Veterans Health Administration (VHA)

Coronavirus Disease 2019 (COVID-19)

Response Report - Annex A

May 10, 2021



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FOREWORD

Since COVID-19 hit our shores last winter, our leaders and employees have combined dedication, ingenuity and agility to mobilize at an unprecedented scale and speed. Veterans Health Administration (VHA) has had all hands on deck, and we have risen to the challenge.

This report (the Annex) is the second chapter of our story. Like our October 2020 COVID-19 Response Report (Initial Report), the Annex was created so that others can learn from our efforts to combat this virus. This report details VHA's journey through six critical months of the COVID-19 pandemic: July 1, 2020, to January 1, 2021.

In early fall, we added a new goal to our COVID-19 response: increasing immunity. VHA contributed resources and experts to the task of finding a working vaccine. When the first vaccine was approved on December 11, 2020, VHA was ready. The Department of Veterans Affairs (VA) COVID-19 Vaccination Plan was issued on December 14, and the first Veteran was vaccinated the same day. It was an incredible feat, only possible thanks to the truly dedicated networks of personnel committed to VHA's role as a learning organization. As in all things, we worked to serve our Veterans and our Nation.

VHA is a learning organization. By that, I mean we are always working to improve, learning more about how we can bring the highest quality of safe and accessible care to the people who depend on us.

Despite the pandemic—and because of it—VHA continued to prioritize the principles of high reliability. High reliability organization (HRO) training sessions were moved to virtual spaces to ensure that learning could continue. VHA teams conducted huddles and communications at facilities around the country, and our focus on safety and efficiency increased throughout this health emergency. Our success in this fight has been because these principles are woven through our culture.

VHA is forward-looking. As we look beyond this pandemic to the health emergencies of the future, we must ask ourselves how we can best prepare. VHA is dedicated to supporting health care for the Nation, especially during times of crisis.

VHA's role in the battle against COVID-19 was nationally significant. We expanded our care beyond what we have ever done before, and we did it well. As we move into the future, I hope we can continue to grow VHA's support for the Nation by enhancing our preparedness for national health emergencies, expanding interagency coordination and implementing emergency deployment strategies. If we focus on learning from COVID-19, we can strengthen our national response to future challenges.

The devastation of COVID-19 reminded us all of the ongoing inequities that affect marginalized Americans. More than ever before, VHA is committed to eliminating these health disparities for our Veterans. Our Office of Health Equity (OHE) is conducting outreach to Veterans experiencing disparities. OHE has committed to making VHA more accessible to those who need us. We will work hard to ensure that all of our Veterans can receive the comprehensive and quality care they deserve.

VHA thrives because of its people. The period covered by this Annex saw our VHA doctors, scientists and medical experts generating new research and growing our knowledge about COVID-19. They fought through every challenge to discover this disease's secrets and enhance prevention, diagnosis, treatment and recovery. The knowledge gained from our research has spread well beyond VA to help Veterans and patients around the world.

VHA has some of the most dedicated and knowledgeable professionals I have ever had the honor to serve alongside. It is because of them that we have fought this disease with such success. I would like to express my sincere appreciation to the resolute women and men of VHA for their sustained commitment and selfless service. We would not have succeeded without the steadfastness and generosity of so many VHA front line workers, doctors, nurses, administrators, staff and medical volunteers. All of them stepped up and worked whenever and wherever the need arose.

Last but not least, I would like to thank the VA Secretary and Deputy Secretary for their advocacy and support during our continued journey to fight and conquer this pandemic. Their leadership inspires me and my team in our continued service to America's Veterans.

Thank you for your continued interest in learning from our experience fighting COVID-19 and for all you do for our country.

Please continue to stay safe,

Richard A. Stone, M.D.

Acting Under Secretary for Health

Veterans Health Administration

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U.S. Veterans Health Administration (VHA) COVID-19 Pandemic Response

"The VA has mobilized every resource to help our Veterans and the entire nation fight COVID-19, demonstrating the full strength of the largest integrated health care system in the country and honoring the patriotism of the Veterans we serve."

Acting Under Secretary for Health, VHA, Dr. Richard Stone



VETERAN CARE



VHA has tested 878,398 Veterans for COVID-19^{A,1}



6,458,171 total Veterans Using VHA Services^{B,2}



VHA has diagnosed 149,565 Veterans with COVID-19^{A,1}



367,245 VHA employees supported the pandemic response^{C,3}



VHA has treated 124,144 Veterans that have recovered from COVID-19^D



1,497 inpatients^D

7,553 COVID-19 related Veteran deaths^{A,1}

VIRTUAL CARE



745,545 average monthly telehealth (CVT) video encounters^{E,4}







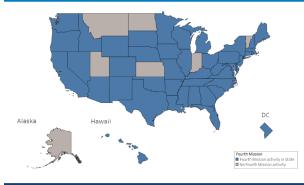
3,197,292 average monthly telephone encounters^{F,4}



1 203%

from the same period in 2019^{F,5}

FOURTH MISSION D,G



920,122 pieces of personal protective equipment provided to external organizations, including:



556,970 gloves



221,094 masks

1,396 Veterans admitted to care from State Veterans Homes

335 non-Veterans who received VHA care have been discharged home

2,307 VHA staff members supported non-VHA facilities

MEDIA OUTREACH



VA leadership has participated in **275** media opportunities related to VA's response to COVID-19^D



72 COVID-19related news releases published by VA^D



1,200 good news stories published in external media outlets D

All figures listed above are cumulative and include data from March 1, 2020 - January 1, 2021 unless otherwise noted

1 Excludes Veteran-Employees, March 1, 2020 to January 1, 2021. 2 Veterans Using VHA Services are Veterans who used VHA between April 1, 2019 and September 30, 2020, this definition excludes Veterans who died prior to February 1, 2020. 3 Includes VHACO and VISN employees. 4 Encounters between July 1, 2020 and December 31, 2020. 5 Comparing the months starting on July 2019 through December 2019 to July 2020 through December 2020.

ANational Surveillance Tool (NST) Dataset, Healthcare Operations Center (HOC), VHA, accessed 2/21/2021; BVeterans Using VHA Services, Allocation Resource Center (ARC), VHA, on 2/2/2021; CHR Employee Cube, VHA Service Support Center (VSSC), VHA, accessed on 1/25/2021; COVID-19 Weekly Infographic - Dec. 29-Jan. 4.pdf; Telehealth Cube, VSSC, VHA, Accessed: January 25, 2021; Encounter Cube, VSSC, VHA, Accessed: January 25, 2021; Response to VISN Data Calls, VHA VISNs, 7/2020, 8/2020, 1/2021, and 2/2021

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EXECUTIVE SUMMARY

This Annex discusses the period from July 1, 2020, to January 1, 2021. It is an addendum to our Initial Report, which was released on October 27, 2020.

The purpose of the Annex is to describe the continuation of VHA's response to the COVID-19 pandemic. This response included interagency coordination, vaccination planning, clinical operations and extensive support for Fourth Mission work throughout this period of time.

Data are presented as of January 1, 2021, unless specified otherwise. As the pandemic and VHA responses continue, VHA expects to provide additional Annexes.

Updated Guiding Principles

The VHA Steering Committee for this Annex established the following guiding principles, which will be followed throughout the report:

- Reporting and assessment of the COVID-19 response is essential to VHA as a learning organization and can be applied to agencies outside VHA.
- Accurate documentation of the evolution of the pandemic and essential
 elements of the response is imperative to informing future VHA readiness and
 planning for VHA emergency responses. This documentation can also inform
 readiness and planning at a national level. Readiness and planning will be
 essential to effective future responses because VHA's role in the Fourth
 Mission requires close coordination and collaboration with multiple entities,
 including the Federal Emergency Management Agency (FEMA), Department
 of Health and Human Services (HHS) and state governments.
- Data, observations and experiences in response to a crisis are all important to identifying issues key to learning from the response.
- Identification of root causes for complex process problems is essential to improvement and often requires a focused analysis by subject matter experts (SMEs).
- Questions identified in the response for which answers require new knowledge will be approached via research, employing the scientific method.
- A systems-oriented approach to process solutions is important to identifying reliable solutions.

Method

This Annex was produced using similar methods to those used for the Initial Report. Enterprise-level leaders and Veterans Integrated Service Network (VISN) leadership provided most of the information contained here. Data were gathered through virtual interviews and questionnaires.

At the outset, VHA senior leaders identified focus areas for the Annex based on subjects with the greatest value in updated information, analysis, conclusions, findings and recommendations. Additionally, VHA senior leaders determined that a section focused on future aspects of preparedness should be included in this Annex.

Updates to Strategic Challenges and Actions within the Elements of the Response

In mid-summer 2020, the virus responsible for COVID-19 was continuing to spread nationally. In late spring, infection rates dipped, but in late June 2020, outbreaks developed across the South and Southwest, most notably Arizona, Texas and Florida. As the pandemic progressed into fall 2020, the spread accelerated in many locations nationally, including areas in the upper West that had been relatively quiescent until that time.

The fall surge led to high demands for hospital care at multiple locations around the Nation, including VA Medical Centers (VAMCs). The surge also resulted in sustained requests for aid from states, the Indian Health System (IHS) and tribal health systems.

VHA needed to manage and coordinate actions at many locations simultaneously. VHA worked hard to relieve pressure on community hospitals, using Fourth Mission resources to reduce the burden on non-VA facilities. VHA also continued to accept mission assignments from FEMA, deploying staff to quell outbreaks in State Veterans Homes (SVHs), community nursing homes and tribal health systems. VHA used analytics to forecast locations at risk for demand exceeding health care capacity to forecast requests for VHA assistance.

Although the supply chain market for pandemic supplies remained very difficult, the actions VHA initiated during the initial months of the response progressed and ensured that VHA facilities had needed supplies and equipment. Personal protective equipment (PPE) used by VHA followed contingency guidelines laid out by the Centers for Disease Control (CDC).

From July 1, 2020, to January 1, 2021, the total number of Veterans in the VHA system diagnosed with COVID-19 climbed toward and then beyond 20,000. The number of Veteran deaths related to COVID-19 rose to 7,553. At the same time, extraordinary progress was made toward a COVID-19 vaccine. Anticipating the demand for vaccines once they were approved, VHA planned for mass vaccination of enrolled Veterans and staff. This included planning for distribution, storage and handling of new vaccines with special temperature requirements.

National and Interagency Coordination

During this period, the Acting Deputy Under Secretary for Health (DUSH) was the primary VHA interagency representative for day-to-day operations. Under the Acting DUSH, VHA relationships with Federal and state agencies matured. With improved communication and mutual support, VHA became a critical part of the national fight against the pandemic.

To support state and tribal health system requests for Federal assistance, VHA worked closely with relevant parties, including the following:

- VHA Area Emergency Managers
- Liaisons to the National Response Coordinating Center (NRCC) and HHS
- Office of Emergency Management (OEM) liaison support to the Acting DUSH
- Network directors

The Acting DUSH played an active role in identifying requests for Federal assistance. VHA was quick to offer VA capabilities and assistance, including facilities, supplies and beds.

VHA took a lead role in vaccination planning and administration. Identifying CDC requirements early on, VHA became its own multi-jurisdiction vaccine provider. This meant VHA would receive vaccines directly through the Federal program, rather than receiving allotments via states. The effort prompted extensive coordination between VHA and CDC, spearheaded by the lead planner from the VA National Center for Health Promotion and Disease Prevention.

During this period, VHA stopped its direct participation in the National Supply Chain Task Force. HHS assumed the supply chain leadership for the national response, and VHA used its existing liaison to HHS to interact with the task force. The Strategic National Stockpile Committee under HHS completed its work.

Emergency Management and Readiness

Following a July 2020 operational test in Chicago, OEM made adjustments to mobile intensive care units (ICUs), created out of Containerized Fold-Out Rigid Temporary Shelters (C-FORTS). The changes proved effective during extended use of C-FORTS equipment at the Oklahoma City VAMC, where it was used as an 18-bed medical-surgical inpatient unit. Its success indicates that the equipment is fully capable as a critical care platform.

Obtaining necessary personnel became the primary limitation on C-FORTS ICU facilities. Widespread acceleration of COVID-19 spread made it challenging for VAMC directors to release critical care staff for deployment as volunteers.

Although VHA fulfilled all FEMA mission assignments during this period, securing available volunteer staff for deployment via the Disaster Emergency Medical Personnel System (DEMPS) became difficult. This occurred because of fewer volunteers combined with the hesitance of some VAMC leaders to release staff out of concern about increasing local demand for inpatient COVID-19 care. Sourcing available volunteer critical care staff for deployment was particularly difficult, leading some locations to use temporary contract staff to augment VAMCs experiencing surges in demand for COVID-19 care.

Vaccination Planning, Data Management and Distribution

In December 2020, the Food and Drug Administration (FDA) approved the first two vaccines for emergency use in the United States. VHA had spent most of 2020 fighting against the spread of the disease. Now, with the arrival of the vaccine, a new mission began. VHA's preparation for vaccine distribution was comprehensive, detailed and completed well ahead of the vaccine distribution.

VHA initiated planning for mass administration of COVID-19 vaccine to Veterans and staff in August 2020—four months before the first vaccine was approved. VHA anticipated the Emergency Use Authorization (EUA) for messenger ribonucleic acid (mRNA) vaccines. Knowing there might be special requirements for storage, VHA factored special freezer requirements into its planning. VHA conducted data calls to determine which freezers were available throughout its facilities. Then additional special freezers were procured for sites designated to receive the mRNA vaccines. VHA worked closely with CDC to make sure all designated sites were prepared for the initial distribution. As multi-jurisdictional vaccination provider, VHA coordinated its requirements for vaccine directly with CDC, following coordination with the networks.



Staff pose with the Moderna vaccine at the Aleda E. Lutz VAMC in Saginaw, MI. (Photo Credit: VA)

VHA's vaccination planning was comprehensive. It identified initial guidelines for vaccine administration, including distribution, informatics, data management, communications, policy, safety, education and measurement. Through its early multidisciplinary planning, VHA was ready to issue vaccinations as soon as the EUA was final. VHA planning efforts provided a solid foundation for mass vaccinations to follow once enabled by vaccine supply quantities. This foundation enabled VHA to provide a dual focus on public health and clinical care as the vaccination process initiated pursuit of herd immunity among Veterans and staff. Networks conducted tabletop exercises to prepare for mass vaccination. VHA's final plan was released on December 14, 2020, which was the same week the first vaccine was approved and released. VHA vaccination commenced at 37 initial sites designated for the Pfizer-BioNTech vaccine.

The following week, VHA activated 113 additional sites that were ready to receive and administer the just-approved Moderna vaccine. The plan described detailed prioritization phases among Veterans and staff. The initial vaccinations went to priority group 1a, consisting of Community Living Center (CLC) residents, spinal cord injury (SCI) unit Veterans and the staff for those units.

The VHA vaccination plan included preparations to use existing systems for scheduling, documentation, tracking of vaccine inventory and adverse events. Following the requirements from CDC, VHA established a software system that provided vaccine data to CDC on an ongoing basis. This software was functional

prior to initiation of vaccination. VHA's existing system for adverse event reporting also included a data link to FDA.

Health Equities in the Veteran Population

Throughout the Annex period, the VHA OHE generated weekly reports to the VISNs. These reports compared rates of newly positive COVID-19 tests among Veterans by race and by community. The data VHA has monitored during the pandemic has shown disproportionately high incidence of COVID-19 among Black and Hispanic Veterans.

Data were not available on COVID-19 among lesbian, gay, bisexual, transgender and related identities (LGBT) Veterans because VHA believes that the data set is incomplete. Veterans tend to under-report LBGT identity to health care organizations, including VHA. Aware of the challenges in gaining trust with this group, VHA has prioritized support to LGBT Veterans. However, the limitation on inperson visits for this population (due to COVID-19 precautions) has caused concern.

VHA efforts to address health disparities during the pandemic response have included the following:

- Communications tools for networks
- Communications to Veterans
- Outreach to sustain care for chronic conditions
- Focus groups with minority Veterans during vaccination planning
- Periodic surveys of Veterans measuring health equity concerns

High Reliability

The VHA Acting Under Secretary for Health (USH) describes transformation to an HRO as the foundation of the VHA Modernization Plan. VHA launched HRO implementation in February 2019. The implementation continued through the pandemic response, but planned training events that were largely in-person and involved travel prompted suspension of training in March 2020. VHA adjusted the training to use virtual tools, which allowed it to resume training for executive leadership, supervisors, all staff and frontline teams. Throughout the pandemic response, VHA disseminated messaging products for simple, direct visibility in work centers.

VHA leaders report that high reliability tools were beneficial to the pandemic response. These tools included leadership engagement with front line teams and support for problem-solving through continuous improvement. The co-leads of the

VHA HRO Steering Committee reported a high level of direct leadership engagement with front line teams; an improvement that was particularly helpful early in the response when processes and supplies for staff protection were sources of concern.

Development of a strong safety culture and a just culture are primary aims of an HRO. To determine the state of its own culture, VHA used its annual All Employee Survey. According to the National Center for Patient Safety (NCPS), research is in progress on the results of the 2020 survey. NCPS cautions that two or three years of data will be required to definitively understand the status of VHA's culture through the pandemic response. However, there are indications of continued cultural progress, including growth in staff participation in patient safety reporting and expansion of the patient safety forum via virtual tools in VAMCs.

Data and Analytics

Starting in November 2020, VHA fielded added capabilities to the National Surveillance Tool (NST). The update included data presentation at the enterprise, facility and individual patient levels, accessible throughout VHA. The update also included sharing VA data with HHS and CDC. This data informed the national response and furthered a national biosurveillance strategy.

The improvements to NST supported essential activities informing the COVID-19 response, including the following:

- Analytics and research
- Management of bed capacity
- Clinical processes
- Access to care

VHA used daily analytic products to forecast changes and needs for its facilities. Through interpretations of this data, VHA determined needs for hospital care at specific VAMCs and predicted communities that might have need for VHA assistance under the Fourth Mission.

Supply Chain

VHA continued to follow CDC contingency use guidelines for PPE. This included meeting facility demands for pandemic supplies. Although the availability of PPE in the market improved and prime vendors were able to fill more orders, VHA's central procurement process remained essential to supplying the facilities.

Procurement of adequate quantities of nitrile gloves was particularly difficult. Proliferation of counterfeit N95 masks in the market led VHA to limit N95

procurement to the central process. By placing large, consolidated orders, VHA was able to procure masks directly from manufacturers, thereby ensuring authenticity. The interim PPE Dashboard tool implemented early in the response remained the primary means for monitoring facility inventories of pandemic supplies.

VHA commenced operation of its four interim Regional Readiness Centers during this period. Supplies for these centers came from central procurement. Although procurement enabled gradual growth in inventory of pandemic supplies at facilities and at the Readiness Centers, inventories remain below VHA's target for days of inventory in active rotation.

