA's video-enabled tablets with data plans if they did not own a device with internet connectivity or cellular internet service.
- Veterans were prioritized for receiving tablets if they had an access barrier such as transportation challenges, or residing far from a VA facility, or if they complex clinical needs such as a mental health condition.
- Providers initiated tablet consultation meetings for patients they thought would qualify. If Veterans were considered eligible, tablets were ordered to be mailed to those Veterans.

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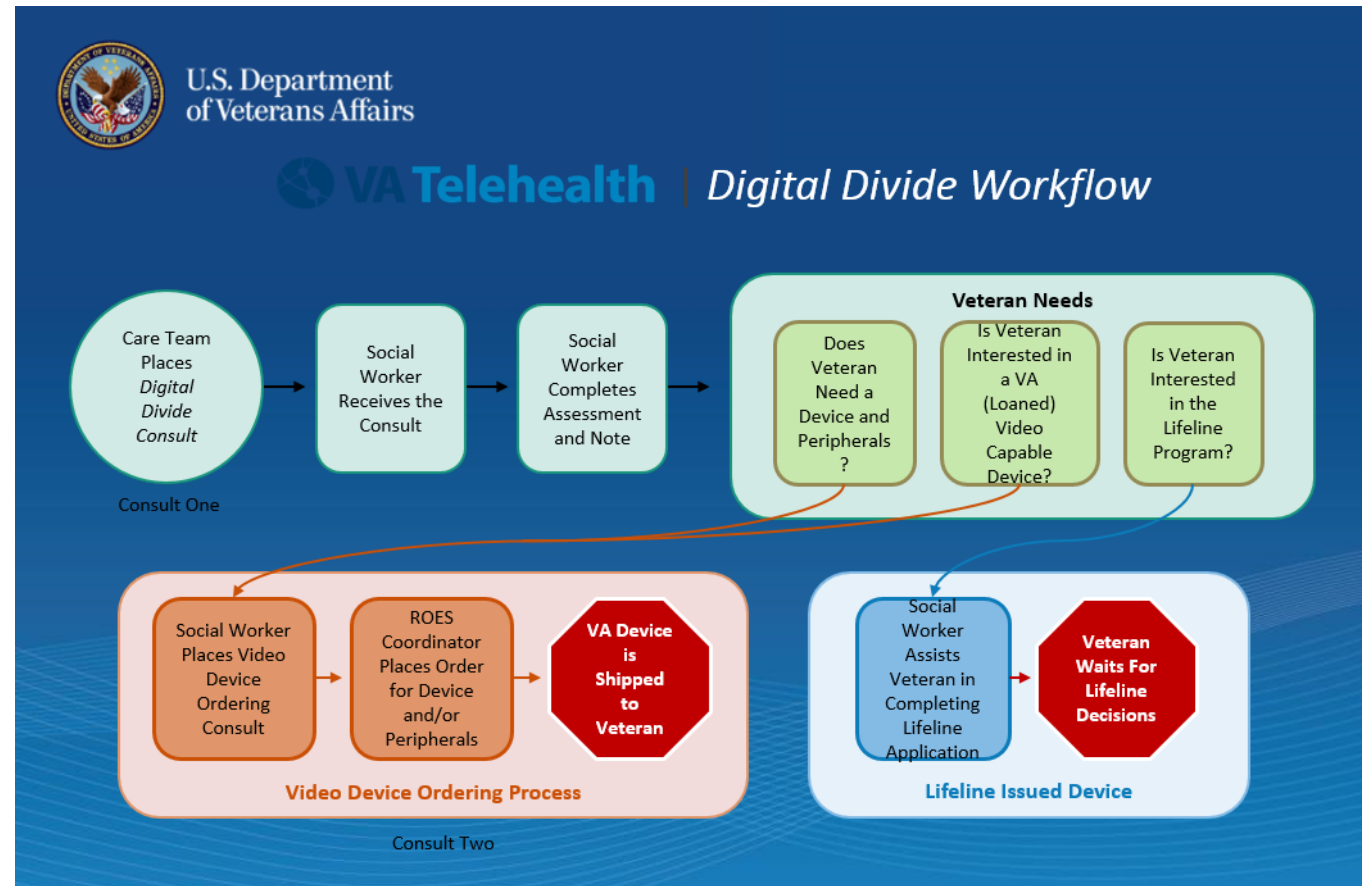
Intervention: VA's Video-enabled Tablets

- The Digital Divide Consult was launched in the summer of 2020 and implemented at all sites by September 15th, 2020.
 - Digital Divide Consult replaced the Video Telehealth Tablet Consult at all facilities.
 - The consult has evolved since its first inception and continues to evolve.

Additional details about the Digital Divide Consult can be found here:

https://vaots.blackboard.com/bbcswebdav/xid-714516_1

<https://telehealth.va.gov/digital-divide>



Mental Health Service Use, Suicide Behavior, and Emergency Department Visits Among Rural US Veterans Who Received Video-Enabled Tablets During the COVID-19 Pandemic

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Methods:

- **Study Cohort:** Veterans living in rural areas who had at least 1 VA mental health visit in 2019. We also examined a sub-cohort of rural Veterans who VA predicts to be at higher risk for suicide (“REACHVET”^{*}).
- **Study Design:** Event study and difference-in-differences analyses.
 - Compared outcomes for patients who received tablets during COVID-19 with patients who were not issued tablets, over 10 months before and after tablet-shipment.
 - Adjusted for age, sex, race, ethnicity, homelessness, distance from VA, chronic conditions, risk of hospitalization, indicator for suicide risk, county COVID-19 cases, VA facility, month effects, and the time-invariant or fixed difference between recipients and non-recipients.
 - Event study methodology allows for seeing outcome trends pre-tablet issuance. If there are no differences in adjusted outcomes between tablet recipients and non-recipients in the pre-tablet period, and if there are abrupt differences between them in the post-tablet period, then tablets are considered to have an impact.

Mental Health Service Use, Suicide Behavior, and Emergency Department Visits Among Rural US Veterans Who Received Video-Enabled Tablets During the COVID-19 Pandemic

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Results: Baseline Frequency of Outcomes

	Rural tablet non- recipients	Rural tablet recipients
	<i>N=458,611</i>	<i>N=13,180</i>
Any Psychotherapy Visit	56,775 (12%)	2,534 (19%)
Any Video Psychotherapy Visit	640 (0.1%)	673 (5%)
Any Video Medication Management Visit	378 (0.1%)	317 (2%)
Any Video Visit for a Comprehensive Suicide Risk Evaluation (CSRE)	14 (0.003%)	17 (0.013%)
Any ED Visit	25,050 (5%)	775 (6%)
Any Suicide-Related ED Visit	850 (0.2%)	68 (0.5%)
Any VA Suicide Behavior or Overdose Report	576 (0.1%)	64 (0.5%)

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Results: Baseline Covariates

	Rural tablet non- recipients	Rural tablet recipients
Female	52,066 (11%)	1,563 (12%)
Age, mean	58.0	61.2
Distance to closest VHA primary care site, mean	25.5	23.8
Number of Physical Chronic Conditions in 2019, mean	4.5	5.5
Number of Mental Chronic Conditions, mean	1.8	2.3
Diagnosed with Substance Use Disorder in 2019	76,779 (17%)	3,615 (27%)
Diagnosed with Post-Traumatic Stress Disorder in 2019	208,359 (45%)	6,687 (51%)
Diagnosed with Depression in 2019	222,653 (49%)	7,476 (57%)
VA Care Assessment Needs (CAN) score	0.1	0.2
VA classification of REACHVET**		
Classified as REACHVET (but < top 1% of risk)	14,551 (3%)	1,009 (8%)
Classified as top 1% of suicide risk	954 (0.2%)	148 (1%)
Hispanic	16,778 (4%)	301 (2%)
Race		
American Indian or Alaska Native	8,208 (2%)	245 (2%)
Asian	2,107 (0.5%)	39 (0.3%)
Black or African American	59,875 (13%)	2,161 (16%)
Native Hawaiian or other Pacific Islander	3,791 (1%)	91 (1%)
White	384,630 (83%)	10,644 (80%)