VHA continues to plan for accelerated deployment of the Defense Medical Logistics Standard Support (DMLSS) system to enable modernization of supply chain management. DMLSS deployment remained suspended through this period due to travel restrictions, but VHA plans to deploy DMLSS to eight sites in 2021, and complete implementation within five years.

In a separate effort, VHA proceeded with incremental movement of facility procurement of supplies to the Defense Logistics Agency (DLA). This will increase efficiency of supply procurement and increase standardization.

Clinical Operations

During the Annex period, VHA advised its clinicians to follow National Institutes of Health (NIH) guidelines for COVID-19 care. Updated guidelines were presented on an NIH website. Representatives of VHA were part of the NIH panel that monitored evidence and established guidelines.

VHA testing capacity expanded during this period. COVID-19 tests consisted primarily of polymerase chain reaction (PCR) and antigen testing, was added in the fall 2020. With the addition of antigen testing, VHA was able to conduct rapid point-of-service testing. As testing capacity expanded, VHA adjusted testing guidelines to enable surveillance of CLC and SCI staff. The primary limitation on testing capacity was access to supplies and reagents for the devices.

During this period, VHA employed a variety of outreach tools to sustain suicide prevention efforts and monitored data that suggested an increase in suicidal ideation during the pandemic. VHA mental health providers used virtual care tools extensively when in-person care was limited to sustain contact and care for Veterans with chronic conditions.

As COVID-19 transmission increased, VHA evolved to a locality-specific approach that expanded in-person care as permitted by the rate of COVID-19 spread in each

community. At times, sustained acceleration of local spread required rolling back elective procedures and limiting in-person care as surge plans were activated.

Fourth Mission

VHA continued its historic level of response to FEMA mission assignments under the Fourth Mission during this period. The Acting DUSH coordinated closely with other agencies, with the support of OEM liaisons. Engagement by network directors was instrumental as VHA prepared for Fourth Mission activities in community health systems, SVHs, tribal health systems and local governments. All of these organizations experienced increased stress during the Annex period due to the rise in COVID-19 cases. Fourth Mission activities allowed VHA to ease that stress.

The VHA Executive-in-Charge set a goal to offer up to 20% of bed capacity to community COVID-19 patients. Networks were encouraged to offer these beds to needy communities, with primary focus on receipt of critical care patients. Even with the increase in non-Veteran support, sustaining full access for the enrolled Veteran population remained top priority.

Fourth Mission activity was particularly active in VISN 22. Throughout July and August, the VISN provided acute care capacity in Tucson and Phoenix. In December 2020, the VISN provided additional Fourth Mission support in Southern California. Simultaneously, VISN 22 deployed staff to the Navajo Nation Health System, while opening up acute care capacity in VAMCs for COVID-19 patients from IHS and Navajo health facilities.

CDC data revealed a disproportionate impact of COVID-19 on Native Americans. Most requests for health services assistance from tribal nations and the IHS were for clinical staff they were unable to secure due to insufficient resources or the lack of contracting support. VHA responses were facilitated where existing relationships and agreements were in place between VHA facilities, VHA networks and tribal nations. A baseline of periodic communications and coordination between VHA facilities and tribal nations has proven effective in facilitating early consultation. The existing relationships also streamlined communication so that requests for support were clearly defined and more quickly validated.

Research and Innovation

During the Annex period, the total number of VHA COVID-19 research projects rose to 292 across 70 VHA sites. VHA participated in clinical trials of five different vaccines sponsored by Moderna, AstraZeneca, Janssen, Novavax and Pfizer-BioNtech at six VHA sites. Research projects included clinical trials of COVID-19

therapy with monoclonal antibodies and studies of immune response to the viral pathogen. The number of published scientific papers pertaining to COVID-19 by VA authors rose to 84 during this period.

The VHA Office of Research and Development (ORD) teamed with the VHA Office of Healthcare Innovation and Learning on a three-dimensional printing (3DP) initiative described in the Initial Report. In addition, a study for the FDA was designed, approved by the institutional review board, and initiated to determine the effectiveness of 3DP swabs for PCR tests. The 3DP initiative for pandemic supplies continues work on a sustainable business model scalable for surges in demand.

Preparedness

VHA's extensive Fourth Mission to FEMA mission assignments in support of community health systems, SVHs, community nursing homes and IHS/tribal health systems demonstrates the important national role that VHA can play into the future. No other entity can provide expandable inpatient health care capacity with critical care across the Nation at the scale of VHA. This role is important to the Nation but also to Veterans in the communities to which VHA can provide care.

This pandemic response presents a strong opportunity to improve preparedness in VHA. The focal points below have emerged as actions warranting integration into VHA strategies for modernization:

- Include (and prioritize) Fourth Mission response when prioritizing and scoping recapitalization within VHA facilities.
- Incorporate flexibility for contingency operations into standards for facility design when building and renovating medical centers and ambulatory specialty care facilities.
- Build reliability and capacity into VHA preparedness to deploy staff in support
 of VAMCs or in response to FEMA mission assignments, including designated
 deployment platforms with consistent availability of ready staff designated for
 deployment augmented by volunteer deployers.

Updates to Conclusions, Findings and Recommendations

The following are summations of the conclusions, findings and recommendations of this report. For more details, see the Conclusions and Recommendations sections of this Annex and the Initial Report. The Annex time period brought new insight to some of the conclusions and recommendations and thus are supplementary to the Initial Report.

National and Interagency Coordination

Conclusion: As Federal agencies worked together to address the challenges, VHA interagency coordination matured and gained efficiency. VHA was highly effective in coordinating its planning and actions for COVID-19 vaccination and vaccine distribution with Federal agencies.

Finding: VHA employed a highly effective and rapid process for pre-coordination of requests for Federal health services assistance. The process ensured that detailed requirements were defined within the requests. Pre-coordination enabled rapid dispositions at Emergency Support Function #8 (ESF #8) and FEMA.

Finding: VHA interagency coordination during planning for COVID-19 vaccine distribution and vaccination was highly effective. This coordination led to timely preparation for vaccine administration with functioning data linkages.

Emergency Management and Readiness

Conclusion: VHA fulfilled all mission assignments during this period, deploying volunteer VHA staff for on-site support at multiple locations. Operational experience with the mobile ICU equipment as an 18-bed medical-surgical inpatient platform has been successful and indicates it is fully capable for critical care. During this period, DEMPS proved suboptimal for sourcing the high continuing requirements for deployed staff.

Finding: VHA successfully deployed staff to multiple national locations despite significant sourcing challenges during the Annex period, including sustained medical-surgical inpatient operations in the VHA mobile ICU.

Finding: VHA struggled to source volunteers via DEMPS as the extended pandemic continued to increase demand for staff deployment.

Leadership and Organization

Conclusion: VHA sustained the operational framework for coordinated response that was created in spring 2020. However, the changing character of the pandemic prompted VHA to change its operational model to location-specific actions informed by analytics. This adjusted approach was highly effective in meeting the needs of enrolled Veterans and communities in need.

Finding: VHA very effectively sustained and adapted its processes for coordinated response as the pandemic significantly increased demands for inpatient care in multiple regions simultaneously.

Vaccination Planning, Data Management and Distribution

Conclusion: VHA accomplished comprehensive planning for distribution, handling, documentation and administration of the vaccine. Through coordination and planning, VHA was able to administer immediately following vaccine EUA and initial distribution.

Finding: VHA planning was effective and timely for mass vaccination of enrolled Veterans and staff; planning was also effective and timely for distribution and handling of the vaccine.

Recommendation: Consider using tools, such as surveys and focus groups managed by the Veterans Experience Office, to monitor trends in factors influencing vaccine acceptance among Veterans and staff. This data should inform continuing outreach and communications to improve vaccine acceptance in specific groups of concern, including those defined by race and ethnicity, gender, age and community.

Recommendation: Consider instituting a vaccination tracking system capable of documenting administration to non-Veterans (staff, supported agencies, community population). This system should include enterprise-level tracking and data.

Health Equities in the Veteran Population

Conclusion: Evidence suggests that the prevalence of confirmed COVID-19 among enrolled Veterans was lower than community prevalence. However, evidence also suggests that disparities in prevalence of COVID-19 between Black, Hispanic and White Veterans reflects inequities in the communities with higher prevalence among Hispanic and Black Veterans. During this period of the pandemic response, VHA provided the networks with information, data and toolkits for the mitigation of health disparities among Veterans. Published evidence from a VA study suggests that outcomes among Veterans treated in VHA for COVID-19 do not vary significantly by race.

Finding: Rates for COVID-19 infection and death among Black and Hispanic Veterans were higher than those for White Veterans, similar to the disparity in rates among the U.S. population.

Finding: VHA provided data and toolkits to inform outreach during the pandemic to Veterans at risk for health disparities based on race. Published evidence suggests outcomes for Veterans treated for COVID-19 did not vary by race among Veterans treated by VHA.

Finding: Impact of the pandemic on LGBT Veterans is uncertain because data systems do not enable Veterans to self-identify sexual orientation or gender identity.

Recommendation: Develop rates for confirmed COVID-19 and deaths related to COVID-19 among the Veteran population using VHA services stratified by race and ethnicity, age and gender with appropriate caveats. Conduct trend analysis of rates among this Veteran population to inform outreach strategies for prevention, vaccination and treatment.

Recommendation: Develop a process similar to self-identification of race for Veterans to voluntarily identify sexual orientation and gender identity to enable outreach, analytics and research focused on health equity among this population of Veterans.

High Reliability

Conclusion: VHA continued its implementation of high reliability during the pandemic response. VHA adapted messaging, tools, leadership engagement and communications into the pandemic response to keep the application of the principles of high reliability visible and relevant.

Finding: VHA generated continued progress in its commitment to zero harm through its implementation of high reliability principles. The sustained emphasis on leadership commitment, safety culture and continuous process improvement proved beneficial. Front-line teams and support teams adapted these processes and systems of care during their response to the pandemic.

Data and Analytics

Conclusion: During the Annex period, VHA made continuous progress in advancing the NST. VHA's data consolidation was valuable as a basis for analytics and research. It will continue to be used for clinical trials and other studies that advance scientific knowledge of the health effects and treatment of Coronavirus infections.

Finding: VHA has improved its consolidation and presentation of clinical data. These advancements have provided an essential foundation to effective response to public health emergencies.

Supply Chain

Conclusion: Although VHA met PPE needs throughout this period, the procurement of PPE remained difficult due to scarcity in the market. Central procurement remained essential to supplying VHA facilities. VHA initiated its accelerated modernization and resilience strategies, including the establishment of four interim Regional Readiness Centers and the incremental transition of network supply procurement to DLA.

Finding: VHA effectively balanced central and local procurement to supply the pandemic response while also monitoring pandemic supplies via an interim tool for inventory visibility.

Finding: VHA moved forward with actions to initiate its supply chain resiliency strategy as the pandemic progressed.

Recommendation: Complete a strategy that outlines the long-term objectives for Regional Readiness Centers.

Recommendation: Consider potential roles in supporting consortium preparedness, such as management of deployable equipment sets, training for deployable teams and bed expansion kits.

Recommendation: Determine how the Regional Readiness Centers will integrate with overall supply chain management for daily operations and preparedness beyond the current pandemic.

Clinical Operations

Conclusion: VHA advised its clinicians to follow NIH guidelines for COVID-19 care. As testing capacity expanded, VHA adjusted testing guidelines to enable surveillance of CLC and SCI unit staff. As COVID-19 transmission increased, VHA evolved to a locality-specific approach that expanded in-person care as permitted by the rate of COVID-19 spread in each community.

Finding: VHA effectively participated in the monitoring and dissemination of evolving evidence-based guidelines for prevention, diagnosis and treatment of COVID-19. Evidence suggests that VHA actions to protect vulnerable populations in CLCs and SCI units were effective.

Fourth Mission

Conclusion: VHA sustained effective responses to SVHs, community hospitals and nursing homes while also opening critical care beds for transfers from community and tribal health systems. IHS and tribal nation requests for assistance highlighted the need for greater resilience and response capacity for those systems of care.

Finding: The Indian Health Service and several tribal health systems required sustained VHA emergency support in some locations due to insufficient resources to respond to outbreaks of COVID-19.

Recommendation: Consider development of a strategy for enhanced collaboration with tribal nations and IHS, with a primary focus on strong local agreements supported by central collaboration with IHS. In collaboration with IHS, jointly pursue legislative support and resources for collaboration within VHA modernization initiatives with the goal of enhancing health infrastructure, emergency response and tools for the tribal nations.

Recommendation: Consider development of a partnership engagement toolkit, including centrally developed tools for networks to build and sustain relationships with tribal nations and IHS facilities.

Recommendation: Prioritize establishment of local agreements with tribal nations and IHS facilities, including high reliability, patient safety programs, quality of care measurement and continuing education. Include utilization of the partnership engagement toolkit.

Recommendation: Develop deployable teams of shared VA and IHS/tribal health personnel at select locations to actively engage in daily health care operations. This team would facilitate the collaboration within particular systems of care and VA response under its Fourth Mission to tribal nations.

Research and Innovation

Conclusion: VHA research engaged in the international effort to generate new evidence for efforts to prevent, diagnose and treat COVID-19. During the Annex period, the total number of VHA COVID-19 research projects rose to 292 across 70 VHA sites. VHA participated in clinical trials of five different COVID-19 vaccines. A VHA study for the FDA was designed, approved by the institutional review board and initiated to determine the effectiveness of 3DP swabs for PCR tests.

Finding: VHA sustained existing clinical research while adjusting its focus to generating new knowledge regarding the prevention, diagnosis, health effects and treatment of COVID-19. VHA and its Veteran volunteers made significant contributions to clinical trials of newly developed COVID-19 vaccines.

<u>Preparedness</u>

Conclusion: The experiences and lessons from COVID-19 will provide valuable insight to inform VHA's incorporation of preparedness into strategies. Strategic enhancements to preparedness could include creation of VAMC Deployment Centers with embedded rotational deployment teams. Enhancements could also include preparedness considerations in decisions about the future scope of services and facility recapitalization. Facility design for flexibility in emergency response and regional management of deployable equipment could be additional enhancements.

Finding: The national pandemic response demonstrated the importance of Fourth Mission support in assisting community and tribal health systems, particularly in health emergencies. The nationwide capacity and on-site response capability (with an emphasis on the provision of critical care) proved highly beneficial in numerous communities.

Recommendation: Develop a system maintaining designated clinical staff ready for deployment on rotating schedules at selected VAMCs identified as deployment centers. Build sufficient capability and capacity in the system to serve as VHA's primary source for deployable staff with the volunteer system as augmentation.

Recommendation: Develop a strategy for enhancing preparedness of Fourth Mission responses, including considerations for current VHA infrastructure and scope of services across the country.

Recommendation: Build plans for the regional management of deployable equipment and supplies (potentially at the Regional Readiness Centers) in order to gain agility in deployment of equipment, facilitate hands-on training for ready deployment teams and gain efficiencies in biomedical maintenance.

ACKNOWLEDGEMENTS

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ACRONYMS AND ABBREVIATIONS

Acronym	Expansion			
3DP	three-dimensional printing			
ACTIV	Accelerating Covid-19 Therapeutic Interventions and Vaccines			
ADAPT	Agile Design and Production Transformation			
Al	artificial intelligence			
ASPR	Assistant Secretary for Preparedness and Response			
AUSHO	Assistant Under Secretary for Health for Operations			
AUSH-S	Assistant Under Secretary for Health for Support Services			
C-FORTS	Clinic fold-out rigid temporary shelter			
CACMI	Cancelled Appointments and Consult Management Initiative			
CARES Act	Coronavirus Aid, Relief, and Economic Security Act			
СВОС	Community-Based Outpatient Clinics			
CCC	Clinical Contact Centers			
CDC	Centers for Disease Control			
CDW	corporate data warehouse			
CNA	Certified Nursing Assistant			
CLC	Community Living Center			
CMS	Centers for Medicare and Medicaid Services			
COVID-19	Coronavirus Disease 2019			
CPI	continuous process improvement			
CRM	crew resource management			
CTT	Clinical Team Training			
CURES	Coronavirus Research and Efficacy Studies			
CVT	Clinical Video Telehealth			
DEMPS	Disaster Emergency Medical Personnel System			
DHS	Department of Homeland Security			
DLA	Defense Logistics Agency			
DMLSS	Defense Medical Logistics Standard Support System			
DoD	Department of Defense			
DUSH	Deputy Under Secretary for Health			
EIC	Executive-in-Charge			
ELT	Executive Leadership Team			

Acronym	Expansion
EMCC	Emergency Management Coordination Cell
EOC	Emergency Operation Center
ESF #8	Emergency Support Function #8
EUA	Emergency Use Authorization
FDA	Food and Drug Administration
FEMA	Federal Emergency Management Agency
FOC	Full Operating Capability
FORTS	Fold-out rigid temporary shelters
HCS	health care system
HERL	Human Engineering Research Laboratory
HHS	Department of Health and Human Services
HMRSOG	Healthcare and Medical Resourcing Strategic Operations Group
HOC	Health Operations Center
HR	human resources
HRO	high reliability organization
ICU	intensive care unit
IHS	Indian Health Service
IE	Innovative Ecosystem
JC-DST	Just Culture Decision Support Tool
JPSR	Joint Patient Safety Reporting
LGBT	lesbian, gay, bisexual, transgender and related identities
LPN	Licensed Practical Nurse
LVN	Licensed Vocational Nurse
MVP	Million Veteran Program
MOU	Memorandum of Understanding
mRNA	messenger ribonucleic acid
MSA	medical support assistant
NAII	National Artificial Intelligence Institute
NCPS	National Center for Patient Safety
NFS	Nutrition Food Service
NIH	National Institutes of Health
NRCC	National Response Coordinating Center
NST	National Surveillance Tool

Acronym	Expansion			
OEM	Office of Emergency Management			
OHE	Office of Health Equity			
OHRS	Occupational Health Record-keeping System			
OHIL	Office of Health Care Innovation and Learning			
OR	operating room			
ORD	Office of Research and Development			
OSRI	Office of Systems Redesign and Improvement			
ows	Operation Warp Speed			
P&LO	Procurement and Logistics Office			
РВМ	Pharmacy Benefits Management			
PCR	polymerase chain reaction			
PIMS	Performance Improvement Management System			
POC	people of color			
PPE	personal protective equipment			
PTSD	Post-Traumatic Stress Disorder			
PVAHCS	Phoenix VA Health Care System			
RN	Registered Nurse			
SARS-CoV-2	Severe Acute Respiratory Syndrome / Coronavirus 2			
SCI	spinal cord injury			
SME	subject matter expert			
SVH	State Veterans Home			
VA	Department of Veterans Affairs			
VADERS	VA Adverse Drug Event Reporting System			
VAMC	VA Medical Center			
VCL	Veterans Crisis Line			
VHA	Veterans Health Administration			
VHACO	Veterans Health Administration Central Office			
VINCI	VA Informatics and Computing Infrastructure			
VISN	Veterans Integrated Service Network			
VTM	viral transport media			
VVC	VA Video Connect			

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OVERVIEW

Progression of the Pandemic

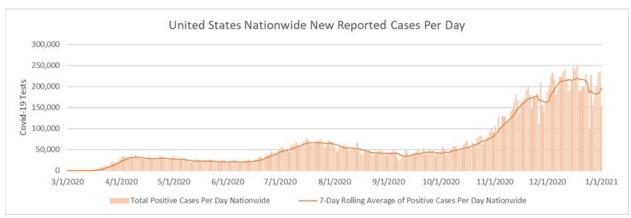
On July 1, 2020, the 7-day average of new COVID-19 cases in the United States was 43,415; 3 weeks later, the number had increased to 67,011—the highest rolling average since the pandemic began. Despite daily cases declining in the early fall, by September 20, 2020, the Nation exceeded 200,000 deaths due to COVID-19.

Daily cases rose throughout October. By October 24, 2020, the United States had eclipsed the previous July peak as the virus had become more widespread throughout the country. Eleven states reported more than 40,000 cases each; in July, only 4 states had numbers that high.³

On December 8, 2020, the United States passed 15 million cumulative cases, and nearly 5% of all Americans had tested positive since the pandemic began.⁴ During December 2020, most states reported record-high case counts, and deaths and demand for hospital beds increased.⁵

By January 1, 2021, the 7-day rolling average neared 200,000 new daily cases, and there had been over 352,000 deaths due to COVID-19.⁶ Figure 2.1 illustrates the surges of new COVID-19 cases across the United States from March 1, 2020, to January 1, 2021.

Figure 2.1: New Reported COVID-19 Case Per Day, U.S. General Population, (March 1, 2020 – January 1, 2021)



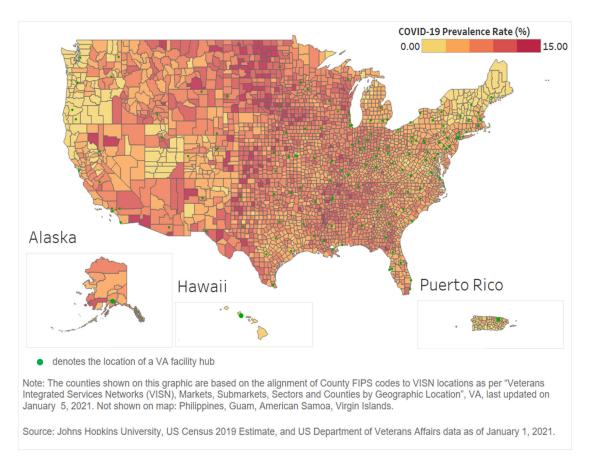
Notes: COVID-19 reported positive cases represent general community confirmed positive COVID-19 tests. Nationwide total case estimates were aggregated by individual state reported cases from March 1, 2020, to January 1, 2021.

Source: John Hopkins COVID-19 GitHub Repository, accessed 3/10/2021.

Community prevalence varied by region, as shown in Figure 2.2. In July 2020, the spread began in Southern Gulf Coast states, and then outbreaks occurred in

Northern states of Montana and North Dakota in August 2020.⁷ Per capita cases continued to spread throughout the Midwest, and by October 2020, there were large clusters of cases in Wisconsin, Idaho and the Dakotas.⁸

Figure 2.2: Prevalence of Confirmed COVID-19 Cases Among the General Population in U.S. Counties (March 1, 2020 – January 1, 2021)



Nationwide cases more than doubled from October to November 2020, at which time much of the Midwest and Mountain states were experiencing high prevalence. Per capita cases decreased slightly in December 2020, but there were large outbreaks in Southern California, Northern Nevada and West Texas. Overall prevalence of confirmed COVID-19 across the United States was 6% as of December 31, 2020, as seen in Figure 2.3.

Unlike the vast majority of U.S. health care systems, VHA has a defined patient population. Thus, VHA tracks its Veterans separately from the general population. VISN Veterans Using VHA Services prevalence and community prevalence were separated by 0.5% on July 1, 2020 (0.3% and 0.8%, respectively). Beyond that date, prevalence of confirmed COVID-19 in the community began to steadily increase at a rate higher than the growth among Veterans Using VHA Services. From October 28,

2020, to December 30, 2020, U.S. community prevalence of confirmed COVID-19 increased from 2.7% to 6.0%, while prevalence among Veterans Using VHA Services increased at a lower rate, from approximately 1.0% to 2.3%.

160,000 7.00% 140,000 6.00% 120,000 Number of Cases (Veterans) 5.00% 100,000 4.00% Prevalence 80,000 3.00% 60,000 2.00% 40,000 1.00% 20,000 0.00% 9/1 7/1 8/1 10/1 11/1 12/1 1/1 Dates (2020) New Positive Cumulative Positive Prevalence Among Veteran Users Community Prevalence Rate

Figure 2.3: COVID-19 Confirmed Case Statistics, Veterans Using VHA Services versus Community Prevalence, (July 1, 2020 – January 1, 2021)

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition for this report in order to quantify Veterans at risk for COVID-19. Veteran confirmed positives figures exclude Veterans and Veterans at risk for COVID-19.

Source: NST Dataset, HOC, VHA, accessed 2/21/2020; COVID-19 US Cases Data, Johns Hopkins University, accessed 2/23/2020; 2019 U.S. Census 2019 Population Estimate, U.S. Census, accessed 7/10/2020; Veterans Using VHA Services Data, ARC, VHA, 2/2/2020.

Updated Timeline

The total number of Veterans in the VHA system diagnosed with COVID-19 continued to increase after July 1, 2020. VHA dedicated significant time and resources to planning for vaccine distribution, storage and handling for fall 2020.

By the end of 2020, the United States had surpassed 20 million infections and more than 346,000 deaths from COVID-19.¹¹ In the Veteran population, there were nearly 150,000 infections and more than 7,500 deaths, which is reflected in Table 1.1 in the updated epidemiological data for VHA populations and staff section of this report. The following is an updated timeline of VA key events and actions from July 1, 2020, to January 1, 2021.

- July 29: VHA Executive-in-Charge (EIC) requested a plan for testing any Veterans for COVID-19 on their way out of hurricane shelters.
- August 16: Over 460,000 people attended the 80th annual Sturgis Motorcycle Rally in South Dakota.¹²
- **August 24**: VHA launched its COVID Vaccine Campaign, with initial next steps to draft a project charter in collaboration with the NCP.
- August 25: OEM released Disaster Response in a Pandemic Plan and Sheltering and Mass Care documents provided to ensure disaster preparedness and response planning for the 2020 hurricane season and for future disasters occurring during the COVID-19 pandemic.
- **September 29**: The COVID Vaccine Campaign held their kick-off to provide guidance and overall strategy for COVID-19 vaccination for VHA.
- October 15: The draft COVID Vaccine Plan was completed and routed for leadership review prior to submission to the CDC.
- October 27: VHA released its Initial COVID-19 Response Report.
- November 9: FDA issued EUA for monoclonal antibody therapy Bamlanivimab.
- November 22: FDA issued EUA for monoclonal antibody therapies Asirivimab and Imdevimab.
- **December 3**: Formalized new VHA COVID-19 testing guidance recommended increased frequency of testing in CLC and SCI settings in alignment with CDC recommendations.
- **December 10**: FDA authorized Pfizer-BioNTech vaccine for emergency use.
- December 14: First Veteran vaccinated in the United States.¹³
- **December 18**: FDA authorized Moderna vaccine for emergency use.

Summary of Adjustments to VHA Approach

During the Annex period, VHA juggled four major responsibilities:

- Full scope of health services support beyond COVID-19
- Treatment for Veteran (and non-Veteran) patients with COVID-19
- Fourth Mission response
- Planning for vaccine administration and preparations for vaccine distribution

The sustained and simultaneous accelerated spread of COVID-19 in multiple regions led VHA to make the following adjustments to its response:

 Activated surge plans for locations where COVID-19 cases were likely to exceed community capacity (based on forecast analytics).

- Identified VAMCs that might be able to provide critical care capacity to relieve pressure on community hospitals or tribal health systems, and prioritized those VAMCs for augmented resources.
- Identified VAMCs that might need to receive significant numbers of inpatients from SVHs, and prioritized those VAMCs for augmented resources.
- Mobilized VHA's mobile ICU equipment to augment VAMCs, which required expansion of critical care capacity beyond facility accommodation.

To execute these critical activities, VHA made the following adjustments to its supply chain activities:

- Continued the expansion of central procurement to ensure that all facilities were supplied for contingency use of PPE,¹⁴ moved supplies between VISNs so that each could obtain crucial supplies,¹⁵ and coordinated with other agencies to address shortages.
- Created interim Regional Readiness Centers to help with supplies and established eight temporary centers during the Annex period.¹⁶ Restricted N95 mask procurement to a centralized process to counter the proliferation of counterfeits in the market.

To combat the rise of COVID-19 in older Veterans while also providing comprehensive health care, VHA made the following adjustments to its nursing and elderly living facility policies:

- Recommended twice-weekly testing of staff at CLCs.¹⁷
- Restricted visitation rules to prevent family and friends from bringing the virus into facilities.¹⁸
- Increased virtual appointments and postponed elective and non-urgent care.

To prepare for the availability of vaccines, VHA took the following actions:

- Gave priority to participation in clinical trials of COVID-19 vaccines in support of the national program.
- Completed a charter and gathered a team of experts months before vaccines were approved.
- Worked with CDC to obtain multi-jurisdictional vaccine provider status.

VHA also strengthened its relationships with FEMA and coordinated closely with CDC to prepare for vaccines.

Updated Epidemiological Data for VHA Populations and Staff

From July 1, 2020, to January 1, 2021, 149,565 Veterans Using VHA services and 15,414 VHA employees tested positive for COVID-19.¹⁹ During the same period, VHA treated 20,230 COVID-19 inpatients.

VHA also recorded 7,553 Veteran deaths and 123 employee deaths associated with positive COVID-19 tests. Table 2.1 displays summary statistics for Veterans Using VHA Services and VHA employees. The reader of this report should note that the deaths associated with a diagnosis of COVID-19 enumerated in Table 2.1 are not case fatality rates. For further description of case fatalities, see the epidemiological data section of the Initial Report.

Table 2.1: COVID-19 Summary Statistics, all VISNS (as of January 1, 2021)

Category	Number
Veterans Using VHA Services	6,458,171
Veteran COVID-19 Cases	149,565
Veteran COVID-19 Inpatients	20,230
Veteran Deaths (COVID-19 related)	7,553
VISN Employees	347,320
Employee COVID-19 Cases	15,414
Employee Deaths (COVID-19 related)	123

Note: Veterans Using VHA Services are Veterans who used VHA services between April 1, 2019, and September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to cost of care. Veteran tests, confirmed positives & deaths figures exclude Veteran-Employees Employee tests, confirmed positives & deaths include Veteran-Employees and Non-Veteran Employees.

Note: Totals may not add due to rounding.

Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; Employee Deaths data provided by VHA on 2/3/2021; HR Employee Cube, VSSC, VHA, accessed on 4/12/2021.

Table 2.2 shows a breakdown of COVID-19 confirmed cases by age and gender. Overall prevalence of COVID-19 amount Veterans Using VHA services was 2.32%, with relatively equal proportion of diagnoses between male and female Veterans.

Table 2.2: Number of Veterans Using VHA Services with COVID-19 Diagnosis, by Age and Gender (March 1, 2020 – January 1, 2021)

Age Groups	Female	% of Female Veterans	Male	% of Male Veterans	Total by Age Group	% of Veterans Using VHA Services
34 and under	2,579	(2.37%)	9,755	(2.12%)	12,334	(2.17%)
35 - 44	3,612	(2.78%)	13,524	(2.46%)	17,136	(2.52%)
45 - 54	3,514	(2.89%)	17,858	(2.76%)	21,372	(2.78%)
55 - 64	3,495	(2.51%)	24,419	(2.55%)	27,914	(2.54%)

Age Groups	Female	% of Female Veterans	Male	% of Male Veterans	Total by Age Group	% of Veterans Using VHA Services
65 - 74	1,509	(2.09%)	39,642	(2.19%)	41,151	(2.18%)
75 - 84	326	(1.88%)	19,662	(1.95%)	19,988	(1.95%)
85 and over	183	(2.61%)	9,487	(2.23%)	9,670	(2.24%)
Total by Gender	15,218	(2.55%)	134,347	(2.29%)	149,565	(2.32%)

Note: Veterans Using VHA Services are Veterans who used VHA services between April 1, 2019, and September 30, 2020. Veterans who died prior to February 1, 2020 were excluded from the Veterans Using VHA Services definition. Veteran confirmed positives and deaths figures exclude Veteran-Employees.

Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed on 2/21/2021.

Table 2.3 shows a breakdown of COVID-19 mortality due to COVID-19 by age and gender. Of males using VHA services known to have COVID-19, 5.51% died; of females using VHA services known to have COVID-19, 1.03% died.

Table 2.3: Mortality Among Veterans Using VHA Services Following Diagnosis of COVID-19, by Age Group and Gender, All VISNs (March 1, 2020 – January 1, 2021)

Age Groups	Female	% of Female Veterans	Male	% of Male Veterans	Total by Age Group	% of Veterans Using VHA Services
34 and under	1	(0.04%)	2	(0.02%)	3	(0.02%)
35 - 44	0	(0.00%)	38	(0.28%)	38	(0.22%)
45 - 54	10	(0.28%)	110	(0.62%)	120	(0.56%)
55 - 64	39	(1.12%)	501	(2.05%)	540	(1.93%)
65 - 74	44	(2.92%)	2,385	(6.02%)	2,429	(5.90%)
75 - 84	28	(8.59%)	2,128	(10.82%)	2,156	(10.79%)
85 and over	35	(19.13%)	2,232	(23.53%)	2,267	(23.44%)
Total by Gender	157	(1.03%)	7,396	(5.51%)	7,553	(5.05%)

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. VHA Employee Deaths (COVID-19 related) were identified from Issue Briefs from the deceased's local VAMC. The deceased may have been tested at a VHA test location or an outside location.

Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed on 2/21/2021.

Figure 2.4 displays COVID-19 cases per 100,000 Veterans Using VHA Services by race and ethnicity. Black and Hispanic groups each exceeded 3,000 cases per 100,000, and the Non-Hispanic White group was just over 2,000 cases per 100,000. As seen in Figure 2.5, COVID-19-related deaths per 100,000 Veterans Using VHA Services were also greater in Black and Hispanic groups, at 134 and

121, respectively. Non-Hispanic White deaths were 113 per 100,000 enrolled Veterans.

These are cases primarily confirmed through testing by VHA and do not include all cases confirmed through testing outside VHA, further the rates do not include asymptomatic cases never tested. However, the disparate rates of confirmed cases and deaths between races demonstrates that Veterans are experiencing the disparities known to exist across the United States. For more information on VHA's efforts to address disparities during the pandemic, see the Health Equities section of this Annex.

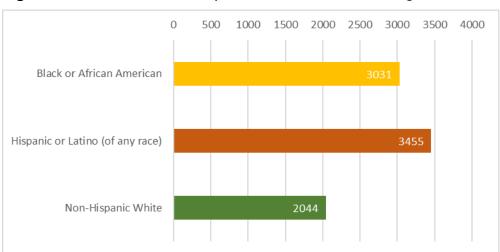


Figure 2.4: COVID-19 Cases per 100,000 Veterans Using VHA Services

Note: Veteran tests, confirmed positives, and deaths figures exclude Veteran-Employees. The following racial/ethnic groups were not included in the figure due to the relatively low number of counts in each category: American Indian, Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, and Veterans with multiple reported racial/ethnic categories. In total, these excluded racial/ethnic categories comprise approximately 4% of Veterans who use VHA services. Veterans for which VHA does not have a captured race/ethnicity were also excluded, and comprise approximately 7% of the Veteran population. The population of Veterans Using VHA Services during FY20 was captured from the CDW database to identify individual race and ethnicity within that population. Veteran COVID-19 related cases and deaths were also captured from the CDW database. Veterans with multiple positive case records were only counted once per patient integration control number. Source: NST Dataset, HOC, VHA, accessed 3/3/2021.

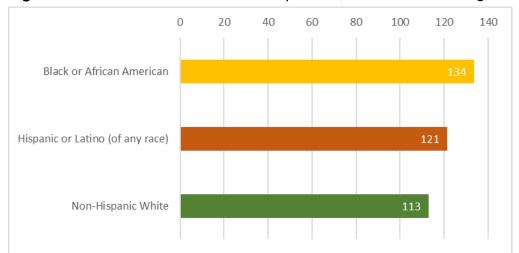


Figure 2.5: COVID-19 Related Deaths per 100,000 Veterans Using VHA Services

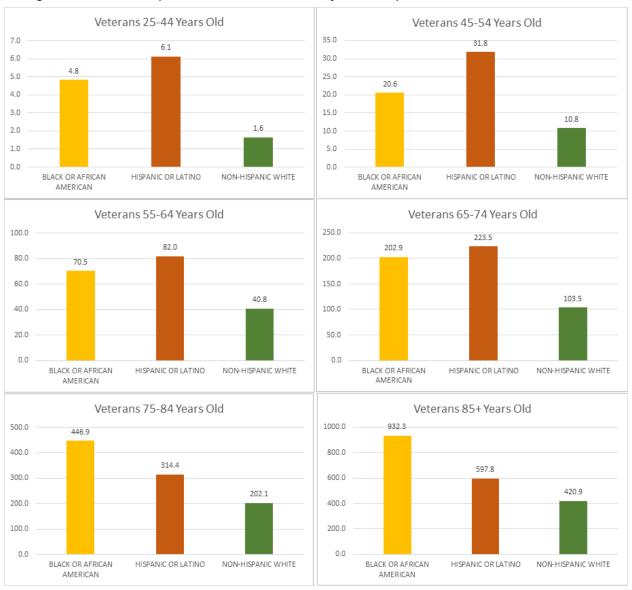
Note: Veteran tests, confirmed positives, and deaths figures exclude Veteran-Employees. The following racial/ethnic groups were not included in the figure due to the relatively low number of counts in each category: American Indian, Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, and Veterans with multiple reported racial/ethnic categories. In total, these excluded racial/ethnic categories comprise approximately 4% of Veterans who use VHA services. Veterans for which VHA does not have a captured race/ethnicity were also excluded and comprise approximately 7% of the Veteran population. The population of Veterans Using VHA Services during FY20 was captured from the CDW database to identify individual race and ethnicity within that population. Veteran COVID-19 related cases and deaths were also captured from the CDW database. Veterans with multiple positive case records were only counted once per patient integration control number. Source: NST Dataset, HOC, VHA, accessed 3/3/2021.