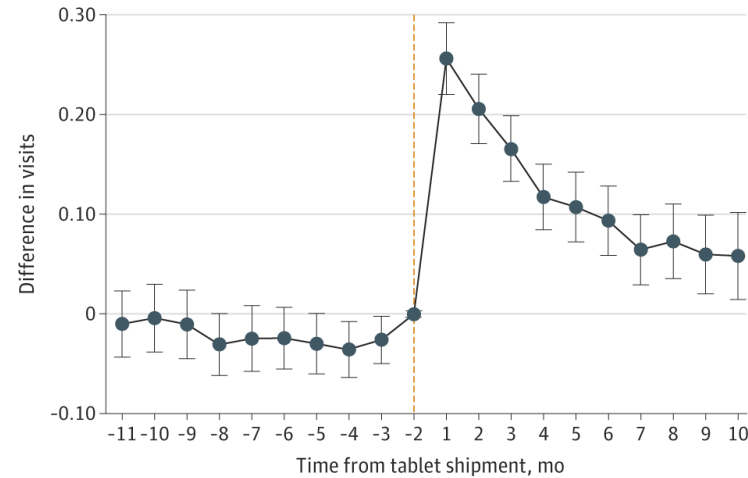
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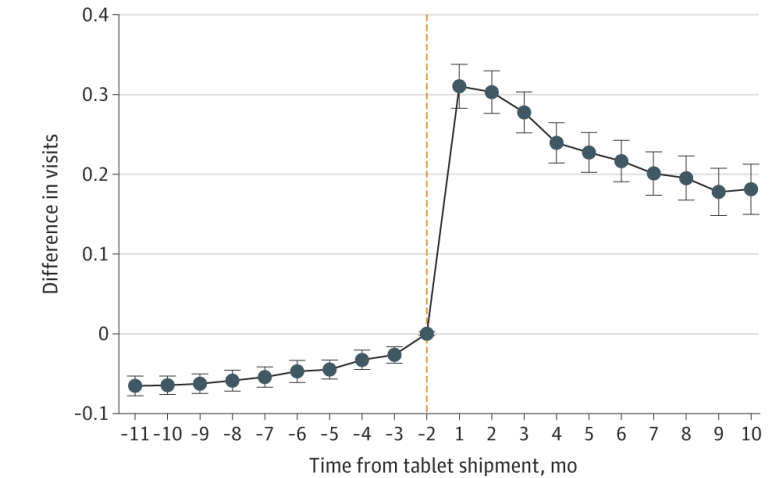
Results: Psychotherapy, Medication Management Visits, and CSREs

- Few effects or trending in the months prior to tablet receipt after adjustment.
- Significant change in the pattern of effects post-tablet shipment.
- Tablets appear to substantially increase video visits.
- As for psychotherapy visits, we examined total visits across all modalities for medication management and CSREs, but did not observe a change in visits across all modalities.

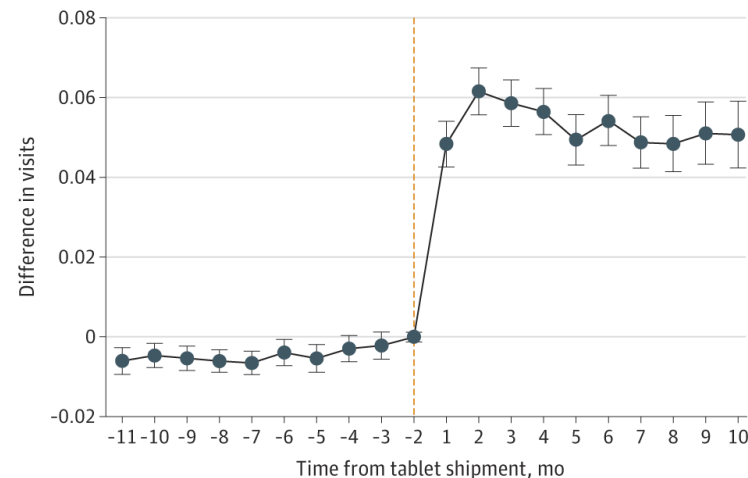
A Psychotherapy visits (all modalities) compared with baseline



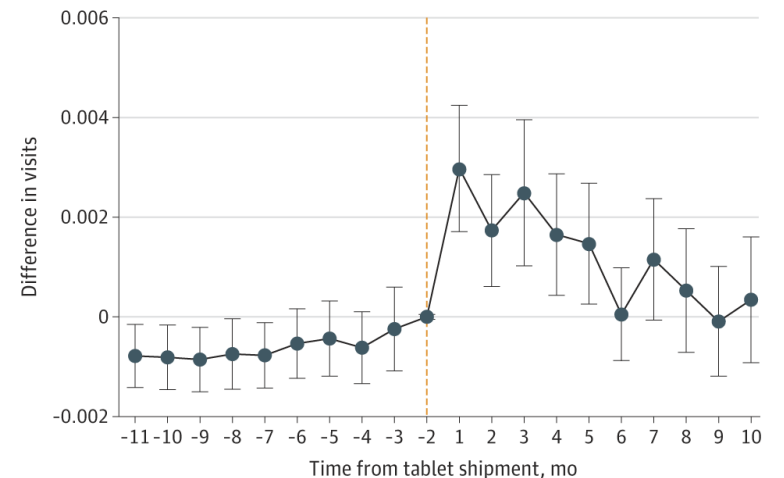
B Video psychotherapy visits compared with baseline



C Video medication management visits compared with baseline



D Video comprehensive suicide risk evaluations compared with baseline



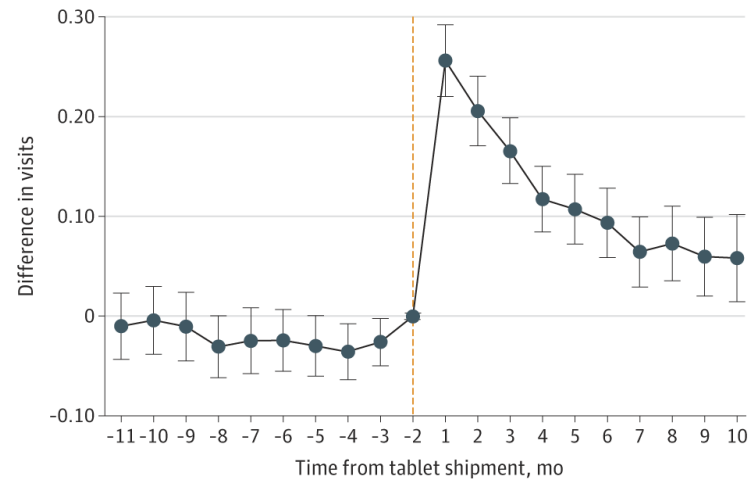
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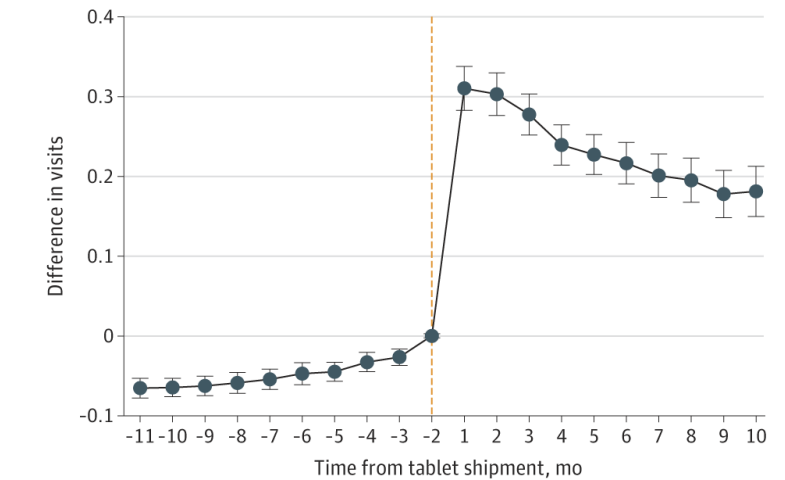
Results: Psychotherapy Visits

- Tablet-associated increase in video psychotherapy was 3.5 visits/year and across all modalities, was 1.8 visits/year.
- For the high-risk sub-cohort of rural Veterans (REACHVET), the tablet-associated increase in video visits was 5.9 visits/year and 3.1 psychotherapy visits/year.
- For context, the baseline frequency of psychotherapy visits for tablet-recipients in our full-cohort was 5.5 visits/year and in the high-risk sub-cohort (REACHVET) was 13.7 visits/year.
- Thus, tablet-associated increases of 1.8 visits/year for the full cohort and 3.1 visits/year for the high-risk sub-cohort (REACHVET) translated to increases of 33% and 23%, respectively.