Figure 2.6 breaks down the population mortality rates from Figure 2.4 into age groups, demonstrating that COVID-19 related mortality among Black and Hispanic Veteran populations have occurred at higher rates than in the White Veteran populations in each age group. In Veterans aged 74 and younger, the Hispanic Veteran population experienced the highest COVID-19 related mortality rate. For Veterans aged 75 and older, the Black Veteran population experienced the highest COVID-19 related mortality rate.

It should be noted that the rates displayed in Figure 2.5 and Figure 2.6 are population mortality rates and not case fatality rates. A recent VHA study of case fatality rates among Veterans that received care for COVID-19 through May 4, 2020, observed no difference in the 30-day mortality rates between infected Veterans of different racial/ethnic groups. This indicates that Veterans experienced the same racial disparities in rates of infection and death from COVID-19 as seen in the communities; however, those Veterans treated within VHA for COVID-19 experienced consistent outcomes across racial and ethnic groups.²⁰

As described in the Initial Report, there are multiple factors that contribute to COVID-19 mortality. Although age is a primary factor, there are other factors that were not included into this particular analysis. One factor that was not analyzed for this Annex is the timeframe of when the Veteran was treated for COVID-19. As the pandemic has progressed, medical professionals have learned more about COVID-19, resulting in improved treatment later in the pandemic.

Figure 2.6: Age and Race Stratified COVID-19 Related Deaths Per 100,000 Veterans Using VHA Services, (March 1, 2020 – January 1, 2021)



Note: Veteran death figures exclude Veteran-Employees. The following racial/ethnic groups were not included in the figure due to the relatively low number of counts in each category: American Indian, Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, and Veterans with multiple reported racial/ethnic categories. In total, these excluded racial/ethnic categories comprise approximately 4% of Veterans who use VHA services. Veterans for which VHA does not have a captured race/ethnicity were also excluded and comprise approximately 7% of the Veteran population. The population of Veterans Using VHA Services during FY20 was captured from the CDW database to identify individual race and ethnicity within that population. Veteran COVID-19

related cases and deaths were also captured from the CDW database. Veterans with multiple positive case records were only counted once per unique patient integration control number. Sources: NST Dataset, HOC, VHA, accessed 3/3/2021; Veterans Using VHA Services - CDW Database, VHA, accessed 3/24/2021.

Table 2.4 shows the top 25 facilities by number of COVID-19 cases among Veterans Using VHA Services. Six facilities exceeded 1,000 COVID-19 cases among Veterans Using VHA Services, two of which were VISN 17 facilities.

Table 2.4: Top 25 Facilities by Number of COVID-19 Cases among Veterans Using VHA Services (as of January 1, 2021)

VISN	Facility Name	City	State	Number of Veterans Using VHA Services with COVID 19 Diagnosis
23	Omaha VAMC–VA Nebraska- lowa Health Care System (HCS)	Omaha	NE	1,440
15	Kansas City VAMC	Kansas City	MO	1,360
7	Columbia VA HCS	Columbia	SC	1,239
17	VA North Texas HCS	Dallas	TX	1,232
15	VA St. Louis HCS	St. Louis John Cochran	MO	1,196
17	South Texas Veterans HCS	San Antonio	TX	1,071
23	San Diego Vet Center	Minneapolis	MN	972
16	Michael E. DeBakey VAMC	Houston	TX	968
10	Louis Stokes Cleveland VAMC	Cleveland	ОН	959
17	Central Texas Veterans HCS	Temple	TX	920
8	North Florida/South Georgia Veterans Health System	Gainesville	FL	916
9	Tennessee Valley HCS	Nashville	TN	911
2	Atlanta VA HCS	Atlanta	GA	905
17	VA Texas Valley Coastal Bend HCS	Harlingen	TX	878
12	Clement J. Zablocki Veterans Affairs Medical Center	Milwaukee	WI	830
9	James H. Quillen Veterans Affairs Medical Center	Mountain Home	TN	822
2	VA Western New York HCS	Buffalo	NY	775
16	Veterans HCS of the Ozarks	Fayetteville	AR	744
16	Gulf Coast Veterans HCS	Biloxi	MS	731
22	Eureka Vet Center	Phoenix	AZ	723
17	El Paso VA HCS	El Paso	TX	716

VISN	Facility Name	City	State	Number of Veterans Using VHA Services with COVID 19 Diagnosis
6	Salisbury – W.G. (Bill) Hefner VAMC	Salisbury	NC	711
22	VA Loma Linda HCS	Loma Linda	CA	703
7	Ralph H. Johnson VAMC	Charleston	SC	670
8	Bay Pines VA HCS	Bay Pines	FL	625

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition for this report in order to quantify Veterans at risk for COVID-19. Counts by location are based on a pro-rated method proportional to the cost of care. Source: Veterans Using VHA Services Data, ARC, VHA, 2/2/2021. NST Dataset, HOC, VHA, accessed 2/21/2021.

Updated Summary of Fourth Mission Data

VA Fourth Mission support continued to be active from July 1, 2020, to January 1, 2021. In that time, VA provided support in 36 states.²¹

Table 2.5 shows the number of Fourth Mission episodes that VA supported during the timeframe of this report. The majority of Fourth Mission episodes were to support staffing requests. Similar to the Initial Report, staffing, PPE, testing and bed capacity received high requests. For more background about VA's Fourth Mission and the breadth of support provided, see the Fourth Mission section of this report.

Table 2.5: Number of Fourth Mission Episodes by Support Type (July 1, 2020 – January 1, 2021)

Support Type	Number of Fourth Mission Episodes
Staffing Supplement	374
PPE	47
Education	30
Bed Capacity	28
Testing	21
Supplies	45
Subject Matter Expertise	47
Infection Control	31
Vaccinations	2

Note: Some taskings were counted more than once if they provided multiple types of support. Data covers taskings that started after June 30, 2020.

Source: Response to Data Calls, All VISNs, January – February 2021.

WORKFORCE

This section describes updates to VHA's workforce during the Annex period. These updates will include deaths, leave policies, hiring and attrition rates. As of January 1, 2021, VHA employed nearly 370,000 people.²²

See the Human Resources (HR) section of the Initial Report for information on HR actions taken by VHA in response to the pandemic up to June 30, 2020.

Hiring and Attrition Statistics

From July 1, 2020, to January 1, 2021, VHA increased its personnel by approximately 8,880 (net of attrition), representing a 2.5% net increase in the workforce. Table 3.1 shows HR statistics for the whole year, in which 15,266 employees were added (net of attrition).

During the Annex period, VHA hired more than 4,000 nurses, but lost more than 2,500, so the total net gain was 1,700 people.²³

Medical support assistance was the second-largest occupational jump; VHA hired more than 3,000 people in medical support assistance. However, 1,400 people left that role during this period, so the net total was only 1,691 people.²⁴

Table 3.1: Key HR Statistics Across VHACO and VISNs, (Jan 1, 2020 – Jan 1, 2021)

Occupations	Total Staff Onboard (as of December 2019)	External New Hires	Total Losses	Total Staff Onboard (as of December 2020)	Net Gain (Onboard 2019 minus Onboard 2020)
Medical Officer	26,749	2,813	2,083	27,463	714
Nurse	73,621	8,644	5,518	77,649	4,028
Practical Nurse	15,339	2,110	1,426	15,681	342
Nursing Assistant	13,429	2,926	1,363	14,343	914
Medical Support Assistance	27,764	5,936	2,854	29,899	2,135
Pharmacist	9,016	527	319	9,456	440
Psychology	6,074	467	393	6,321	247
Social Work	15,481	1,660	914	16,322	841
Custodial Worker	12,007	3,680	2,475	12,511	504
All Other Occupations	152,499	16,987	13,777	157,600	5,101
Totals	351,979	45,750	31,122	367,245	15,266

Notes: New Hires represents unique external hires, which excludes transfers from other VA entities; Total Loss represents all employees who have been removed from, or departed, VA for any reason; and Total Staff Onboard represents total positions filled as of 12/31/2020. Net Gain is calculated as the variance

between the 2019 Total Staff Onboard and 2020 Total Staff Onboard. Net Gain is inclusive of transfers within VA to another administration or occupational position. All Other Occupations include all administrative, clinical, and other occupations not independently identified in the table above. Numbers reported exclude trainees, medical residents, employees in non-pay status, and intermittent employees. Source: HR Employee Cube, VSSC, VHA, accessed 4/12/2021; HR Turnover Rate Cube, VSSC, VHA, accessed 1/25/2021; HR Nature of Action Cube, VSSC, VHA, accessed 1/25/2021.

Staff Unavailability

As shown in Figure 3.1, VHA employees experienced two major spikes in absences related to COVID-19 based on those reporting they were unable to work, which does not include regular sick or annual leave. From a low of approximately 0.4% in mid-June, the number of employees self-reporting sick leave due to COVID-19 jumped to about 0.9% in mid-July.²⁵

Employee self-reported leave due to COVID-19 decreased again in September and then spiked to just past 1.6% in early December before starting to decrease again. ²⁶ These data do not reflect the total unavailability of the workforce—only the portion of the workforce that self-reported COVID-19 related absences.

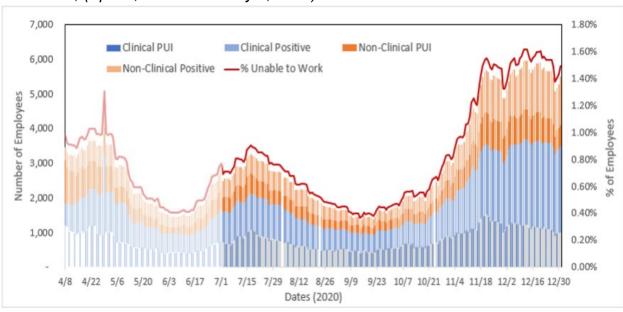


Figure 3.1: VHA Employees Unable to Work due to Circumstances Related To COVID-19, (April 8, 2020 – January 1, 2021)

Source: VHA, "Rapid COVID-19 Database," accessed 2/12/2021; VSSC, VHA, "HR Employee Cube," accessed 1/25/2021.

In light of the risk to health care personnel, vaccination of employees was a major priority for VHA during the Annex period. From December 14, 2020, to January 1, 2021, approximately 127,000 VHA employees were vaccinated.²⁷ Most reactions to the vaccines were mild; however, some discomfort was possible, particularly after the second dose.²⁸

On December 11, 2020, VHA issued a memorandum that provided COVID-19 Vaccination leave guidance. The new policy approved excused absences for up to two workdays for employees who become incapacitated after receiving the vaccine.²⁹ VHA revised this guidance on December 21 to allow for those who were vaccinated outside VA.³⁰

Staff Leave, 2019 vs. 2020

Despite the COVID-19 pandemic, employees took less leave during the second half of 2020 than they did in the second half of 2019, as shown in Figure 3.2. This closely mirrored the pattern for the previous six-month period, which can be found in Figure 6.12 of the Initial Report.

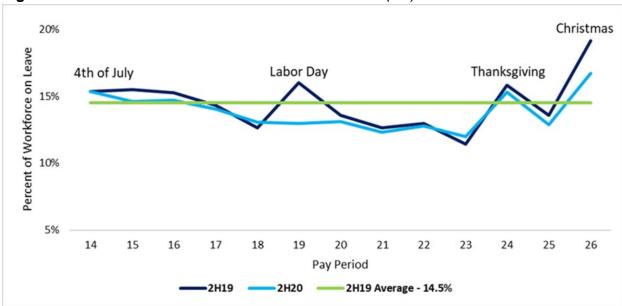


Figure 3.2: VHA Workforce Leave in the Second Half (2H) of 2019 and 2020

Source: VHA, "Workforce Management and Consulting Data," accessed 1/29/2021.

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NATIONAL AND INTERAGENCY COORDINATION

National COVID-19 Response Structure

From July 1, 2020, to January 1, 2021, the organizational structure for the national COVID-19 response remained largely unchanged. VHA was still represented in the White House COVID-19 Task Force, the interagency Emergency Support Function #8 (ESF #8) Coordinating Council, and high-level interagency planning groups (see Figure 4.1).

However, a few interagency groups shifted. In light of the COVID-19 surge in fall 2020, the HHS Office of the Assistant Secretary for Preparedness and Response (ASPR) stood up the interagency Healthcare and Medical Resourcing Strategic Operations Group (HMRSOG). The group's objective is to help the ESF #8 Coordinating Council prioritize resources. In the meantime, the Strategic National Stockpile Committee was dissolved, having completed its work, while FEMA's Supply Chain Task Force remains under FEMA but no longer has a VA representative. VA now has a VA OEM liaison officer at HHS to help coordinate on supply chain issues, under the Assistant Under Secretary for Health for Operations (AUSHO).

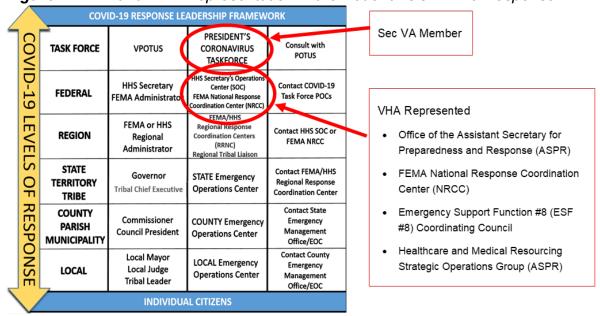


Figure 4.1: VA and VHA Representation in the National COVID-19 Response

Source: Original illustration obtained from "Coronavirus (COVID-19) Pandemic: Response and Recovery Through Federal-State-Local-Tribal Partnership," White House Office of Intergovernmental Affairs, March 2020, https://www.whitehouse.gov/wp-content/uploads/2020/03/COVID-RESPONSE-and-Recovery-Guidance.pdf, accessed 10/14/20. Link no longer active as of 2/16/2021. Updated with information obtained in January 2021,³⁶ as described in preceding paragraph.

Interagency Collaboration Enhancements

Evolving Partnerships Across Response Levels

Through its participation in the ESF #8 Council—which channels and prioritizes all requests from states, VISNs, IHS, Native American communities and territories—VHA has become much more involved in interagency pandemic response and communications at all levels. Through the Emergency Management Coordination Cell (EMCC), VHA has forged especially strong relationships with FEMA/NRCC and HHS/ASPR.³⁷ These partnerships have enhanced and streamlined national and regional coordination.³⁸

VHA's engagement in COVID-19 collaborative networks has helped the interagency prepare for vaccination rollout.³⁹ To facilitate this process, VHA leadership has asked the ESF #8 Council to help coordinate requests for Federal assistance pertaining to vaccination.⁴⁰ See the Vaccination Planning, Data Management and Distribution section in this report for details.

To help VHA coordinate with lower levels of leadership at FEMA and other agencies, VHA's OEM instituted a liaison to the VHA Acting Deputy Under Secretary for Health (DUSH), who represents VHA on the ESF #8 Council.⁴¹ VHA leadership has viewed this position as invaluable for the Acting DUSH in helping VHA with its top-to-bottom interagency response to requests for assistance.⁴² The liaison supports the DUSH in tracking these requests via coordination with VHA Area Emergency Managers.⁴³

According to VHA senior officials, compared to the first six months of the COVID-19 response, VHA's Fourth Mission capabilities gained considerable visibility in the interagency and resulted in more requests for assistance. ⁴⁴ The Acting DUSH often helped identify instances in which VHA could provide requested assistance, and found it especially important to remind ESF-8 Council and FEMA about VHA's capability to make beds available to civilians. ⁴⁵ He also worked with VISN directors in helping flag local state needs identified as urgent and expediting those requests to the ESF #8 Council for approval. ⁴⁶ In addition, he informed states struggling to find contract staff that VHA has a large network of staffing contracts across the country that are available to any state. ⁴⁷ See the Fourth Mission section of this report for additional details.

IHS and Tribal Health Programs

In November 2020, VHA and IHS developed an updated Memorandum of Understanding (MOU), with the original having been in effect since 2010. The agreement aims to institute a framework for coordination and partnerships to help

leverage resources and investments in support of each organization's mutual goals. The revised MOU is still in draft form as it undergoes a mandatory Tribal consultation process (slated to conclude in mid-March).⁴⁸

The MOU update was prompted by the influx of new technologies since 2010, as well as the need for a more flexible agreement.⁴⁹ A more flexible MOU could serve as an umbrella for various programs and initiatives, leveraging those advancements.⁵⁰ For example, it could open the door to electronic health record coordination between the two agencies.⁵¹ It would also facilitate the development of consistent outcomes metrics for measuring the MOU's success, something long requested by the Government Accountability Office.⁵²

One novel program being developed through a VHA-IHS collaboration is a new Native American Veteran patient navigator program.⁵³ It will operate under the VHA Office of Rural Health resource centers, with IHS providing materials such as cultural literacy pamphlets to help guide VHA staff.⁵⁴

Since assisting the Navajo Nation in VISN 22 with a major COVID-19 outbreak in March 2020, VHA has continued some of its work in the region.⁵⁵ For example, it still has staff working with Hopi Indians.⁵⁶ See VISN 22 section of Initial Report for details of the March 2020 events.

According to a senior VHA Office of Rural Health official, the primary challenge of working with the Tribes is their number and diversity.⁵⁷ There are 600 sovereign nations, each of which has its own relationship with the U.S. government.⁵⁸ The Tribes' primary connection to VHA is through their local VAMC directors, a set of partnerships that has been successful.⁵⁹ VHA hopes that a newly established advisory committee to address Native American Veteran challenges, which will operate under the Veterans Rural Health Advisory Committee, will aid communication and collaboration with the Tribes.⁶⁰

Data-Sharing and Analytics

In the first six months of the COVID-19 response, VHA's statistical modeling and analytics proved critical in helping to predict surge needs for beds and supplies across the enterprise; see the Interactions and Interdependencies with Federal and State Agencies section of Initial Report. The agency is working to leverage its data collection and management capabilities to boost interagency information-sharing and analytics for the pandemic and beyond.⁶¹

This new platform would be used for management decisional purposes.⁶² More broadly, VHA sees an opportunity to spearhead interagency data harmonization

efforts to enable seamless sharing of information.⁶³ It has several initiatives in place on which it can build: a joint health information exchange with the Department of Defense (DoD),⁶⁴ as well as COVID-19 data-sharing agreements with HHS (for example, on testing and vaccination), some of which are mandated by the Coronavirus Aid, Relief, and Economic Security (CARES) Act.⁶⁵

VHA leadership stated that it would like to see a common interagency operating platform, potentially based on person-oriented—not transaction-oriented—information tracking.⁶⁶ Such a platform could progress from guiding COVID-19 vaccination and testing strategies to informing national public health policy decisions long after the pandemic.⁶⁷

Leadership Insights

The COVID-19 pandemic has been a lesson in how to maximize the potential of interagency collaboration to successfully tackle a national crisis. As such, some VHA officials said they are viewing the experience as a valuable launching pad to build best practices to optimize future interagency emergency response coordination.⁶⁸

Several VHA leaders noted that although the ESF #8 Function has been used in emergencies such as fires and hurricanes, VA was rarely brought in unless resources were completely exhausted.⁶⁹ The officials observed that COVID-19 was instrumental in bringing VHA to the table, and they expect VHA to remain an active participant moving forward.⁷⁰

VHA leadership hopes that when the pandemic has passed, there will be an interagency effort to document and leverage the challenges and successes encountered in COVID-19 collaboration efforts.⁷¹ The lessons learned could further strengthen relationships and response systems and could give VHA the opportunity to continue to contribute its wealth of resources and expertise.⁷²

EMERGENCY MANAGEMENT AND READINESS

Overview

On January 21, 2020, OEM and Population Health activated the EMCC, and the cell continues to remain activated.⁷³ Since July 1, 2020, the EMCC has scaled up field staff to handle potential hurricane and wildfire responses while maintaining staff to sustain the management of its COVID-19 response plan.⁷⁴

In August 2020, the AUSHO issued a memorandum, "Disaster Response in a Pandemic Plan," which outlined OEM's approach to managing and responding to multiple incidents within a pandemic environment.⁷⁵ As part of the plan, OEM created scenario-based tabletop exercises that VISNs and the VAMCs could use to prepare for continuing COVID-19 pandemic operations and for managing a no-notice incident.⁷⁶

Personnel Deployment Coordination

One of the main functions of OEM is to oversee DEMPS—a program that enlists VHA volunteers to provide clinical and non-clinical staffing assistance during an emergency or disaster. During the first several months of the pandemic, many deployments were coordinated directly between VHA facilities rather than through DEMPS because of concerns that volunteers would not be deployed quickly enough through DEMPS.⁷⁷ As a result, VHA did not have visibility into the majority of deployments. This lack of centralized visibility created risks around ensuring credentials, facilitating awareness around safety requirements, obtaining proper approvals for government credit cards, and limiting access to real-time data on deployments.⁷⁸

Since July 1, 2020, OEM implemented a series of response actions to improve the DEMPS process. OEM developed a DEMPS SharePoint site with real-time visibility, including an "Open Recruitment" roster. All current DEMPS staffing requests can be entered on the site, where they are visible to DEMPS points of contact and facility coordinators. VISN DEMPS points of contracts and Deployment Operations Teams can then enter volunteer data on the Open Recruitment roster. The SharePoint site also hosts a DEMPS Staffing Support Plan that identifies roles and responsibilities for each process step in deployment operations.⁷⁹

In addition to the SharePoint site, OEM upgraded the Performance Improvement Management System (PIMS) to meet the high demands of large-scale deployments. PIMS now includes functionality to allow VHA Deployment Operations Teams to select and add volunteers from the DEMPS database to their DEMPS deployment

rosters. Prior to this functionality, only 8% (4 out of 49) of DEMPS COVID-19-related deployment rosters were fully completed. Post-implementation, 100% (36 out of 36) of rosters were completed.⁸⁰

Finally, OEM refined their DEMPS Mobilization and Demobilization Concept of Operations to ensure on-the-ground support for all DEMPS deployments and, with support from Population Health, outlined a detailed Medical Care Plan to guide actions if a DEMPS staff member contracted COVID-19 while deployed.⁸¹ These response actions improved the VHA's capability to get DEMPS personnel on the ground more quickly and efficiently where needs have been identified.⁸²

Since July 1, 2020, there have been enough DEMPS volunteers within and across VISNs and medical centers; however, DEMPS approval at the medical center remains a challenge. Beautiful Endeath in the supervisors are reluctant to release DEMPS volunteers because they may be needed to meet local COVID-19 demands as they arise. Beautiful Endeath DEMPS in its original form was not designed to address a protracted national emergency while also sustaining daily health care operations. OEM leadership noted that engaging VISNs to get their support and buy-in is foundational to create a DEMPS infrastructure that can sustain long-term deployments. Without VISN support, additional conditions will be needed to sustain volunteer numbers:

- An operating budget that will support equipment and team supplies⁸⁶
- A team operating plan that is detailed enough to define roles and responsibilities of DEMPS employees⁸⁷
- Additional OEM full-time employee equivalents (FTEE) who can support medical center deployability and logistics issues⁸⁸
- Comprehensive training/exercise plans for a joint OEM and Medical Centers' DEMPS support⁸⁹
- A full-time DEMPS coordinator at each VISN who works in close coordination with OEM⁹⁰

Table 5.1 provides an overview of VHA personnel movement, some of which occurred outside the DEMPS system. Registered Nurses (RN) had the highest numbers of movement compared to other medical specialties: 394 RNs moved to support a non-VHA facility, 69 moved within their assigned VISN, and 247 moved to support another VISN. Large numbers of Licensed Practical Nurses (LPN) were also moved to support needs within and outside the VISN.

Table 5.1: VHA Movement of Personnel (March 1, 2020 – January 1, 2021)

	,	•	•
Category	Non VHA Facility	Movement within VISN	Sent to another VISN
Admin / Management / Support	46	8	21
Allied Health Clinician	0	1	0
Associate Director	0	0	0
Clinical Nurse Specialist	5	0	0
Clinical Support	21	0	1
Health Care Technician	13	2	15
Industrial Hygienist	2	0	0
Logistics	0	3	3
Mechanic	0	0	0
Nurse	40	33	1
Licensed Practical Nurse / Licensed Vocational Nurse	239	10	23
Nurse Manager	27	1	7
Nurse Practitioner	28	6	4
Nurse Shift Supervisor	0	0	0
Nursing Assistant	123	19	17
Physician	38	2	5
Physician Assistant	0	0	0
Registered Nurse	499	80	181
Trade / Craft	2	0	0
Nutritional Health Services	0	11	4
CDL Driver	0	6	9
Police	3	6	11
Fire Department	0	0	0
Respiratory Therapist	9	6	22
Housekeeper	3	6	8
Medical Support Assistant	6	14	7
Pharmacists	3	15	2
EMS	5	5	1
Hospitalist	0	1	0
Infectious Diseases SME	7	1	0
Microbiologist	0	1	0
Social Worker	5	2	5
Other	208	21	14

Note: Personnel listed in the VISN data call were aggregated by type of personnel movement and category of occupation.

Source: Responses to VISN Data Call, VHA, January and February 2021.

Fourth Mission Coordination

The EMCC manages all FEMA Mission Assignments. There were no major changes in the Fourth Mission coordination process since the last report due in large part to continuity of OEM Liaisons in the Regional Response Coordination Centers. 91 OEM leadership noted that having the same people in the same liaison officer roles has aided in the mission coordination process. 92

Conversely, turnover in Federal and state agencies has created some challenges,⁹³ particularly in the coordination process. For example, as the EMCC receives more requests for vaccinations, state and local partners (who may not be aware of the process) have begun to bypass the EMCC and go directly to VHA facilities to request vaccines.⁹⁴

To ensure continued success, OEM leadership maintained that all partners need to stay within the established process and vet their requests directly through the EMCC. 95 OEM leadership also noted that the full-time NRCC liaison officer role is a critical position that should be reopened and reconsidered. Leaders believe that the role will be even more crucial as VHA starts forming national response teams. 96

Mobile Asset Deployment

In addition to its other responsibilities, the EMCC facilitates deployment of mobile assets, such as Fold-Out Rigid Temporary Shelters (FORTS) and other temporary medical structures. ⁹⁷ These assets serve as alternative sites of care if an overwhelming number of patients need hospitalization. Since July 1, 2020, the EMCC began using VHA personnel, rather than contractors, to deploy mobile assets. ⁹⁸ Contracting trucking services to deploy mobile assets was taking a significant amount of time, which impacted the timeliness of delivery. ⁹⁹ OEM leadership noted that OEM and VHA must maintain personnel who have commercial driver's licenses and the capability to maintain and deploy mobile assets regardless of the emergency. They also noted that OEM and VHA should not rely on external organizations or companies to maintain and deploy VHA/OEM assets. ¹⁰⁰

From July to December 2020, the EMCC delivered a series of FORTS, C-FORTS (clinics), mobile ICUs and Isolation Units to a variety of locations across the United States. It is up to the receiving medical center to source the required staffing once critical care staffing requirements have been established. ¹⁰¹ Table 5.2 provides a list of the mobile units delivered by month and location.

 Table 5.2: Mobile Asset Deployment

Date	Mobile Unit Deployed	Location
July 2020	Four single-room FORTS	Danville, Hines and Sacramento (one remained with the mobile ICU)
July 2020	4 double-room FORTS	Tomah, Denver, Lake City and Montgomery
July 2020	2 three-room FORTS	Madison and Mt. Home
July 2020	1 C-FORTS Clinic	North Chicago
July 2020	1 mobile ICU	Oklahoma City
November 2020	1 mobile ICU	El Paso
December 2020	1 mobile ICU	Oklahoma City
December 2020	3 C-FORTS Clinics	Amarillo, Richmond and Salem
December 2020	Received 15 Isolation Units	Prepositioned at the following locations: Buffalo (in use), GLA (in use), Orlando, Ann Arbor, Jackson, Cheyenne, Lyons (in use), Topeka, Eugene and Martinsburg x7

Source: VHA Office of Emergency Management and Fourth Mission, response to questionnaire, 1/19/2021.

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VACCINATION PLANNING, DATA MANAGEMENT AND DISTRIBUTION

During the Annex period, FDA authorized two COVID-19 vaccines for emergency use: the Pfizer-BioNTech COVID-19 vaccine, authorized under an EUA on December 11, 2020, and the Moderna vaccine, authorized on December 18, 2020. 102

Because this report covers only July 1, 2020, through January 1, 2021, VA had only a few weeks of vaccinations within the reporting period. Therefore, the content in this section will focus heavily on vaccine development and distribution planning. For more current information about vaccinations, visit VHA's Access to Care website. 103

VHA is responsible for providing COVID-19 vaccinations to over six million people. 104 The vaccinations will be offered to VA and VHA employees and to Veterans who are enrolled and have accessed the VA health care system in the last 24 months. 105

On December 14, 2020, VHA began issuing vaccinations to prioritized individuals according to its interim COVID-19 vaccination risk stratification framework. ¹⁰⁶ From December 14 to December 31, 2020, VHA vaccinated 19,463 Veterans. ¹⁰⁷ This number includes residents of CLCs (4,755 vaccinated) and Veterans with SCIs (585 vaccinated). ¹⁰⁸ VHA estimated that nearly 44% of VHA employees prioritized for vaccination had received one dose by January 1, 2021—126,916 of 289,000 employees prioritized at the time. ¹⁰⁹

Both vaccines require two doses to be administered to each patient, with a waiting period of 21 days between the injections for Pfizer-BioNTech, and 28 days for Moderna. Because the vaccines were approved in mid-December 2020 and doses are given three or four weeks apart, no second doses were administered during this report's timeframe. 111

Planning for Vaccination

VHA began its vaccination planning in August 2020. In its COVID-19 planning charter, VHA outlined the scope of work needed to prepare VHA to administer vaccinations. The major deliverables are outlined in Table 6.1.

Table 6.1: Major Deliverables and Milestones for VHA Vaccine Distribution

Major Deliverable	Deliverable Description
Establish COVID-19 Vaccine Planning Team	Establish a work group consisting of representation from various program offices to develop policy and program guidance supporting prioritization and delivery of COVID-19 vaccines for Veterans and staff.
Create Communication Plan	Build communications to support the Veteran and staff COVID-19 vaccination programs.
Create VA vaccine Prioritization Plan	Coordinate approval and implementation of a prioritization framework for COVID-19 vaccination for staff and Veterans.
Create vaccine policy	Coordinate approval and implementation of VHA policies and clinical guidance for COVID-19 vaccination campaigns for staff and Veterans.
Deploy metrics for monitoring COVID-19 vaccination plan	Coordinate development of key metrics for tracking of COVID-19 vaccine supply and distribution, and COVID-19 vaccination rates for staff and Veterans.
Launch clinical support tools to optimize vaccine compliance	Sponsor development of clinical informatics tools, such as reporting dashboards and clinical reminders, to support the COVID-19 vaccination campaigns for staff and Veterans.
Create vaccine safety and quality monitoring plan	Establish a work group to draft clinical guidance for post-COVID-19 vaccination safety and clinical monitoring.
Create vaccine education plan	Develop and disseminate educational materials for Veterans and staff to support the COVID-19 vaccination program.

Source: VHA Office of Healthcare Transformation, "COVID-19 Vaccination Plan 1025 Project Team Charter," pg.4, 8/22/2020.

In keeping with its goals from the charter, VHA created a team to plan for vaccine distribution in September 2020. 113 At that time, FDA had not approved or authorized any COVID-19 vaccines; however, CDC had informed Federal agencies that they should prepare plans to distribute COVID-19 vaccines in anticipation of their availability under an EUA. 114

The COVID-19 vaccine planning team split into work streams that included stakeholders from Veterans Health Administration Central Office (VHACO), clinical leaders, regional leaders, medical center leadership and project management support. Through coordination with CDC, FDA and other Government agencies, VHA created a plan that would launch as soon as a vaccine was authorized and available for distribution. The

VHA's final national COVID-19 vaccine plan aimed for swift vaccine distribution with safe, ethical and transparent plans and guidance. The guiding principles of the plan were threefold: 118

• Lower the infection and spread of COVID-19.

- Prioritize the safety of staff and Veterans at all times.
- Create policies for vaccine distribution that are "fair, evidence-based, equitable, transparent, and aimed at maximizing the benefits of COVID-19 vaccination." ¹¹⁹

Based on these guiding principles, VHA developed three goals for its vaccination program: 120

- Develop and implement a plan to procure, distribute and administer COVID-19 vaccine for Veterans and VA staff.
- Develop a population-based risk stratification plan for COVID-19 vaccine administration and implement this plan during the early phase of limited vaccine supply.
- Implement solutions to track and report vaccine supply, administration, wastage, spillage and monitor vaccine safety for internal and external stakeholders.

Planning Challenges

Planning for the vaccine came with its share of challenges. VHA collaborated across its own organization, as well as with other agencies such as CDC to create tabletop exercises designed for facilities and regions to work through potential challenges before the vaccines were available. 121

One of the largest challenges VHA faced was unknown numbers of vaccine doses. Ahead of FDA approval, VHA did not know how many vaccines would be authorized or how many doses would be available to its facilities. 122 Without clear knowledge of its supply, VHA created a plan that included planning for a number of vaccine delivery modalities, including combinations of appointments and walk-in clinics. 123 Limiting the number of scheduled appointments allowed the VHA to minimize potential appointment cancellations due to inadequate supply. 124

Data Tracking

CDC had specific requirements for data collection and transmission once the vaccine was ready for distribution. 125 At the time, VHA did not have the systems in place to provide the detailed reporting CDC required, which would have prevented its ability to obtain vaccines. 126

To solve this problem, VHA worked with its Office of Information and Technology to leverage a pre-existing middleware system that would provide data to CDC to meet CDC's reporting requirements. A program was identified and modified to include patient and employee vaccine administration data that met the CDC's requests. 127

VHA leadership noted that CDC's reporting requirements mandated a manual upload of vaccine reports within 24 hours of vaccine administration. ¹²⁸ As a result, staff members had to upload the data each day, which was far less efficient than an automated system. ¹²⁹ VA is working with CDC to create a system that does not require manual upload. ¹³⁰

Despite these issues, VHA leadership reported that the current data transmission system is working well; less than 1% of the data entries are rejected or need correction.¹³¹

Vaccine Storage

Refrigeration was another concern. The Pfizer-BioNTech COVID-19 vaccine had to be stored at a temperature of -70 degrees Celsius (C). Any facility administering this vaccine would need to have the capability to store the medicine, which required the facilities to have access to ultra-cold storage. This limited the number of facilities VHA could open for storage of the Pfizer-BioNTech vaccine.



A staff member opens boxes of COVID-19 vaccines in Central Alabama. (Photo Credit: VA)

Knowing that this would be a challenge, VHA conducted a data call in November 2020 to identify the number of facilities with ultra-cold storage. ¹³⁵ Then VHA placed orders for more freezers manufactured to meet the ultra-cold temperature requirements. ¹³⁶ When the Pfizer-BioNTech vaccine was approved, 37 VHA sites around the country were ready to receive it. ¹³⁷

When the Moderna vaccine was approved on December 18, 2020, this helped VHA extend its vaccine reach to many additional facilities. Moderna did not require the same cold storage standards. Moderna vials needed to be stored at -20 degrees C, which is much more common than the availability of freezers that can store at -70 degrees C. Many VHA facilities already had freezers in place that could cool to -20 degrees C. VHA was able to distribute Moderna vaccinations to 103 sites at release. Moderna vaccinations to 103 sites at release.

Roles and Responsibilities in Vaccination Planning

In May 2020, President Trump announced the creation of Operation Warp Speed (OWS). OWS was a collaborative effort to develop and administer a vaccine for COVID-19 as quickly as possible. Stakeholders in the operation included DoD, and members of HHS—including CDC, FDA, NIH and the Biomedical Advanced Research and Development Authority. 144

VHA worked closely with OWS throughout the vaccine planning process by offering assistance and working alongside the stakeholders.¹⁴⁵

VA is also a key player in ESF #8, a group of 16 agencies that work together to provide supplemental support in a public health crisis. 146 VHA leadership reported that overall, ESF #8 was effective in coordinating resources throughout the pandemic; however, there were times when the process moved too slowly for the demand. 147 In these situations, VHA utilized local contacts with SVHs or private-sector leaders to resolve needs. 148

Vaccine Distribution

Prior to the release of vaccinations, VHA coordinated with CDC to become a multijurisdictional vaccine provider. ¹⁴⁹ By meeting CDC requirements (cold storage, tracking and reporting capabilities), VHA was able to receive an allocation of vaccine doses of the vaccines directly from CDC, rather than from individual states. ¹⁵⁰ VHA was ready to distribute the vaccines as soon as they were authorized by FDA, and CDC made recommendations on their use. ¹⁵¹ VHA leadership reported that initial distribution of vaccines to VHA sites went smoothly. CDC provided allotments directly to facilities as planned, and vaccinations of priority individuals were proceeding at a rapid pace at the end of December. 152

HHS allocated vials of the vaccine according to the needs of the organization. ¹⁵³ For VHA, that meant that the number of vaccines they received might increase as their mission parameters grew. ¹⁵⁴ For instance, if VHA were tasked with administering vaccines at SVHs, VHA could request a larger allotment of vaccines to accommodate the new mission. ¹⁵⁵

Recipient Considerations and Prioritization

CDC provided guidance on priorities for the vaccine. ¹⁵⁶ Table 6.2 outlines the first three groupings identified for vaccination, referred to as Phases 1a, 1b and 1c.