A Psychotherapy visits (all modalities) compared with baseline



B Video psychotherapy visits compared with baseline



Mental Health Service Use, Suicide Behavior, and Emergency Department Visits Among Rural US Veterans Who Received Video-Enabled Tablets During the COVID-19 Pandemic

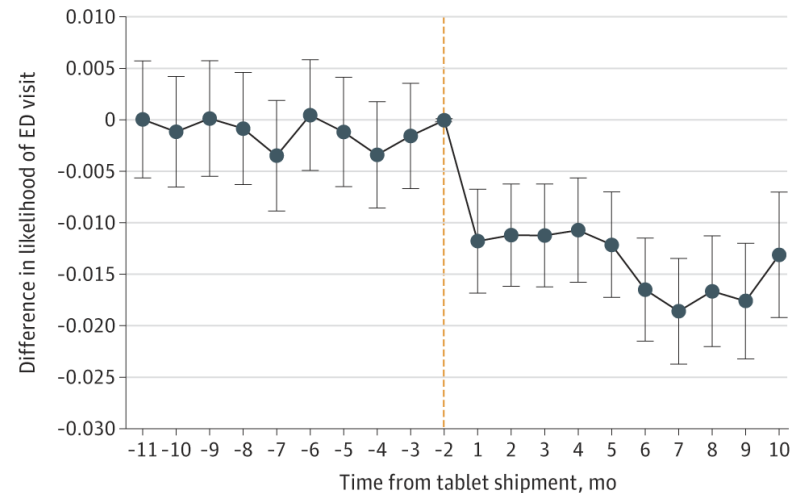
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Results: Emergency Department Visits, Suicide-related Emergency Department Visits, and Suicidal Behavior & Overdose Reports

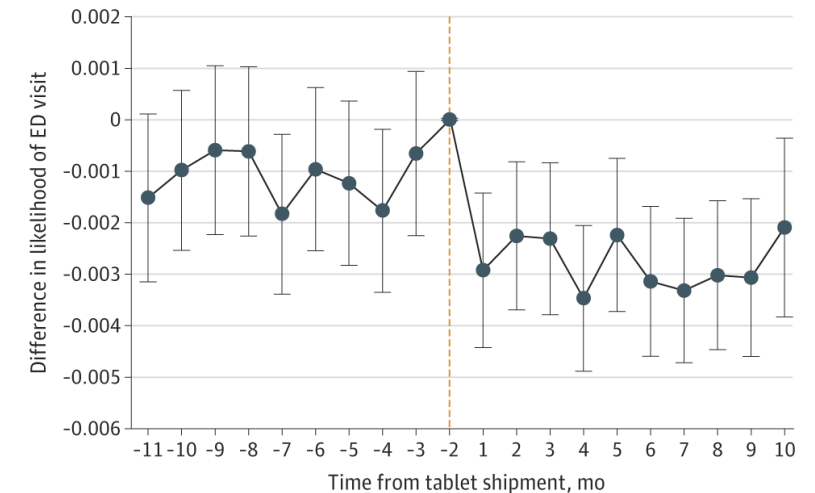
Tablets were associated with:

- 20% reduction in emergency department (ED) visits,
- 36% reduction in suicide-related ED visits, and
- 22% reduction in reports of suicidal behavior.

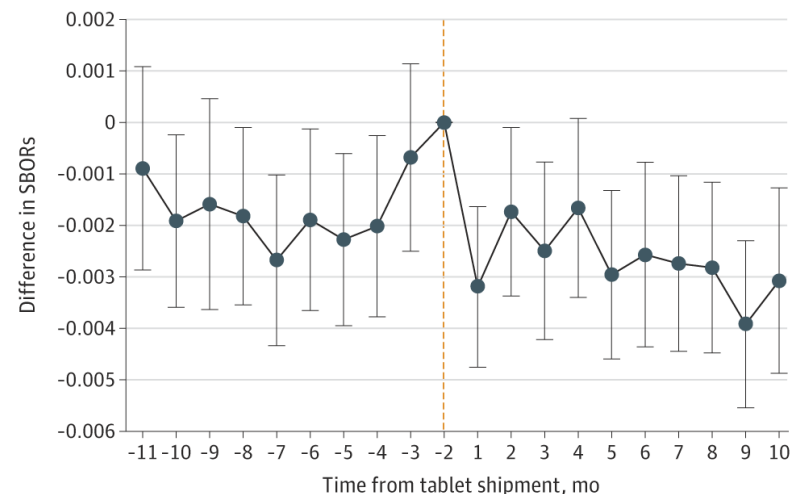
A Any ED visit compared with baseline



B Any suicide-related ED visit compared with baseline



C VA SBORs compared with baseline



Mental Health Service Use, Suicide Behavior, and Emergency Department Visits Among Rural US Veterans Who Received Video-Enabled Tablets During the COVID-19 Pandemic

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Discussion

- Video visits replaced phone or in-person visits in some cases but constituted new or additional visits in other cases.
- Tablets were associated with clinically significant increases in psychotherapy (across all modalities) of 1.8 visits/year for the full cohort and 3.1 visits/year for the high-risk sub-cohort, which translated to increases of 33% and 23%, respectively, compared to baseline.
- Clinical significance is further emphasized by our complementary findings that tablets were associated with decreases in likelihood of ED visits, suicide-related ED visits, and decreases in suicide behavior and overdose reports.
- These results reinforced an earlier pre-pandemic finding that tablets improved continuity of mental health care, and extended prior work by focusing specifically on rural Veterans and demonstrating that the effect of tablets extends to reductions in ED visits and suicidal behavior, including in the high-risk sub-cohort of rural Veterans.

Potential Disparities in the Impact of VA Tablets on Psychotherapy Use, *Under Review*

Potential Disparities in the Impact of VA Tablets on Psychotherapy Use

Gujral, K., Van Campen, J., Jacobs, J., Lo, J., Kimerling, R., Blonigen, D., Wagner, T. & Zulman, D. M. (2023). *Under Review – please do not cite.*

Background:

- Research has pointed to a digital divide, particularly among rural residents and racial and ethnic minorities who may lack access to computers, smart devices, or broadband or high-speed internet availability.
- Digitally isolated individuals often have a higher prevalence of chronic diseases and critical needs for health care.
- At the same time, telehealth can improve access to care for many individuals.
- Recent studies have suggested that telehealth may have mitigated the impact of the pandemic on utilization and health disparities.
 - For example, women typically face greater access barriers due to a disproportionate burden of caregiving and logistical difficulties in seeking care, and prior research suggests women had a greater desire to avoid in-person care during the pandemic.
 - However, women may be more inclined to use telehealth services than men, which can mitigate the influence of existing access barriers.

Potential Disparities in the Impact of VA Tablets on Psychotherapy Use

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- **Objective:** Given that technological advances such as reliance on telehealth could inadvertently increase health inequities but could also ameliorate disparities, we built upon our prior work and examined the impact of tablet on differences in psychotherapy use between rural and urban patients, Black and white patients, and women and men.
- **Study cohort:** rural and urban Veterans with a mental health visit in 2019 and an expanded cohort of tablet recipients (March 2020 to December 2021).
 - 64,000 tablet recipients & 1.4 million non-recipients
 - Rural: 18,481 tablet recipients & 422,439 non-recipients
 - Urban: 45,283 tablet recipients & 992,197 non-recipients
 - Black: 21,078 tablet recipients & 358,312 non-recipients
 - White: 40,728 tablet recipients & 997,978 non-recipients
 - Women: 8,958 tablet recipients & 204,733 non-recipients
 - Men: 54,806 tablet recipients & 1.2 million non-recipients
- **Study design:** Event study and difference-in-difference analyses comparing tablet recipients and non-recipients, before and after tablet receipt.

Potential Disparities in the Impact of VA Tablets on Psychotherapy Use

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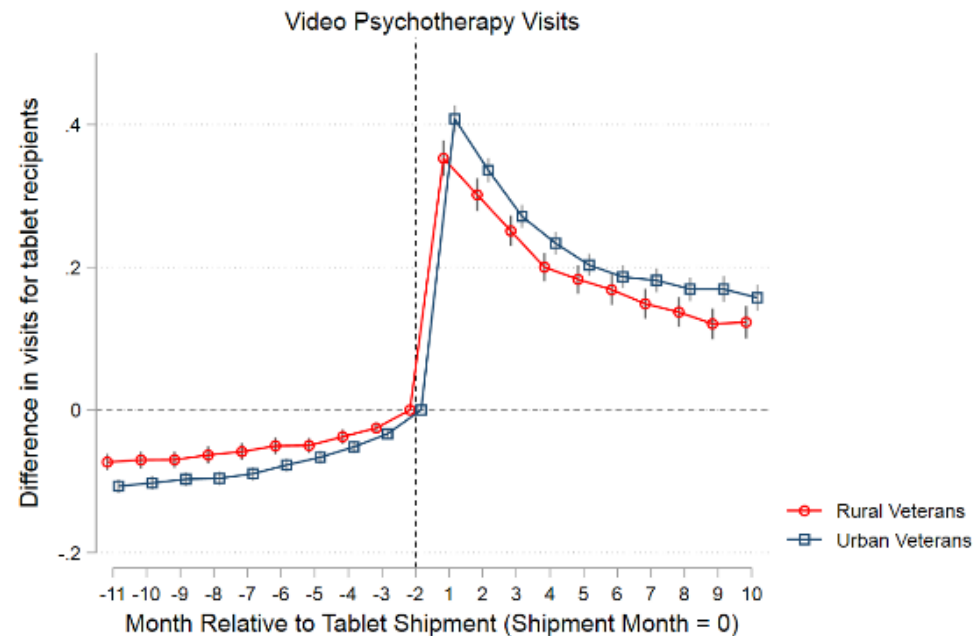
Results:

- Receiving a VA video telehealth tablet was associated with increased psychotherapy use across all the sociodemographic subgroups examined, although we observed modest variations in the extent of increase across these groups (described in subsequent slides.)