 Table 6.2: CDC Priority Groups for COVID-19 Vaccination

Phase	Description
1a	Health care personnel Long-term care facility residents
1b	People 75 years or older Front line essential workers, including firefighters, police officers, grocery store workers, public transit employees and educators
1c	People ages 65-74 years old People ages 16-64 with underlying health conditions Other essential workers not included in CDC Phase 1b

Source: CDC, "CDC's COVID-19 Vaccine Rollout Vaccinations," updated 2/19/2021, https://www.cdc.gov/coronavirus/2019-ncov/vaccines/recommendations.html, accessed 2/21/2021.

Because VHA had many individuals in Phase 1a and anticipated that supply would be insufficient to initially vaccinate all individuals in Phase 1a, VA sub-stratified its 1a population. Veterans residing in CLCs and SVHs, as well as Veterans in SCI units were sub-stratified for initial vaccination through VHA.

Although VHA provided vaccinations to many employees, not all VHA health care workers received (or will receive) vaccinations through VHA, and many were (or will be) vaccinated by their states of residence according to those states' priorities. ¹⁵⁹ Of the 289,000 VHA employees who were identified as priorities for vaccination, 126,916 (44%) of VHA employees had received one vaccination dose as of January 1, 2021.

Table 6.3 shows VHA vaccinations by priority group for the Annex period. For more detailed information by VISN, see Appendix C, Table 16.3 and Table 16.4.

Table 6.3: Vaccinations Administered by VHA, by Priority Group

	Veterans Using VHA Services			
	Employees	Veterans	Veterans with SCI	Veterans in CLCs
Total Vaccinated	126,916	19,463	585	4,755
Total Population	347,320	6,458,171	16,786	7,360
Percent Vaccinated	36%	0.30%	3.49%	65%

Note: Veterans Using VHA Services are Veterans who used VHA services between April 1, 2019, and September 30, 2020. Veterans who died prior to February 1, 2020 were excluded from the Veterans Using VHA Services definition for this report in order to quantify Veterans at risk for COVID-19. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests, confirmed positives and deaths figures exclude Veteran-Employees. CLC resident counts were aggregated between December 15, 2020 and January 1, 2021 to account for all residents during the period of COVID-19 vaccine administration. CLC population counts as of December 30, 2020 may include patients who resided in more than facility during the time period stated above. A majority of Veterans with SCI are not VA inpatients, and those that are have been offered vaccination per the VA vaccination priority guidelines. Total Veterans vaccinated, Veterans vaccinated with SCI, and CLC Veteran vaccinated populations are not mutually exclusive. Note: Totals may not add due to rounding.

Source: Veterans Using VHA Services Data, ARC, VHA, 2/2/2021; HR Employee Cube, VSSC, VHA, accessed 4/12/2021; CDW Database - VSSC Out Tables, HOC, VHA, accessed 2/21/2021; CLC Vaccination and Population Data provided by HOC, VHA on 3/24/2021.

Vaccination Protocols

The VHA vaccination team issued two training modules with the vaccines. ¹⁶⁰ The first was about how to handle the vaccine itself—for example, how to store it and reconstitute it. ¹⁶¹ The second module was about administering the vaccine: side effects, how they worked and what to expect after the shot was given. ¹⁶² VHA leadership stated that these training modules were highly effective in preparing staff for vaccination distribution. ¹⁶³

Compared to the Pfizer-BioNTech and Moderna COVID-19 vaccines, Moderna was easier to handle. 164 First, it required less intense cold storage. 165 And second, Moderna was packaged in 10-dose vials with a minimum quantity of 100 doses, but Pfizer-BioNTech vaccines were packaged in 6-dose vials with 975-dose minimum quantities. 166

Pfizer-BioNTech vaccines can be stored for six months, but only at ultra-cold temperatures. ¹⁶⁷ Pfizer-BioNTech uses thermal shippers to move the vaccine from Pfizer-BioNTech facilities to distribution centers. ¹⁶⁸ The thermal shippers use dry ice, which is not as cold as the storage freezers. ¹⁶⁹ Once removed from ultra-cold storage, the vaccine can be used only for 30 days, assuming it has not thawed. ¹⁷⁰

Pfizer-BioNTech vaccines also come in larger packages; the smallest number of vials available was 975 doses. 171 To make sure vaccine doses did not go to waste,

the facilities had to have a large enough population to distribute at least 975 doses prior to expiration. ¹⁷² For this reason, the 37 initial sites were centrally located with larger infrastructures. ¹⁷³

Per CDC regulations, if liquid remained in the bottom of the Pfizer-BioNTech vial after a sixth dose was removed, the remainder needed to be discarded and could not be combined with vaccination fluid from other vials. As described by VHA leadership, the simpler handling procedures for Moderna vaccine, which did not require dilution, made the Moderna vaccine easier to use. 175

In light of the differences in handling and care, VHA initially decided that facilities would receive either the Pfizer-BioNTech vaccine or the Moderna vaccine, but not both. This was done to limit confusion in storage and handling, and to limit the possibility that a patient could get the first dose of Pfizer-BioNTech and the second dose of Moderna, or vice versa. The possibility that a patient could get the first dose of Pfizer-BioNTech and the second dose of Moderna, or vice versa.

Supply Rollout and Management

Shipping the vaccinations was arranged through CDC and DoD.¹⁷⁸ CDC also issued guidelines on how closely vaccinations should be tracked.¹⁷⁹ With these supports behind it, VHA created a vaccine inventory tracking system that allowed them to carefully monitor the location of all doses, including those that had been wasted or redistributed.¹⁸⁰

VHA used a controlled substance tracking process to track each vial of vaccine. 181 Although the vaccinations themselves are not considered controlled substances, it is critical that each dose be monitored closely. 182 VHA leadership reported that because the controlled substance tracking system is so meticulous, VHA was able to keep a careful watch on each dose and monitor vaccine inventory for each site. 183

Vaccine Acceptance

In a nationwide survey conducted in September 2020, only 51% of Americans stated that they would "definitely" obtain the vaccination for COVID-19.¹⁸⁴ Among Black Americans, this percentage was even lower: only 32% of respondents were certain that they would get vaccinated.¹⁸⁵

To address potential vaccine hesitancy from Veterans, VHA released a series of communications designed to reduce vaccine hesitancy and build vaccine confidence. For instance, in "COVID-19 Vaccine Planning: Frequently Asked Questions for Veterans," VHA assured Veterans that VA would monitor reactions to the vaccine. 186

Marginalized Groups

Creating trust around the COVID-19 vaccine has proven challenging, particularly for groups that have experienced experimentation and other unethical behavior from the medical community in the past. VHA leadership stated that communication is key to instilling trust, but that diversity and representation will need to be a critical component of that communication. 188

Homeless people face considerable risk from COVID-19 but reaching these individuals to talk to them about vaccines can be a challenge. ¹⁸⁹ VA is uniquely situated to reach out to this community. ¹⁹⁰ In the coming months, VA will be partnering with Hertz to work on a vaccination initiative for the homeless population. ¹⁹¹ For more information, see the Health Equities section of this report.

CDC reported that the number of Americans planning to be vaccinated increased from September to December 2020, especially among Americans over 65 years old; however, CDC also emphasized the importance of ongoing communication about the vaccine with the general public. 192

To date, VA has not conducted its own surveys on the subject of vaccine acceptance; VHA leaders reported that rolling out a survey in such a short period was not feasible. 193 However, VHA is planning to conduct focus groups in spring 2021 to assess vaccine-related concerns from marginalized peoples. 194

Vaccine Rollout

During the Annex period, VHA administered over 165,000 doses of vaccine. ¹⁹⁵ No second doses were issued in the time frame of the report. ¹⁹⁶ Table 6.4 shows doses administered by VHA by vaccine brand. For more detailed information by VISN, see Appendix C, Table 16.3 and Table 16.4.

Table 6.4: Vaccination Doses Received and Administered by Vaccine Brand (as of January 4, 2021)

	Moderna	Pfizer BioNTech	Total
Doses Administered	85,740	74,022	159,762
Doses Received	201,000	264,225	465,225
Percent Administered	43%	28%	34%

Note: Counts of vaccine doses received and estimated doses administered are based on data through 1/4/2021. Counts of estimated doses administered may include personnel or parties outside of designated priority vaccination guidelines. Counts of estimated doses administered are also based on the total vaccine doses shipped to a facility minus the daily self-reported facility inventory count. Source: Vaccine Supply Data from HOC, VHA, received 3/17/2021.

Safety/Adverse Events

From the beginning of the vaccination process, VHA closely tracked adverse events and side effects. 197 All reports of side effects, from mild to severe, were reported to CDC on a weekly basis. 198 VHA leadership noted that reporting was passive, meaning that there was no direct outreach to vaccine recipients. However, there was extensive self-reporting, and VHA leaders believed that the adverse events system was working as intended. 199

To track side effects and significant issues with vaccines, VHA used the VA Adverse Drug Event Reporting System (VADERS), a program that has been in place at VHA for 10 years.²⁰⁰ For COVID-19, the system was upgraded to allow employees to report adverse effects since they, too, were being vaccinated by VHA.²⁰¹ All adverse events entered into the tracker are transmitted to CDC and FDA.²⁰²

For COVID-19, all side effects were reported in detail. VADERS is a web-based program, and any medical professional trained to use the program is permitted to enter information.²⁰³

VHA sites also reported taking a cautious approach to vaccination procedures. ²⁰⁴ VHA has a strong infrastructure for vaccination because it provides flu shots to many Veterans every year. ²⁰⁵ Drive-thru flu shot mechanisms would have been easy to convert for COVID-19 vaccines, in terms of speed. ²⁰⁶ However, practitioners needed to ask the patient questions before they could administer the vaccination. ²⁰⁷ They also wanted to observe patients for 15 to 20 minutes after the vaccine was administered to confirm there was no negative reaction. ²⁰⁸ As a result, vaccination drives were modified to ensure safe and careful protocols. ²⁰⁹ VHA leadership reported that there was one drive-thru clinic running in December. ²¹⁰ Others have opened since then, and more are in the planning stages, as practitioners become more familiar with the vaccination process and protocol. ²¹¹

Vaccine Communication and Education

VA has developed 60 to 70 separate communications about COVID-19 vaccines.²¹² These communications were compiled in a toolkit, in which each chapter outlined a phase of the vaccination roll out. There were communications for employees, Veterans and the general public. These communications stayed close to the messaging provided by CDC, but also provided the unique perspective of VA, tailored to its specific audiences.²¹³

HEALTH EQUITIES IN THE VETERAN POPULATION

The term "health equity" means that everyone has the same opportunities to be as healthy as possible, despite social circumstance. VHA's OHE works to support Veterans in achieving more equitable health and health care. The primary goal of OHE is to eliminate health disparities—preventable differences in health care and health—experienced by socially disadvantaged populations.²¹⁴

OHE's mission is to learn about and eliminate non-clinical differences related to race and ethnicity, gender, age, geographic location, religion, socioeconomic status, sexual orientation, mental health, military era and cognitive/sensory/physical disability.²¹⁵ See the Initial Report for more information about OHE's aims.

This section focuses on disparate groups according to the following categories: race and ethnicity, LGBT, women, and age. The health disparities for these groups were known prior to the pandemic; however, some of the gaps in health became more apparent this year. This, along with adjusting its approaches to care in response to COVID-19, accelerated VHA's actions to address disparities for Veterans.

OHE leadership acknowledged that marginalized groups are often skeptical about VHA's interest in their welfare. ²¹⁶ In order to support their health, VHA must take extra measures to reach out and connect with these subpopulations to help them during this pandemic. ²¹⁷ From July through December 2020, VA increased its outreach to these groups in an effort to understand their needs. ²¹⁸ Through this outreach, VHA leaders learned that many Veterans did not realize what VHA services they could utilize. ²¹⁹ In response, VHA created a centralized communication team and tailored communication strategies to make information on VHA services and COVID-19 more readily available to Veterans during the pandemic. ²²⁰

Race and Ethnicity

The disparity for race and ethnicity has always been considerable in the United States. It also crosses into other marginalized groups. ²²¹ VHA leadership who focus on women's health stated that they look at health equity for men versus women, as well as for white women versus minority women. ²²² Due to this, OHE tracks race and ethnicity data on its Veterans closely. ²²³

According to OHE, the Office has race and ethnicity data on 90% of its Veterans.²²⁴ This data is taken from OHE's self-reported surveys batched with what OHE has in its records.²²⁵ VHA has a high level of trust in the accuracy of the data; OHE reports that it is better than similar private-sector data.²²⁶



As part of a pandemic telehealth initiative, a VHA employee provides a cell phone to a Veteran experiencing homelessness. (Photo Credit: VA)

However, the data is more reliable for White, Black, Hispanic and Asian Americans. According to OHE, data is not given for Native Americans/American Indians because OHE believes that the numbers are misleading. This can be the case because many people of American Indian descent are multiracial. Some identify as White, some American Indian, and some both. These circumstances are not unique to VA. The VHA, only 1% of its users are American Indian. For COVID-19, the likelihood of American Indians using VHA services is low because they will typically be cared for by VHA providers in IHS facilities and generally are transferred to a VHA facility only if extremely sick.

At the beginning of the pandemic, Black Americans experienced high rates of infection and complication.²³³ The disease spread quickly in large cities, which adversely impacted Black Americans.²³⁴ The gap between Black and White infections narrowed during summer 2020 when the disease was more prevalent in rural areas, but increased again in December 2020.²³⁵ OHE expressed concern that this could indicate increased disparity in 2021.²³⁶

Conversely, during the summer and into the fall of 2020, Hispanic Veterans were disproportionately affected by COVID-19 although their rates spiked in the summer and fall.²³⁷ OHE theorizes that this change occurred for two reasons. First, it is

widely reported that Black and Hispanic Americans are more likely to hold jobs that are not amenable to social distancing.²³⁸ Second, the disease changed the way it spread within the United States.²³⁹ Earlier during the pandemic, COVID-19 hit large cities before spreading to small cities and rural areas, impacting Hispanic Americans.²⁴⁰ However, late 2020 saw a return to large cities, which resulted in the uptick in Black Americans testing positive for the illness again.²⁴¹

Building Trust in Communities of Color

OHE used focus groups (convened in fall 2020) to identify knowledge and accessibility gaps for Veterans of color.²⁴² In these focus groups, OHE learned that many Veterans of color had barriers to knowledge about COVID-19 and then OHE developed outreach materials accordingly.²⁴³ Language barriers and limited internet accessibility also contributed to this dearth of information.²⁴⁴ To support these marginalized Veterans, OHE tailored communications to speak directly to them and to their needs.²⁴⁵ Communications were systematically translated into Spanish for the first time, and new channels of communication—such as sending text messages, distributing weekly newsletters and hosting virtual events—were used to reach Veterans.²⁴⁶

OHE gathered information from people of color (POC) Veterans in focus groups and reports outside of VA indicating that minority groups, particularly Black Americans, are more vaccine-hesitant and less likely to get vaccinated.²⁴⁷ This hesitation stems from past poor treatment of people of color by medical science, including syphilis experiments conducted on Black Americans without their knowledge, and the use of Henrietta Lacks' cells without her consent.²⁴⁸

To combat this distrust, OHE reached out through local leaders of color.²⁴⁹ VA posted blog entries written by Black leaders in VA.²⁵⁰ The leaders shared their support of the vaccine and encouraged POC Veterans to remain informed about the development of vaccines and treatments.²⁵¹ VHA also worked to emphasize that the vaccine is optional; although it is being made available, POC Veterans do not have to receive it.²⁵² To further support its POC Veterans, OHE developed tailored guidance for health care providers, outlining communication techniques to ensure that Veterans are properly informed.²⁵³

More data is needed to measure the success of these endeavors. Participants in the focus groups were chosen to represent underserved populations across racial, sexual and socioeconomic identities; but the reach and success have yet to be evaluated.²⁵⁴

Women

According to VHA leadership, Veteran women often use VHA when they cannot turn to insurance or their own finances.²⁵⁵ Those who use VHA have a higher proportion of service physical disability than their male counterparts.²⁵⁶ They are also more diverse than the male Veteran population, especially for those under 65.²⁵⁷

Furthermore, those who use the VHA report lower levels of trust than their male counterparts, and this trust is even lower among the younger Veteran population.²⁵⁸ As reported by one VHA leader, this sentiment appears to be reducing women Veterans' interest in vaccination.²⁵⁹

<u>Vaccines</u>

According to VHA's Women's Health leaders, vaccinations were already an issue for women Veterans prior to the pandemic. Pre-COVID-19, female Veterans were less likely to get the flu and Pneumovax vaccines. This disparity was specific to Veterans; in the general population, American women are actually more likely to get vaccinated than American men. When VHA leaders conducted research on the subject, they learned that women are much more likely than men to go to their peers to discuss health care. Women, especially young women, are also more likely to experience side effects from vaccines. Women Veterans of reproductive age expressed many concerns about potential side effects from COVID-19 vaccines.