Potential Disparities in the Impact of VA Tablets on Psychotherapy Use

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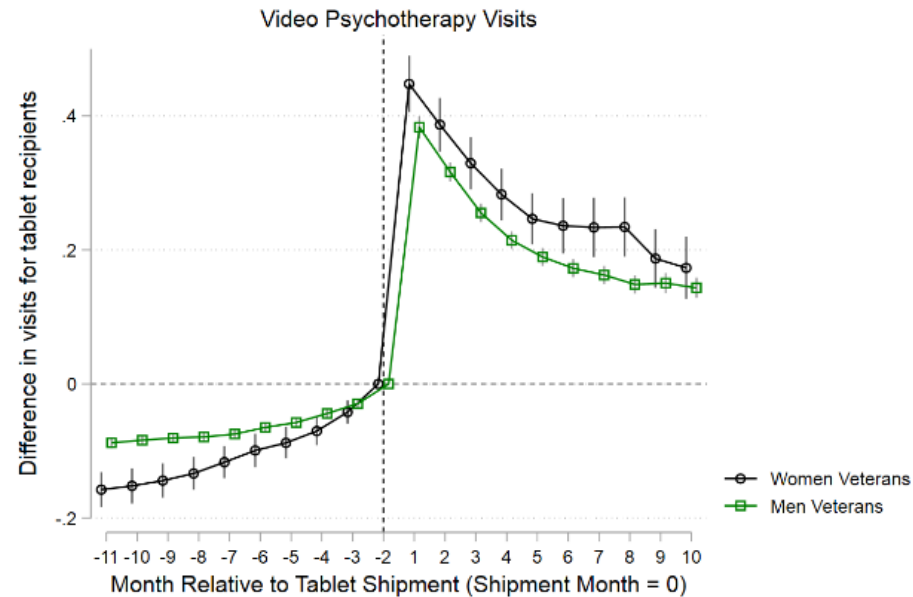
Results: Rural (vs. urban) tablet-recipients had 0.6 fewer video psychotherapy visits/year post-tablets, but they experienced similar increases in psychotherapy visits across all modalities (rural: +27.4%; urban: +24.6%).



Potential Disparities in the Impact of VA Tablets on Psychotherapy Use

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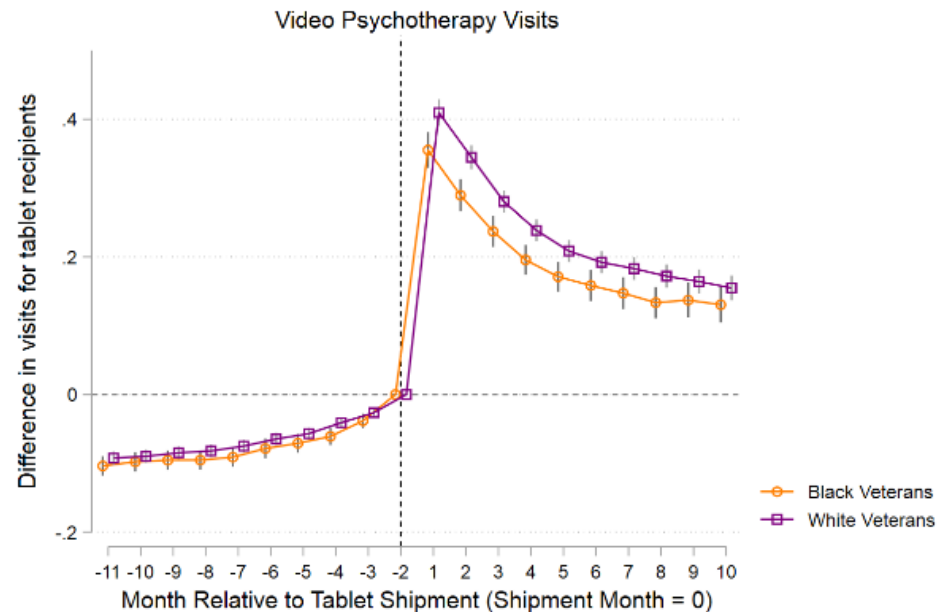
Results: Women (vs. men) tablet-recipients had 1.2 more video visits/year and 1 more visit/year across all modalities (women: +30.5%; men: +24.4%).



Potential Disparities in the Impact of VA Tablets on Psychotherapy Use

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Results: Black (vs. white) tablet-recipients had 0.3 fewer video psychotherapy visits/year contributing to 0.5 fewer visits/year across all modalities (Black: +20.8%; white: +28.1%).



Potential Disparities in the Impact of VA Tablets on Psychotherapy Use

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Conclusions:

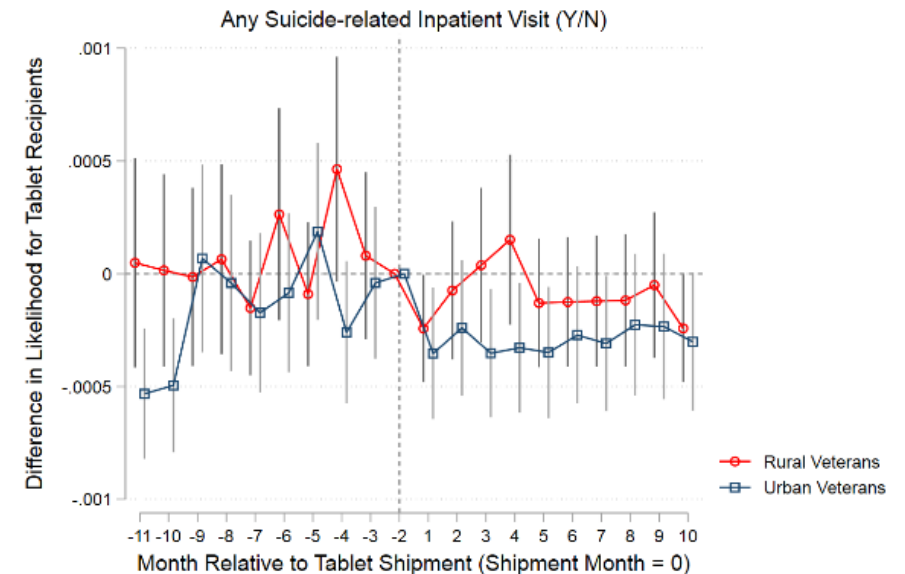
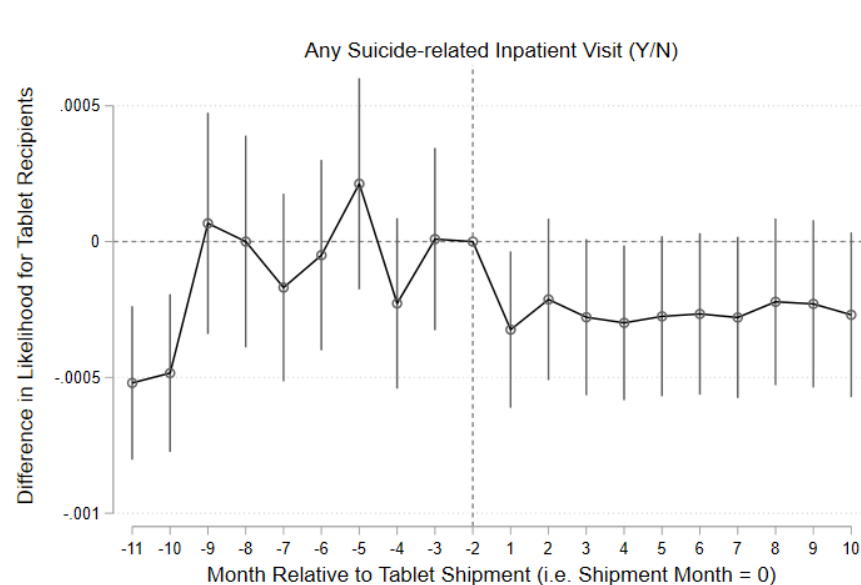
- VA tablet-receipt was associated with increased psychotherapy use across all the sociodemographic subgroups examined, with modest variations in the extent of increase across these subgroups.
- Findings suggest that distributing telehealth-enabled devices helped narrow the psychotherapy gap between rural and urban veterans and increased psychotherapy use among women, but device distribution alone may not reduce racial disparities affecting Black patients.
- There is a need to further explore why Black tablet-recipients had a lower percent increase in psychotherapy visits post-tablet receipt.