To address these concerns, the Women's Health team is working to provide tailored information to women Veterans.²⁶⁶ The team is issuing information gained from its collaboration with vaccine working groups that is relevant to these audiences.²⁶⁷ In addition, the team is streaming a podcast called "She Wears the Boots" as another mode to disseminate information to its women Veterans.²⁶⁸ During fall 2020, VHA used its communications to encourage women Veterans to get flu vaccinations and to share information on the upcoming COVID-19 vaccine.²⁶⁹

Mental Health

The national statistic for American women with a reported mental health condition is 25%.²⁷⁰ Approximately 40% of the women Veterans who use VHA services report having a mental health condition, compared with 24.5% of women in the general American population.²⁷¹ (Twenty percent of male Veterans report mental illness, compared with 16.3% of men in the general population.)²⁷²

According to VHA leadership in Women's Health, women Veterans are more likely to suffer from mental health conditions due to divorce, loss of income, domestic violence and military sexual trauma.²⁷³ (About 20% of female Veterans who use VHA

services have experienced military sexual trauma.)²⁷⁴ With the increase in unemployment among women due to COVID-19, VA expects to see a rise in mental health conditions and is holding seminars to address mental health issues for women related to COVID-19.²⁷⁵

Virtual Care in the Pandemic

In continuance of care for women Veterans, VHA has adjusted its approaches to support the health needs of this community. ²⁷⁶ Although data is still limited, the Women's Health leaders believe they have made such a successful transition to remote support that some of it should continue post-pandemic. ²⁷⁷

According to VHA leadership in Women's Health, women Veterans are able to meet with their doctors for appointments virtually or over the phone for services such as musco-skeletal exams, mental health and prescriptions.²⁷⁸ VHA leaders believe that this should continue after the pandemic because it is easier for many who are mothers at home, caretakers or students to meet with their doctors virtually.²⁷⁹ Additionally, VHA provided pregnant women with computer tablets during labor to help them feel connected with their families, despite restrictions on visitors during the pandemic.²⁸⁰

According to VHA's Women's Health leaders, VA should analyze the low trust scores so it can work on building trust with its women Veterans. Some women Veterans have reported positive feedback about the convenience of virtual care, as well as unique opportunities for interacting with their medical providers. One VHA leader shared an anecdote about how some patients view virtual care as a way to feel seen as a whole person—for example, by being seen in their own household, surrounded by things in their daily lives such as their pets. 282

The Women's Health leaders believe that virtual care modalities could lead to a greater relationship with the provider, which can benefit both parties by allowing the provider to gain a stronger understanding of the patient and by helping the patient build trust with her provider.²⁸³ Moreover, these leaders believe the continuance of measures such as these could have a positive impact on VA's future work with women.²⁸⁴

LGBT and Related Identities Community

One major challenge in serving the LGBT community is the legacy of the "Don't Ask, Don't Tell" policy.²⁸⁵ According to a VHA clinical leader, although "Don't Ask, Don't Tell" was repealed in 2011, it continues to stigmatize the LGBT community of Veterans.²⁸⁶

According to VA's National Center for Post-Traumatic Stress Disorder (PTSD), Veterans of the LGBT community often keep their orientation or identity to themselves when communicating with VHA.²⁸⁷ According to VHA leaders, this is problematic because sexual orientation and identity impact an individual's general health.²⁸⁸ LGBT Veterans need to feel comfortable opening up about their sexual orientation and identity to ensure that they receive proper care.²⁸⁹ According to VHA's National Center for PTSD, greater communications should be disseminated to LGBT Veterans.²⁹⁰

LGBT Mental Health

Individuals of the LGBT community are more likely to have experienced trauma, which contributes to higher rates of anxiety, depression, PTSD and suicide.²⁹¹ Due to COVID-19 and its isolating and unpredictable nature, those with mental health issues are at an increased risk to experience greater issues in mental wellness.²⁹²

According to VA's National Center for PTSD, many local support groups have transitioned to holding their meetings virtually. ²⁹³ This has reduced the safety of that space for LGBT Veterans because virtual spaces can be less personal and less private. ²⁹⁴ This transition to virtual meetings concerns VA staff; this replacement may not be optimal because it does not provide the same supportive experience. ²⁹⁵ However, VA staff agree that it is still helpful to continue because it is better than providing no support to this community. ²⁹⁶

In-person Exams

Veteran members of the LGBT community are facing the same delays of in-person support as non-LGBT Veterans.²⁹⁷ However, widely spaced in-person visits are sub-optimal for LGBT Veterans who are transiting between sexes. ²⁹⁸ These individuals require routine bloodwork.²⁹⁹ Due to COVID-19, these routine appointments continued to be delayed.³⁰⁰

Age

For COVID-19, outcomes are driven by age.³⁰¹ The illness causes death in the elderly population at a higher rate than in any other subpopulation.³⁰² VHA is addressing the issue in the same manner that the U.S. health care system is—by prioritizing its elderly population for vaccination.³⁰³ In late 2020, OHE sent out communications and made calls to notify elderly Veterans of their vaccine options and book appointments for 2021.³⁰⁴ VHA continues to face issues with the speed of its vaccine delivery and plans to work on improving that in 2021.³⁰⁵

Because this population is at the greatest risk of death from COVID-19, the group has been prioritized across the United States.³⁰⁶ According to VHA leadership, older Veterans tend to have a greater trust in VA; therefore, building trust with this population does not need to be a focus area for VA.³⁰⁷

As a preventative measure, VHA worked to protect the elderly Veteran population by monitoring the VHA staff who support elderly Veterans. The Centers for Medicare and Medicaid Services (CMS), a federal agency within HHS, released guidance on monitoring nursing home staff for COVID-19 infection through regular testing. According to VHA's Population Health team, although this guidance was not required, VHA made this a policy for the organization and began testing all VHA staff in fall 2020. Additionally, in response to the third surge of COVID-19, VHA CLCs monitored their staff for COVID-19 infection two times each week. HAA is taking these measures to address the needs of the elderly population in line with U.S. standards.

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HIGH RELIABILITY ORGANIZATION (HRO)

From July 1, 2020, through January 1, 2021, VHA used the principles of HRO to support its response to the COVID-19 pandemic. These principles—which focus on reducing human error and increasing safety—had already been identified as important prior to the pandemic. VHA had begun to gradually implement HRO throughout its infrastructure. When COVID-19 increased the need for clear and risk-averse health care management, HRO was introduced more broadly throughout VHA. It has since demonstrated its value.

This section details the principles of HRO, how VHA is working to transform itself into an HRO and how HRO helped VHA respond to COVID-19 during the Annex period.

Introduction to HRO

The concept of an HRO was developed by researchers studying the workplace cultures in highly complex industries, including commercial aviation and nuclear power—industries where accident rates are low, despite complex, high-risk environments. Organizations in these industries work towards, and then maintain, strong safety cultures and procedures to meet exceptionally high standards of safety and reliability. 313

The Five Principles of HROs are:

- Preoccupation with Failure³¹⁴
- Reluctance to Simplify³¹⁵
- Sensitivity to Operations³¹⁶
- Commitment to Resilience³¹⁷
- Deference to Expertise³¹⁸

HRO principles have been successful in industries that operate under hazardous conditions with low tolerance for safety risk.³¹⁹ This success has led to the popularity of implementing HRO principles and associated workplace practices in the health care industry.³²⁰

In 2019, VHA initiated its Modernization Plan, which used the HRO Lane of Effort— "Commit to Zero Harm"—as the underlying framework.³²¹ The HRO Journey is a foundational element of VHA's efforts to continually improve its operations and better support America's Veterans.³²² The overarching objectives of VHA's HRO journey and commitment to Zero Harm include:

 Building a Just Culture of transparency and trust where HRO practices can thrive³²³

- Empowering employees to lead front line improvement efforts and speak up for safety³²⁴
- Improving system-wide performance in safety and quality of care³²⁵
- Affirming trust with Veterans and the VHA workforce through greater reliability and transparency³²⁶

Transforming to HRO

Under the Executive in Charge's leadership and guidance, VHA began its enterprise-wide HRO Journey in February 2019.³²⁷ For the Annex period, the HRO co-leads for VHA were the AUSH for Quality and Patient Safety and the Director of VISN 15 (Heartland Health Care).³²⁸ VHA's NCPS and Office of Systems Redesign and Improvement (OSRI) support HRO initiatives through training, assessment, monitoring and evaluations.³²⁹

VHA built on an HRO implementation approach applied at the Truman VAMC (Truman). In 2019, VHA identified 18 "lead sites" where HRO transformation activities would take place. VHA chose one VAMC per VISN to lead HRO initiatives. Initial HRO activities included:

- Baseline HRO training for all leaders, supervisors and staff³³⁰
- Leadership coaching³³¹
- HRO site-specific assessments of HRO maturity³³²
- Lean training³³³
- Clinical Team Training (CTT)334

These VHA sites were provided with tools and trainings, including computer-based trainings (HRO 101 and 201) and Executive Leadership Team training, along with additional HRO materials to help them evolve into HROs.³³⁵ At Truman, and within other VAMCs and VISNs, the VHA OSRI supported the VHA HRO pillar of Continuous Process Improvement (CPI) through Lean training, consultation, site assessment, infrastructure development and support for improvement projects and large-scale initiatives.³³⁶ In addition, SR led a national improvement initiative at the outset of the formal VHA HRO journey, engaging all HRO lead sites in experiential learning and application of improvement principles and tools.³³⁷

HRO and the Pandemic

According to VHA leaders, the pandemic demonstrated the value of HRO principles and practices.³³⁸ There was an increased need to follow a high-reliability framework that would help VHA leaders and front line teams safely meet the needs of Veterans amid the complexity of the pandemic.³³⁹

Many sites began adopting key HRO practices to ensure patient and staff safety, including sites that had not been part of the 2019 cohort of 18 lead sites.³⁴⁰ For example, New York City was not one of the 18 VISN lead sites; however, due to the high number of COVID-19 cases in the city, New York VAMCs started to enact HRO principles to respond to the crisis.³⁴¹

Increasingly, VA hospitals across the country realized the usefulness of high-reliability principles. 342 According to one VHA leader, this enabled the greater VHA health care system to reform itself to follow the concepts put forward by high reliability. 343 One VHA health care system (HCS) leader credited high reliability as a primary reason VHA has met the challenges of this pandemic. 344

During the pandemic, VHACO's HRO Program Management Team released communication tools and guides for how to apply HRO practices during the pandemic. 345 NCPS distributed communications to patient safety officers to tell them that now was the time to make HRO the focus of their facilities' plans. 346 VHA leadership reported that to maintain—and increase—momentum, VHA needed to continue the implementation of high reliability and modify its trainings in response to COVID-19.347

Overall, VHA leadership agreed that VHA was able to prioritize HRO transformations during the pandemic because the alarming nature of COVID-19 and the high-level threat to patients and staff members validated the need for high reliability. 348 Although the pandemic put tremendous strains on the entire country and its health care systems, the clear need for (and popularity of) high reliability made it easier for VHA leaders to socialize and implement high reliability principles across the organization. 349

VHA's COVID-19 response demonstrated that HRO practices could become essential to VHA operations. According to the HRO Program Management Team, this was the key reason why VHA was compelled to forge onward with implementation of HRO. 351

Following HRO Principles

This subsection provides background on HRO principles and how VHA has embraced them in its response to COVID-19.

Preoccupation with Failure

Under the Preoccupation with Failure principle, all leaders and staff members share vigilance for process issues or circumstances that could potentially permit an error or

other source of harm to reach a patient.³⁵² This commitment to constant vigilance has helped to drive sustained progress in patient safety.³⁵³

One of the ways VHA emphasized adherence to this principle during the pandemic was through its messaging to Stop the Line.³⁵⁴ Stop the Line reminded staff members of the importance of reporting patient safety issues or concerns.³⁵⁵ Employees were encouraged to speak up when they saw something that could potentially pose a safety risk.³⁵⁶

Stop the Line flyers also included tips for how to be proactive in preventing potential mishaps.³⁵⁷ They served to remind all staff members that although failure is possible, proactive steps can prevent mishaps through diligence and vigilance.³⁵⁸

Reluctance to Simplify

The second principle speaks to the importance of not settling for a simple explanation for why an event of harm or "close call" might occur. Threats to safety are complex, and safety events are driven by individual error and system failures. The second principle speaks to the importance of not settling for a simple explanation for why an event of harm or "close call" might occur. The second principle speaks to the importance of not settling for a simple explanation for why an event of harm or "close call" might occur. The second principle speaks to the importance of not settling for a simple explanation for why an event of harm or "close call" might occur. The second principle speaks to the importance of not settling for a simple explanation for why an event of harm or "close call" might occur. The second principle speaks to safety are complex.

Communications and HRO trainings included a Just Culture Decision Support Tool (JC-DST), which seeks to ensure that leaders respond to a safety event in a manner that ensures appropriate balance between individual and organizational accountability. ³⁶¹ The JC-DST defines three different error categories (simple human error, at-risk behavior and reckless behavior), followed by factors to consider when reviewing responses. ³⁶²

Lean tools helped VHA align with CPI and systems improvement and the principle of Reluctance to Simplify. 363 Lean tools allow organizations to better understand current and future state processes towards improvement. 364 For VHA, this meant meeting Veteran needs more effectively and safely. 365 According to the VHA HRO Team, the use of Lean tools proved invaluable during the pandemic. 366 Within the pandemic response, Lean methods and tools were leveraged widely to improve processes, including bed management for COVID-19 patients, COVID-19 testing and vaccine distribution. 367

Sensitivity to Operations

Sensitivity to Operations speaks to how leaders can only be effective if they are attuned to all aspects of the organization's operations.³⁶⁸ Chassin and Loeb, in their seminal paper on high reliability in health care, noted that the earliest indicators of threats to organizational performance typically appear in small changes in the organization's operations.³⁶⁹ This principle prompts leaders to ensure that staff are

empowered and supported to speak up when they have concerns, and report any indicators of potential threats so the organization can work to achieve safety.³⁷⁰

In keeping with this principle, leaders and clinical staff across VHA facilities held safety huddles before shifts and procedures.³⁷¹ The huddles were used to enable team members to alert each other of safety issues, heighten awareness of risks and demonstrate follow-up on issues from the previous shift or day. Huddles reinforced a sense of focus on frontline staff and care processes and increased mindfulness to processes and systems that impact patient care.³⁷²

The use of huddles was supported by the implementation of a Lean culture toolbox. The toolbox included recommendations to expand daily huddles and use visual management boards and leadership rounding (a key HRO leadership practice of holding regularly scheduled, structured visits with care teams). Visual tools provided staff with the opportunity to identify systems issues, develop improvement teams to seek solutions and track project progression. 374

Recognizing the link between a healthy workforce and safe, effective care for Veterans, VHA also encouraged employees to practice self-care.³⁷⁵ Self-care refers to taking actions to limit stress and increase health.³⁷⁶ It means eating healthy, hydrating, exercising and asking or accepting help.³⁷⁷ It also means minimizing stress and working on mental health.³⁷⁸

VHA provided supportive resources for staff to use when feeling overwhelmed. These resources, which included spiritual resource options, were always available.³⁷⁹ Leaders encouraged staff members to take a break each day for themselves.³⁸⁰ Self-care encourages a culture that will protect the safety of patients.³⁸¹

Clear, closed-loop communication is a hallmark of HRO practices; communication prevents errors that occur during hand-offs.³⁸² VHA noted that although masks were necessary to performing operations during a pandemic, they risked hampering effective communication.³⁸³ In response, VHA provided personnel with tips on how to communicate effectively while wearing masks.³⁸⁴

Commitment to Resilience

The resilience principle recognizes that errors can occur even in a mature HRO.³⁸⁵ Health care organizations need to focus on:

- Recognizing errors early³⁸⁶
- Containing them to prevent harm³⁸⁷
- Learning from errors to prevent them from reoccurring³⁸⁸

In line with the resilience principle, VHA pursued a Just Culture, which supported HRO's Culture of Safety pillar. ³⁸⁹ Instead of focusing on disciplinary action, Just Culture principles concentrated on continuing systems of care. ³⁹⁰ This does not mean that personnel were not accountable for their actions; it simply means that discipline was not the primary focus in the wake of an error. ³⁹¹ Commitment to Resilience is upheld when errors are reported and assessed so the system gaps can be identified, corrected and used as a source of learning. ³⁹²

Routine venues and channels were established for employees across organizational levels, providing them with opportunities to speak up with their concerns or improvement ideas.³⁹³ The HRO Program Management Team credits these channels with the advancement of a Just Culture during the pandemic.³⁹⁴

Leaders across VHA instituted safety forums, town halls and unit-based councils where adverse events and close calls were examined through the lens of the JC-DST. These forums—occurring at the national, VISN, facility and unit levels—encouraged employees to voice their concerns. These sessions became critical to building the trust and transparency where a Just Culture could thrive. The sessions became critical to building the trust and transparency where a Just Culture could thrive.

VHA continued to underscore the importance of reporting in order to build a culture of safety. ³⁹⁸ Through reporting safety events in the Joint Patient Safety Reporting (JPSR) system and promoting informal channels of communication (in addition to formal channels), VHA leadership ensured that its employees reported mistakes or concerns with a shared interest in preventing harm. ³⁹⁹

The application of Lean methods and tools further supported this focus on resilience. 400 Lean methods and tools allowed VHA to address opportunities for improvement in a consistent, logical manner with a focus on "system" versus "people" failures. 401 A focus on continuous process improvement allowed VHA to bolster its Just Culture and empower employees to bridge system gaps constructively. 402

Deference to Expertise

The Deference to Expertise principle focuses on empowering and valuing expertise across disciplines and through all levels of seniority. 403 For example, when there is a problem, the person with the most knowledge about that problem should be included in discussions of causes and solutions, regardless of their rank or position. 404

The onset of the pandemic demonstrated the importance of instilling this principle throughout VHA. According to VHA leadership, strengthening leaders' working dynamics with front line staff was essential to an effective pandemic response.⁴⁰⁵

Instead of appointing responsibility to the highest ranking or most senior person, VHA encouraged its personnel to work alongside one another to solve problems and to involve all relevant staff members in developing solutions.⁴⁰⁶

Since the beginning of the pandemic, there were regular standing forums, panels, huddles and other opportunities for staffers at all levels to share their concerns and engage with leadership. Headership. These points of communication allowed VHA to apply HRO principles at the point of care, which allowed VHA to continuously improve and better serve VHA's mission. Headership.



Clear masks were developed to make it easier to communicate during surgery. (Photo Credit: VA)

Through Deference to Expertise, VHA leaders witnessed how those on the ground are often the most informed about their facilities' needs and can be trusted to take necessary action. ⁴⁰⁹ In this state of emergency with constantly changing conditions, one VHA leader stated that actions are being taken for survival. ⁴¹⁰ For VHA's HRO transformation, although guidance and support from high-level leadership were necessary and helpful, it was critical that leaders and staff in the facilities had the authority to innovate and take actions to yield optimal results. ⁴¹¹

Working with the Veteran

HRO initiatives encourage Sensitivity to Operations as well as Deference to Expertise. Combining these two principles, VHA created a policy shift. Instead of just working for the Veteran, VHA reframed itself to working with the Veteran.⁴¹² One-

pagers were distributed advising clinical staff to shift from saying, "What is the matter with you?" to "What matters to you?" 13

Initiated at the end of June 2020, VHA continued to encourage teams to include the Veterans and their families in HRO principles. This meant that Veterans were also encouraged to speak up and Stop the Line, just like staff members were. The new mindset was promoted by VHA to support patient safety by working to gain the trust of Veterans because they and their families would provide an essential perspective on improvement efforts.

The Three Pillars of VHA's HRO Framework

VHA applied a three-pillar framework for the HRO Journey, adapted from Chassin and Loeb: Leadership Commitment, Culture of Safety and CPI.⁴¹⁷ The pillars provided a framework for actions to apply the principles of high reliability in all aspects of VHA operations and governance.