Impact of VA Tablets (and Telehealth) on suicide-related hospitalizations and suicide deaths and potential disparities, *Ongoing and future work*

Impact of VA Tablets (and Telehealth) on suicide-related hospitalizations and suicide deaths and potential disparities

Gujral, K. et al. (2023) – *ongoing and future work, please do not cite*

- **Study cohort:** Veterans with ≥ 1 mental health visit in 2019 (including rural and urban)
- **Study design:** Compared tablet recipients (n=64,000) with non-recipients (n=1.4 million) before and after tablet issuance
- **Preliminary findings:** Tablets were associated with a 33% reduction in the likelihood of a suicide-related VA hospitalization.
 - This finding is consistent with the 36% reduction in suicide-related ED visits observed for rural Veterans in our published work.
 - Stratifying by rurality, however, the point estimates indicate potentially greater reduction in probability of a VA hospitalization for urban Veterans than for rural Veterans, although rural-urban differences were not statistically significant in this analysis.
 - Statistically insignificant differences may be due to hospitalizations being a sparse outcome and a relatively small sample size of rural Veterans
 - Larger scale studies are needed to examine the impact of tablets (and other telehealth interventions) on suicidal deaths and potential disparities in suicidal behavior.



Impact of VA's video telehealth tablets on substance use disorder care during the COVID-19 pandemic, *forthcoming* in **JSAT (Journal of Substance Abuse Treatment)**

Impact of VA's video telehealth tablets on substance use disorder care during the COVID-19 pandemic.

Gujral, K., Van Campen, J., Jacobs, J., Kimerling, R., Zulman, D. M., & Blonigen, D. (2023). *Forthcoming, Journal of Substance Abuse Treatment*.

Background:

- Prevalence of substance use disorders (SUD) and related adverse consequences such as overdoses and overdose-related deaths have been rising in the U.S. for the past several decades.
- Patients with SUD typically also have high suicide risk.
- Utilization of effective treatment for SUD remains low, with lack of access to medication and psychotherapy for SUD being a major factor.
- Risks and access issues affecting patients with SUD were exacerbated during the COVID-19 pandemic.
 - Many chemical dependency treatment programs and clinics decreased availability of in-person visits, which widened the already large gap between patients with SUD who need treatment and those who have actually received treatment.
 - Since group therapy has been the mainstay treatment option for decades for patients with SUD, measures such as social distancing, shelter in place, and treatment discontinuation during the pandemic generated a need for alternative approaches such as the use of telehealth for treatment of SUD.
 - A study of over 15,000 outpatient behavioral health treatment facilities in the U.S. (excluding VA facilities) found that 32% of mental health facilities and 43% of SUD treatment facilities did not offer telehealth in January 2021, approximately 1 year into the pandemic.
- Telehealth has been underused and understudied among patients diagnosed with SUD.
- As the country's single largest provider of telehealth services and substance use treatment, VA provides a unique opportunity to rigorously examine the impact of telehealth use among patients diagnosed with SUD.
- Prior work has shown that Veterans with SUD generally receive fewer video visits than those with other types of mental health disorders but previous work examining Veterans who received VA tablets found that tablet-recipients with SUD preferred video visits to in-person visits.

Impact of VA's video telehealth tablets on substance use disorder care during the COVID-19 pandemic.

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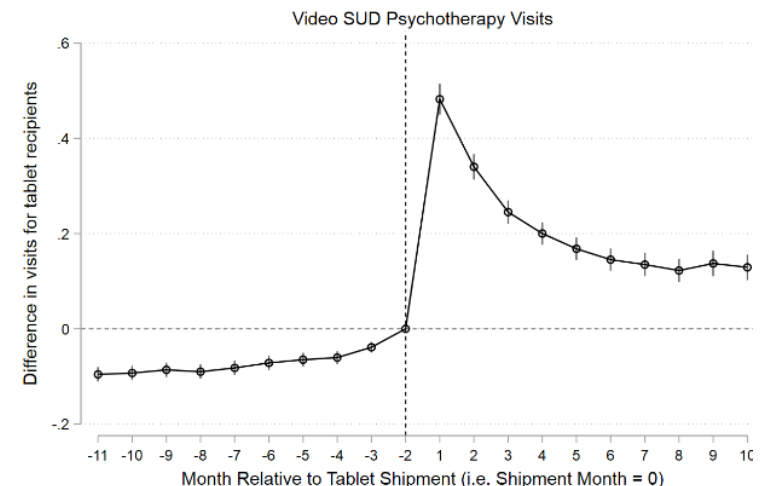
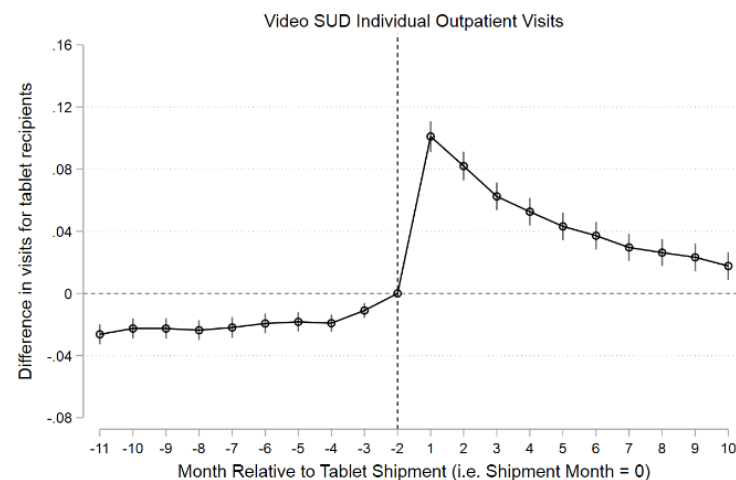
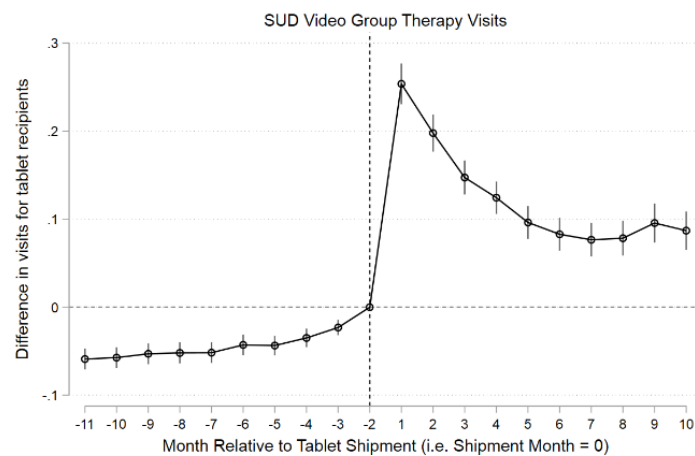
Objective: Examine the impact of VA's video-enabled telehealth tablets on mental health services for patients diagnosed with SUD, a high-risk population.

Study Cohort: Veterans with ≥ 1 mental health visit (includes rural and urban) and a documented diagnosis of SUD in 2019


Study Design: Compared tablet recipients (n=21,684) with non-recipients (n=267,873) before and after tablet issuance.

Findings:

- VA tablets were associated with increases in video visits for SUD specialty group therapy (+2.1 visits/year), SUD specialty individual visits (+1 visit/year) and SUD psychotherapy (+3.5 visits/year).
- These translated to modest visit increases across all modalities (in-person, phone and video): +10% for SUD specialty group therapy (+0.5 visits/year), +4% for SUD specialty individual outpatient treatment (+0.5 visits/year), +18% for SUD psychotherapy (+1.9 visits/year).
- Findings were similar when we examined certain subgroups: patients who were ever homeless during the study, patients who were Black, patients living in rural areas or living 20-40 miles from VA facilities



VA's implementation of universal screening and evaluation for the suicide risk identification program in November 2020 –Implications for Veterans with prior mental health needs

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Background: VA expanded its Suicide Risk Identification Program (VA's Risk ID) to include universal screening

- VA has taken several steps to ensure that Veterans, including those living in rural or underserved areas, have access to adequate mental health care needed to prevent suicides.
- Early and accurate detection of suicide risk among all Veterans presenting for care is one critical strategy towards reducing overall Veteran suicides.
- In November 2020, VA implemented a universal screening requirement, which to our best knowledge, represents the largest suicide screening intervention in the U.S.
- VA has previously led the way on suicide prevention efforts that are now considered best practices.
- In light of recent nationwide efforts to prevent suicides via universal suicide screening, we conducted a descriptive evaluation of VA's large-scale and nationwide implementation of universal suicide screening to provide early insights about this program.

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Original Risk ID in 2018 included three steps:

1. Primary screen: item 9 of the Patient Health Questionnaire-9 (I-9),
2. Secondary screen: Columbia Suicide Severity Rating Scale (C-SSRS) Screener and
3. Comprehensive Suicide Risk Evaluation (CSRE).

Individuals who screen positive at one step move on to the next level of screening or evaluation. Implementation of Risk ID in ambulatory care settings was initially focused on Veterans due for required annual screens for depression and/or posttraumatic stress disorder (PTSD).

Risk ID was modified in November 2020, with an expected implementation start date of December 2020 and a definitive start January 2021.

- The risk identification strategy reduced from three to two steps: C-SSRS Screener followed by the CSRE (S1 Fig), where CSREs may in some instances be administered as the first step without a C-SSRS Screener.
- At the same time, the VA implemented a new policy requiring that all Veterans receiving VA care were screened at least annually (i.e., universal screening requirement). Universal screening was designed to increase detection of suicide risk among Veterans receiving care across a wide range of settings (e.g., primary care, specialty medicine, audiology, mental health).

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Objective: To examine associations between Veterans Health Administration's (VA's) universal suicide screening implemented November 2020 and Veterans' likelihood of screens, follow-up evaluations, and suicidal behavior.

Study Cohort: Veterans who had ≥ 1 VA mental health care visit in 2019 (n=1,654,180; rural n= 485,592, urban n=1,168,588).

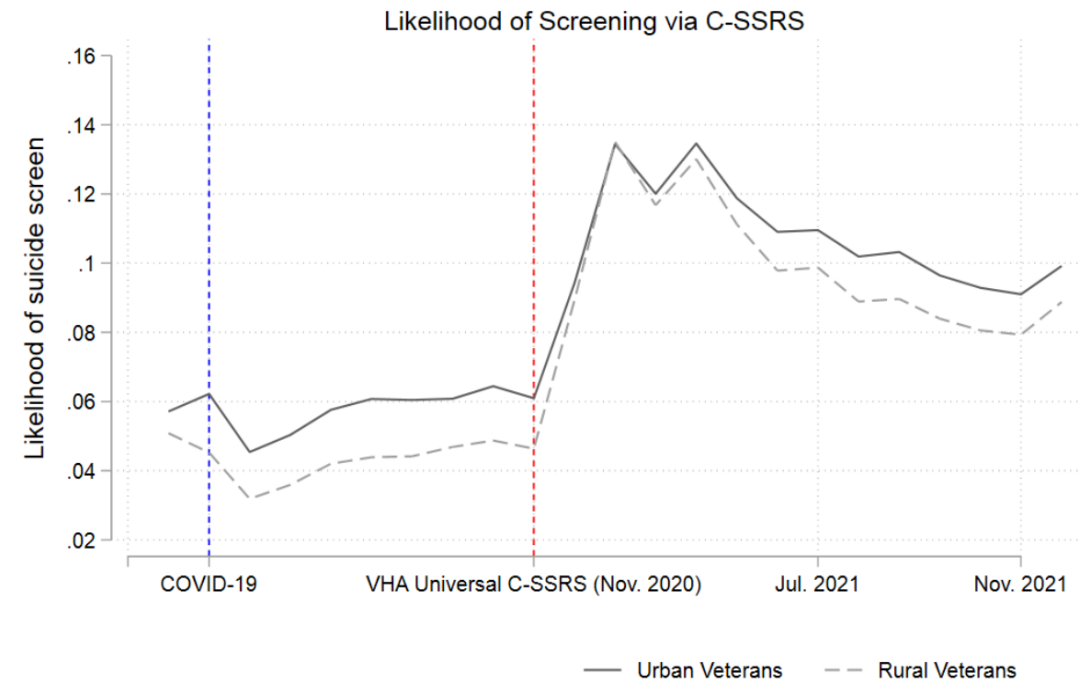
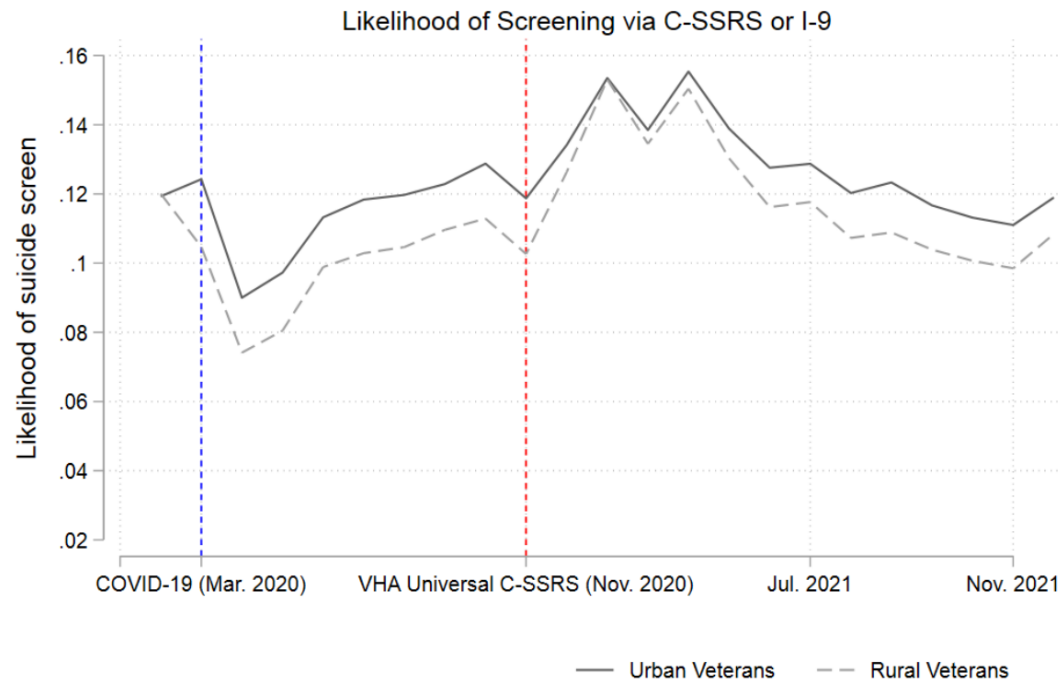
Study Design: Pre-post evaluation of outcomes before and after the start of the policy in November 2020.

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Results (unadjusted):

- 12 months post-universal screening implementation, 1.3 million Veterans (80% of the study cohort) were screened or evaluated for suicide risk.
 - 91% of the sub-cohort who had at least one mental health visit in the 12 months post-universal screening implementation period was screened or evaluated.
 - At least 20% of the study cohort was screened outside of mental health care settings.
- A large portion of the population who had not received a C-SSRS screen in the previous year became due for an annual screen post-implementation, resulting in a larger volume of screens early into the post-implementation period, with the volume leveling out over time.

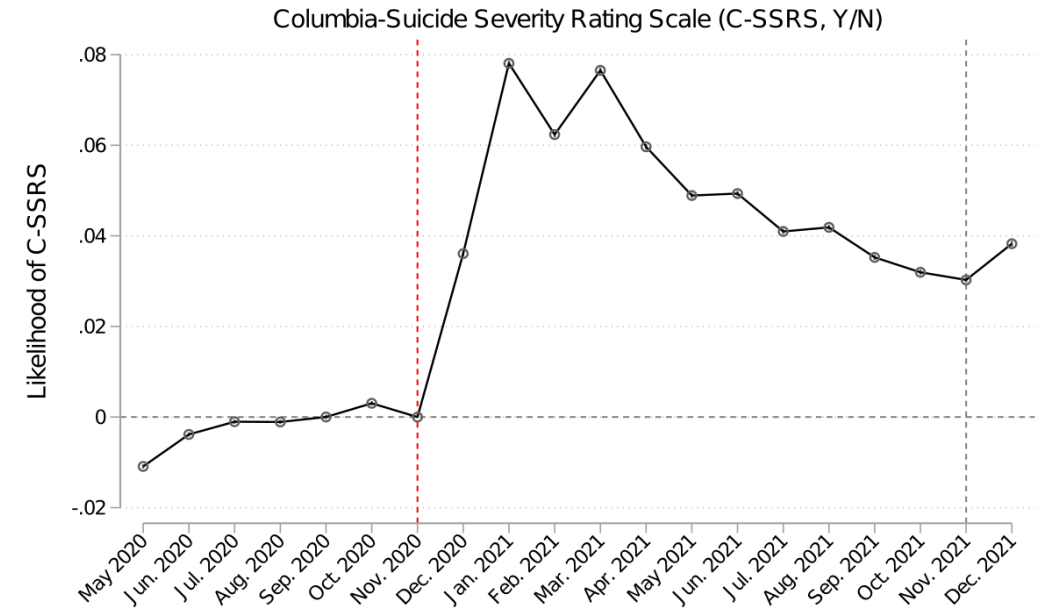
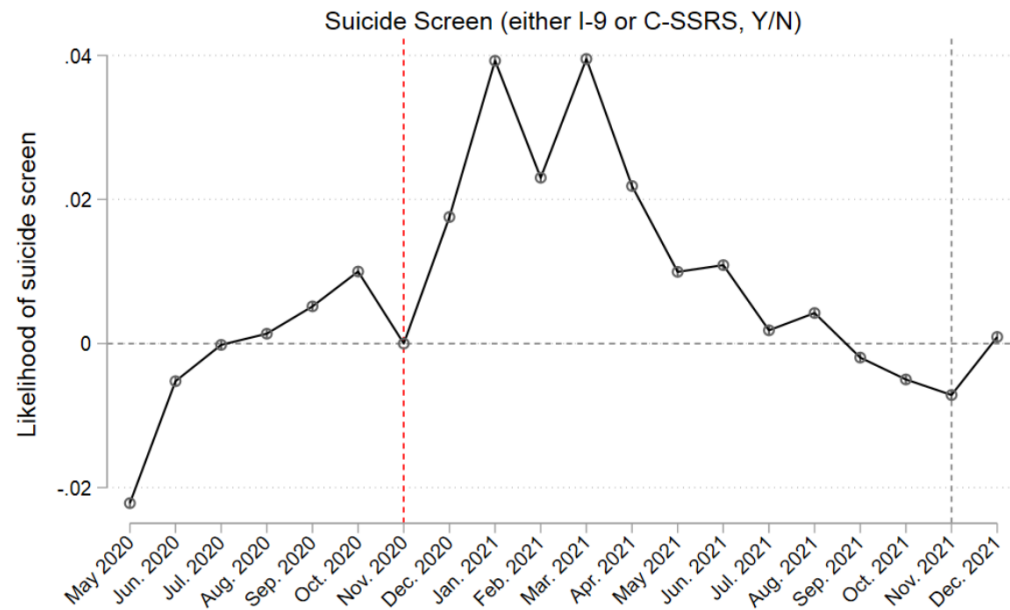


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Results (adjusted):

- Suicide Screens (Either I-9 or C-SSRS) - An additional 30,106 Veterans/month screened via either C-SSRS or I-9 post-universal screening implementation.
- C-SSRS - An additional 89,160 Veterans/month were screened via the C-SSRS post-universal screening implementation.

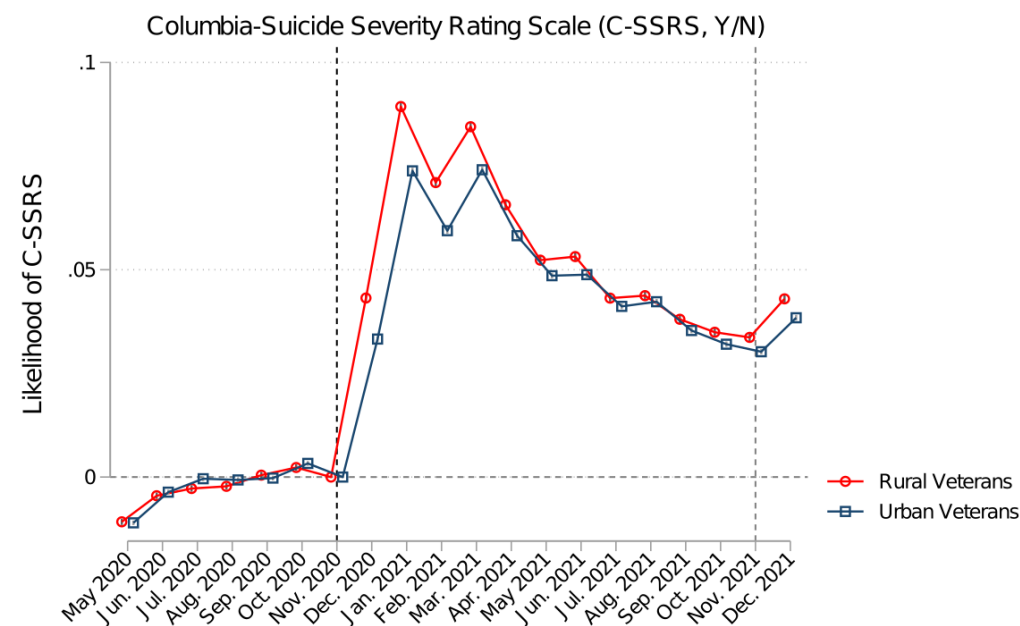
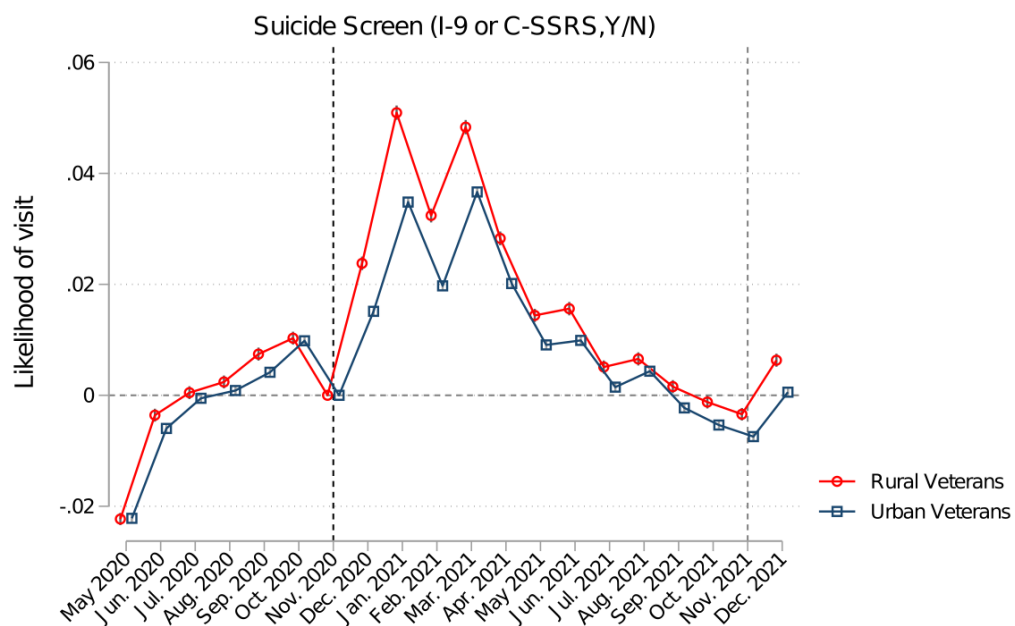


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Results (adjusted), stratified by rurality:

- Suicide Screens (either I-9 or C-SSRS) - Compared to their urban counterparts, 7,720 additional rural Veterans/month were screened via the C-SSRS post-universal screening implementation.
- C-SSRS - Compared to their urban counterparts, 9,226 additional rural Veterans/month were screened via either the C-SSRS or I-9 post-universal screening implementation.

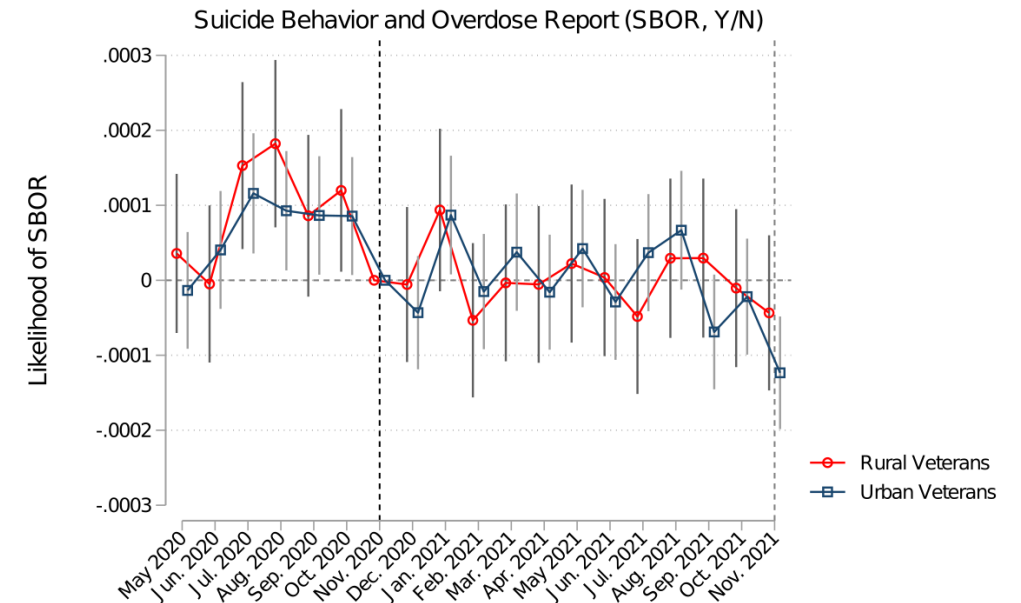
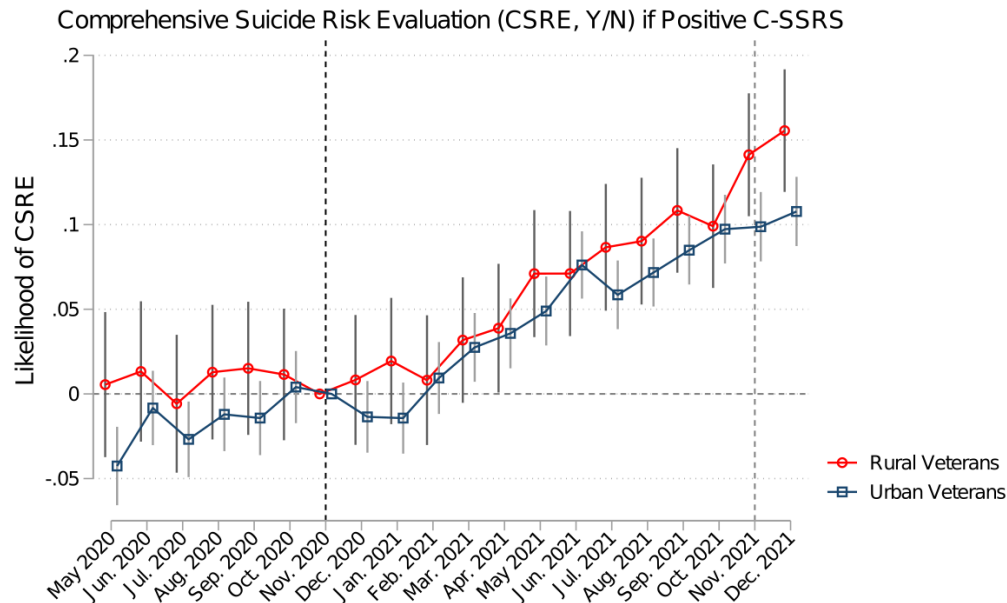


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Results (adjusted), stratified by rurality :

- **CSREs** - VA's universal screening implementation was associated with an increase in follow-up CSRE, conditioned on a positive C-SSRS. Although point estimates for rural Veterans were higher than for urban Veterans, these differences were not statistically significant, possibly because these analyses, conditioned on positive C-SSRSs, could only be conducted for 1% of the study cohort with positive C-SSRSs. Larger scale studies are needed to examine rural-urban differences in follow-up CSREs.
- **SBORs** – We saw a declining trend post-universal screening, but these associations may not be attributable to universal screen implementation, and may reflect a general trend of declining SBORs over time. Given the low frequency of the suicide behavior reports as an outcome, these results may signal potential clinical benefits of the program that should be monitored and further analyzed in future work utilizing a larger sample of patients.



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Discussion

- VA's implementation of the universal suicide risk screening requirement makes it the largest universal suicide risk screening program in the U.S. that can thus offer valuable insights for health systems nationwide seeking to prevent suicides through a universalized approach.
- Early evidence suggests that a universal approach can supplement suicide prevention care for this population, leveraging opportunities to screen for suicide risk in all patient interactions within the health care system.

Summary - VA's Video Telehealth Tablets, Access to Mental Health Care, Suicide Risk Assessment, and Suicidal Behavior among rural and urban Veterans

- Veterans have consistently been at 50% higher-risk for suicide than non-Veterans, and Veterans in rural (vs. urban) areas are more likely to die by suicide.
- Many Veterans have mental health conditions that frequently go untreated due to access barriers and concerns about stigma.
- Risk factors for suicide increased during the COVID-19 pandemic at the same time as access to care was interrupted.
- While telehealth can improve access to mental health care, its effectiveness for suicide prevention has not yet been established.
- Among Veterans living in rural areas, we found VA's video-enabled tablets distributed during the COVID-19 pandemic to be associated with:
 - Increases in video visits for mental health care use and suicide risk evaluations
 - Clinically significant increases in psychotherapy visits across all modalities (phone, in-person, and video).
 - Reduction in emergency department visits (-20%), suicide-related emergency department visits (-36%), and suicidal behavior reports (-22%).
 - Similar effects for the sub-cohort of rural Veterans considered at higher-risk for suicide.
- In an expanded cohort which included both rural and urban Veterans, we found that the favorable effects of tablets on psychotherapy visits persisted.
- As telehealth may inadvertently increase health inequities, we examined sociodemographic differences in the impact of VA-issued tablets.
 - Tablets helped narrow the psychotherapy gap between rural and urban veterans and increased psychotherapy use among women, but
 - Device distribution alone may not reduce racial disparities affecting Black patients. There is a need to explore why Black recipients had a lower percent increase in psychotherapy post-tablets.
- Our ongoing and future work examines whether tablets can reduce suicide-related hospitalizations and suicide deaths, and if they can do so equitably.
 - Preliminary results suggest that tablets are associated with a 38% reduction in suicide-related VA hospitalizations.
 - However, there is a need for larger scale studies to examine differences in the effects of tablets across sociodemographic subgroups.
- Effect of tablets may also differ across mental health conditions. Among patients diagnosed with substance use disorder (SUD) who are typically also at high-risk for suicide, we found that tablets facilitated continuity of care through video SUD specialty services (group and individual) as well as SUD-specific psychotherapy.
 - Findings persisted when we examined certain subgroups: patients who were ever homeless during the study, patients who were Black, patients living in rural areas or living 20-40 miles from VA facilities

Discussion

- VA-issued tablets remove an important access barrier for Veterans: the barrier of owning a smart device with internet connectivity and a data plan.
- We found that VA's video-enabled tablets improved engagement with video services for Veterans with access barriers.
- Tablet-generated increase in video visits often translated to increases in mental health service use across all modalities, but in many cases video visits also replaced in-person or phone visits.
- It is critical to track how substitution of in-person visits with video visits influences health outcomes, especially for patients at-risk for suicide or patients diagnosed with SUD as effectiveness of telehealth for SUD and suicide prevention has not yet been established.
- Tablets are just one of VA's many telehealth initiatives and it is an initiative that removes an important barrier of device ownership. Reliance on telehealth more broadly could have adverse effects for patients who do not have access to smart devices or high-quality internet and additional large scale studies are needed to evaluate the effectiveness of VA's telehealth programs for suicide prevention and for examining potential disparities.
- Finally, while there has been pandemic-driven expansion in VA telehealth, VA has simultaneously also modified and expanded its Risk ID program including implementation of the universal screen requirement
 - Given that Veterans in rural areas may face greater barriers to accessing care, a universal approach to screening may be especially advantageous for reaching and screening rural patients, and then connecting rural patients with appropriate follow-up care.
 - As the universal screening approach relies on VA visits, it will be important to ensure continued access to VA and track patients receiving VA-paid care in the community or outside VA.
 - Telehealth may offer an important strategy for improving reliance on VA care and improving the ability to detect suicide risk among all patients.
- It is critical to continue to track VA's telehealth initiatives and VA's universal screening program to inform national suicide prevention strategies.

Thank You.

Questions?

Please also feel free to email me with any questions at Kritee.Gujral@va.gov.