Leadership Commitment

VHA regarded leadership commitment as foundational to transforming VHA into an HRO. This included leader buy-in on:

- Committing to Zero Harm policies⁴¹⁸
- Establishing a positive safety culture⁴¹⁹
- Engaging and supporting all employees in a CPI culture⁴²⁰

To support the pillar of Leadership Commitment, leaders worked to foster an environment where people would be comfortable speaking up. Personnel were empowered to raise concerns and ask questions without fear of leaders defaulting to punitive action. When launching this principle, VHA leaders were provided with training, coaching, communication tips and tools (such as the JC-DST) to improve staff psychological safety. VHA reported that these efforts helped create a more open environment through:

- Establishing clear expectations⁴²³
- Building confidence that ideas, observations and inputs were valued⁴²⁴
- Fostering continuous learning and improvement⁴²⁵

According to VHA leadership, progress was demonstrated through the development of more channels of communication between VHA leaders and their employees, including Leader Rounding, Safety Forums and Safety Huddles (as noted above). VHA leaders developed increased awareness about needs on the ground and lessons learned among teams. 427

Throughout the pandemic, leaders across VHA facilities practiced Leader Rounding. 428 Many VAMC leaders used Leader Rounding during COVID, whether in person or virtually, to:

- Improve bidirectional communication between leaders and staff⁴²⁹
- Provide leaders opportunities to reinforce high-reliability principles and behaviors⁴³⁰
- Provide staff a forum to share concerns⁴³¹

VHA reported significant progress in making employees feel more supported.⁴³² Feedback during this time period indicates that local leaders felt more supported and had greater access to the resources they needed to keep their employees and Veterans safe.⁴³³

Culture of Safety

To support a Culture of Safety, leaders and staff members are trained in the importance of mutual trust; they work together on improving teamwork and communication. All are expected to have a questioning attitude and be responsive to change. This approach is important because communication failure is a leading source of adverse events in health care. HRO principles dictate that health care facilities need to encourage speaking up and negate the presumption that simply complying with existing rules is enough to ensure safety.

According to VHA leadership, Just Culture served an important role in cultivating its Culture of Safety. 438 This culture created a community where employees were encouraged to voice concerns and weaknesses so that vulnerabilities could be addressed properly. 439 VHA's Just Culture promoted a community of safety in which employees understood that efforts to minimize human error must be coupled with systems of care that prevent errors from leading to harm. 440 Thus, VHA was able to hold the system accountable to identify and analyze the gaps that could lead to error. 441 This upholds the Culture of Safety by putting the primary focus on learning and prevention. 442

Continuous Process Improvement

Emphasis on CPI, coupled with measurement, allowed VHA to apply multiple HRO principles, including Deference to Expertise, Tracking of System Failures and Opportunities, Resistance to Oversimplification and Sensitivity to Operations. 443 During the Annex period, VHA leadership emphasized the importance of continuous process improvement and measurement through the application of Lean principles to foster a collaborative learning environment. 444 The learning environment was

designed to enable staff members to create more effective, efficient and safer practices. 445

According to VHA leadership, a core component of CPI is that "every staff member is a problem solver." ⁴⁴⁶ Through HRO, VHA leaders had the opportunity to become more engaged with front line staff through support of Lean training, sponsorship of improvement projects, leader rounding and engagement in CPI activities. ⁴⁴⁷ To do so, they used important tools such as visual management boards and tiered huddles that supported raising issues to the level of support to expedite solutions. ⁴⁴⁸

The vision under HRO is that all staff members should engage in process improvement activities in and across their departments to proactively mitigate risks, develop reliable and standardized processes, improve collaboration and eliminate waste to add value for the customer. ⁴⁴⁹ VHA's pandemic response offered leaders the opportunity to serve as vocal, visible champions in CPI. ⁴⁵⁰ They were able to deepen the improvement culture, set stretch goals and create an environment in which it was permissible to learn continuously and openly from errors. ⁴⁵¹ Based on the experience of many VHA facilities during the COVID-19 response, a greater number of VHA staff members were involved in continuous process improvement. ⁴⁵²

HRO Training

During the pandemic, VHA moved its HRO trainings from in-person to virtual.⁴⁵³ VHA's three largest HRO training programs—HRO Baseline Training, CTT and CPI/Lean training curriculum—were adapted to a virtual delivery format and relaunched.⁴⁵⁴ VHA leadership reported that the organization found great success with virtual offerings, using video chat and white boarding features through the Microsoft Teams platform.⁴⁵⁵

Resuming HRO training underscored the importance of the need for high reliability in VHA's culture. 456 According to VHA leaders, the resumption during the pandemic was helpful as the collaboration that occurred to develop the virtual trainings incorporated high-reliability principles into how VHA staff worked together. 457

According to VHA leaders, virtual courses have been received with great enthusiasm because they lower cost, reduce risks and allow for higher attendance. Facilities asked for additional HRO training sessions and petitioned for more mid-level managers and supervisors to complete training, such as CTT and Lean leadership or belt courses. Staffers have benefitted from the savings associated with the absence of travel costs and less time away from frontline work. Furthermore, the flexibility of virtual instruction allows more employees to participate because they can pick the sessions that work best with their schedules.

However, there are shortcomings to virtual trainings. ⁴⁶² Although these trainings allow for increased attendance, they also do not command the full attention of the trainees. ⁴⁶³ According to VHA leadership, the inability to be fully interactive with instructors and peer participants is not ideal. ⁴⁶⁴ As a result, some VHA leaders have delayed some of the training until in-person training can resume. ⁴⁶⁵ Others have reserved large auditoriums to conduct training while still adhering to social distancing rules. ⁴⁶⁶

HRO Baseline Training

HRO Baseline training builds a common foundation of knowledge for all participants. 467 The training covers HRO principles, error management practices and CPI. 468 It is designed for the following audiences:

- Executive Leadership Teams (ELTs): VISN and VAMC ELT members attend a VISN-wide training and planning session to discuss each VAMC's ongoing journey to high reliability and what leadership behaviors, actions and resources are needed to foster an HRO culture.⁴⁶⁹
- Supervisors: HRO Baseline training for supervisors includes the core training for front line staff plus extended scenarios and activities that support the criticality of a supervisor's role.⁴⁷⁰
- Front Line Staff: HRO Baseline training for front line staff establishes a common understanding of HRO concepts.⁴⁷¹ The training also covers error management practices that each employee can adopt to become more highly reliable in their work.⁴⁷²
- Train-the-Trainer Sessions: These sessions are intended for members of each facility who will lead HRO Baseline Training for front line staff members and supervisors.⁴⁷³
- VHACO HRO Training: In 2019-2020, VHACO leaders and supervisors received both in-person and virtual training sessions.⁴⁷⁴ In 2020, a Training Management System module was launched to train incoming VHACO leaders, supervisors and staff members.⁴⁷⁵ An HRO Overview was also incorporated into the VHACO New Employee Onboarding program.⁴⁷⁶

During the pandemic, HRO Baseline transitioned from an approach in which instructors from the HRO Program Management Team traveled to facilities to present in-person training to a strategy focused on providing virtual train-the-trainer support for HRO Baseline Trainers who were identified at each VISN and facility.⁴⁷⁷ Training for trainers was conducted from September 2020 through January 2021.⁴⁷⁸ Individual VISNs and VAMCs have developed a deployment strategy to spread HRO Baseline Training to supervisor and frontline audiences and established a goal of training over 90% of employees by December 2021.⁴⁷⁹

For HRO Lead Sites that completed the training before the pandemic, the next step was to chart the course for sustainment of HRO Baseline for future employees. The curriculum was incorporated into new employee learning plans and New Employee Orientation training events. 481

HRO Baseline training for leaders will be integrated into VHA leadership curriculum, managed by the Healthcare Leadership Talent Institute, to sustain training of HRO and Just Culture fundamentals into ongoing training for new leaders at all levels, from facility front line and executive leaders through Senior Executive Service appointees.⁴⁸²

Clinical Team Training

HRO lead sites participated simultaneously in the NCPS CTT program. CTT teaches clinicians how to improve patient safety and job satisfaction through effective teamwork, communication and higher levels of team situational awareness in the clinical workplace. Principles from the aviation industry's Crew Resource Management (CRM) are introduced to model specific applications in the health care environment.

This training requires a multidisciplinary approach, conducted by NCPS employees on-site with integrated simulation. Frontline clinicians learn specific CRM behaviors to manage human error before patients are harmed. For 12 months after completing CTT, trainees receive coaching and monitoring of unit-based performance outcomes. After these 12 months, a recurrent training is administered to reinforce key CRM concepts.

NCPS leaders reported that virtual CTT found success with its master training program. ⁴⁹⁰ To select master trainers, NCPS leaders are working with employees who already have a background in CTT. ⁴⁹¹ These employees' understanding of CTT will make teaching easier. Based on flexible virtual access, 125 employees can be trained together in 2 days. ⁴⁹² NCPS leaders noted the potential for some attrition through this medium, but if 75% of the participants become master trainers, that would still ensure that VHA successfully scales the program. ⁴⁹³

In light of the challenges of virtual training, some VHA leaders stated that virtual learning for CTT and training should be temporary. 494 After the pandemic, these VHA leaders believe that VHA should limit virtual training to master trainers and resume in-person training for all front line workers. 495

Continuous Process Improvement and Lean Training Curriculum

CPI ensures that teams use effective tools for continuous learning and improvement across the organization. One way they accomplish this is through Lean Training. Lean Training enables the systematic use of the Lean improvement methodology and 9-Box A3 format for CPI efforts at all VHA sites, networks and program offices. Unlikely Multiple types of VHA-tailored Lean Training offerings exist in formats for executive leaders, mid-level leaders and frontline staff members.

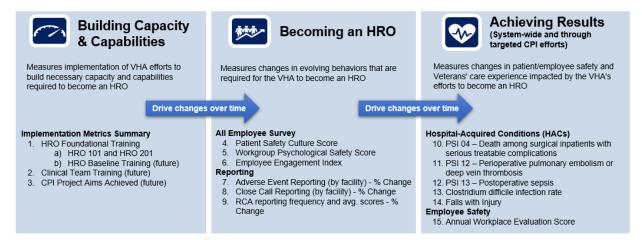
In 2020, nationwide VHA Lean curriculum for leaders and belted professionals was converted from a largely in-person training model to virtual training delivery. ⁴⁹⁹ This update not only supported continuation of the training throughout the pandemic, but also provided flexibility for future attendees beyond COVID-19 recovery. ⁵⁰⁰ These classes can be conducted in a virtual or hybrid model to reach attendees who previously could not attend in-person courses due to schedule and logistical reasons. ⁵⁰¹

Measures Used to Assess Progress

VHA required an initial set of enterprise-wide measures to assist the organization on its HRO journey. These measures made up the HRO Measure Set 1.0. They populate the HRO Dashboard, which provides timely information on HRO efforts to leaders across the organization. The HRO Dashboard was designed to help leaders assess HRO progress, course-correct based on lessons learned and assist the organization. The HRO Dashboard was designed to help leaders assess HRO progress, course-correct based on lessons learned and assist the organization.

Three domains drive all measures work: examining inputs, monitoring initial results and assessing outcomes. ⁵⁰⁶ For VHA's journey to HRO, these domains were captured in the HRO Measures Framework categories: Building Capacity and Capabilities, Becoming an HRO and Achieving Results, as shown in Figure 7.1. ⁵⁰⁷

Figure 7.1: VHA HRO National Measure Set 1.0



Source: HRO Measures Dashboard Guide, March 2021, available on the VHA Journey to High Reliability SharePoint Site - HRO Dashboard Page.

Building Capacity and Capabilities

These measures reflect VHA efforts to build the necessary capacity and capabilities required to become an HRO.⁵⁰⁸ These measures monitor the number of staff trained in basic HRO principles and practices across the enterprise, VISNs and VAMCs.⁵⁰⁹ They will be more clearly defined as the process matures.⁵¹⁰

Becoming an HRO

These measures are designed to assess changes in evolving behaviors that are required for VHA to become an HRO.⁵¹¹ Some of these measures come from the All Employee Survey and review employee perceptions of safety and employee engagement culture.⁵¹² Other measures in this area track safety event reporting, including reporting close calls.⁵¹³

Achieving Results

These measures review progress on ultimate goals of improving patient and staff safety. ⁵¹⁴ Most of these measures track a selection of patient safety indicators. ⁵¹⁵ One measure looks at the Annual Workplace Evaluation as an additional indicator on the impact that HRO behaviors, strategies, processes and activities have on ensuring a safe work environment. ⁵¹⁶

Additional and Associated Measures

NCPS developed a Patient Safety Culture Survey that measured the status of HRO in VHA.⁵¹⁷ The survey also analyzed the metrics used to assess HRO.⁵¹⁸ Results were sent back to the appropriate parties so areas of improvement can be identified

and addressed.⁵¹⁹ As of the Annex period, survey data was still limited as HRO implementation was still in progress; however, NCPS was actively working with researchers to improve the quality of collected data.⁵²⁰

NCPS developed a teamwork and safety climate questionnaire that was baselined at Truman. Truman. After six months, NCPS saw improvement, some of which was statistically significant, across every one of the 27 questions focusing on the safety culture. After a year, NCPS conducted and updated the survey, and found dwindling returns as time passed. NCPS concluded that high reliability will improve the culture, but those improvements will decay over time without a sustained effort. Thus, refresher trainings will be necessary so the principles of high reliability become engrained into the culture.

Results were positive overall, and NCPS leaders saw the culture improve at Truman as anticipated. ⁵²⁶ In conjunction with this, they also witnessed improved outcomes during this three-year trial period. ⁵²⁷ The data was still limited compared to the aviation industry, which typically saw improvements 10 years after implementation. ⁵²⁸ This improvement provided evidence for the need for high reliability across VHA to strengthen the culture in order to improve patient outcomes. ⁵²⁹

Safety Event Reporting Trends

During the Annex period, VHA leaders shared data that suggested that VHA underwent process improvements due to its attachment to HRO principles. Sale Reporting of patient safety concerns dipped early on in the pandemic, but began to rebound and rise after May 2020. Sale Shince then, there was an approximate 10% increase in close-call reporting. WHA leaders believed that this increase showed a maturation due to HRO because employees were understanding the importance of speaking up to protect patient safety.

From April to mid-July, six patient safety notices were published.⁵³⁴ Since July, no safety notices have been issued.⁵³⁵ According to VHA leadership, the decrease in the number of safety notices issued, coupled with the increase in reporting, suggests that operations have been improving in the support of patient safety.⁵³⁶

Another example that shows that there has been improvement in operations is through the completion of JPSRs.⁵³⁷ Over FY 2020, VHA saw an increase in timely completions of JPSRs, nationally.⁵³⁸ The expectation for investigating and finalizing a JPSR is 14 days.⁵³⁹ Over FY 2020, it decreased from 30 days to less than 14 days.⁵⁴⁰ For facilities that were taking longer to complete them, it was because patient safety staff had been pulled to support more urgent needs.⁵⁴¹

At the end of the Annex period, VHA was still under HRO transformation and still managing a pandemic. However, outcome changes led VHA leaders to believe that the culture at VHA was changing positively.⁵⁴² VHA leaders reported that there was a level of respect never seen before.⁵⁴³ Speaking about the changing nature of the culture at VHA, VISN 15 Director, Dr. William Patterson, MD, said, "I wish I had 20 more years to go in the organization."⁵⁴⁴

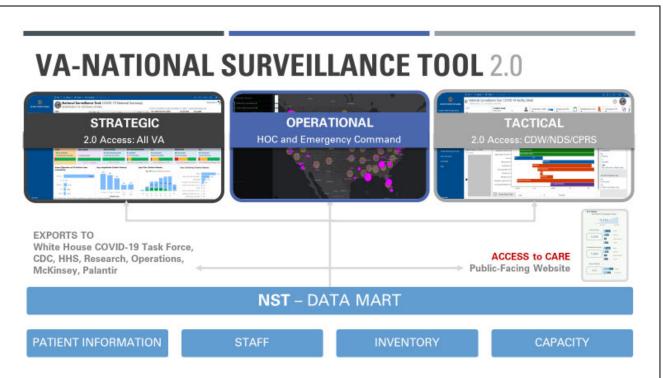
DATA AND ANALYTICS

As of January 1, 2021, the VA was using NST 2.0 to track COVID-19 outbreaks. See Figure 8.1 for an image of the home screen for the program.

NST 2.0 includes a series of iterative updates that were developed in response to needs from both VA leadership and facilities.⁵⁴⁵ The program addresses prior data quality and consolidation issues by providing an authoritative dataset that everyone can rely on.⁵⁴⁶

NST 2.0 monitors COVID-19 patients based on the context of their treatments, tracks more demographic data points and increases access to the report.⁵⁴⁷ The tool generates three main internal reports (strategic, operational and tactical) and shares data with the White House COVID-19 Task Force, CDC, HHS, Research, Operations and selected providers of analytic services.⁵⁴⁸

Figure 8.1: NST 2.0 Home Screen



Source: VHA Office of Quality and Patient Safety, "National Surveillance Tool 2.0 Update," p. 3, updated 1/20/2021.

NST 2.0 is the third iteration of COVID-19 outbreak trackers used by VA. It built on the success of two prior programs—the VA Biosurveillance, Antimicrobial Stewardship, and Infection Control program, and the original NST.⁵⁴⁹

Effectiveness of NST 2.0

NST 2.0 responded to leadership and facility concerns; however, the tool is still impacted by some of the same issues present in the original NST.⁵⁵⁰ According to one VHA leader, the data management team for NST 2.0 faces challenges related to performance and data issues daily.⁵⁵¹ Although not ideal, NST 2.0 is a complex system, and an improvement over past systems.

Working through performance issues to resolve data gaps has been a steady process in the evolution of NST, often related to infrastructure. This includes its connection to shadow systems linked to VISTA. For example, one major issue that remains in NST 2.0 is related to the Clinical Laboratory Improvements Act (CLIA). According to one VHA leader, all authorized labs in the private sector are assigned a CLIA number, which enables CDC and individual states to track COVID-19 testing. Although VA was not subject to CLIA, a recently released national directive made the assignment of CLIA numbers a policy requirement for VA laboratories; however, implementation of this policy was not completed prior to the pandemic. As of January 2021, the data management team was still working to develop workarounds to resolve the missing data elements.

NST 2.0 also has limited access to employee data.⁵⁵⁷ NST 2.0 reports are designed to support readiness by providing information on staff, inventory and capacity data.⁵⁵⁸ This information enables its users to focus the data based on the demands necessitated by the outbreak.⁵⁵⁹ However, due to privacy regulations, NST 2.0 is still unable to align its information on employees with workforce management.⁵⁶⁰

VHA plans to implement enhancements to its new electronic employee health record system in early 2021, which is expected to help with employee tracking; however, there will still be some limitations.⁵⁶¹ According to VHA leadership, NST 2.0 is still expected to be off on employee number counts for facilities at times, which could warp the analyses from the reports on facility and employee information.⁵⁶²

Despite these limitations, NST 2.0 enables its users to track near-real-time informative data from all Veterans and employees who seek medical services from VA hospitals. 563

As shown in Figure 8.2, NST 2.0 can create an interactive strategic report that provides near-real-time data for patient case summary and key system characteristics.⁵⁶⁴ It also allows users to delve deeper into the data. As highlighted in red in Figure 8.2, NST 2.0 includes filters for age, sex, race and ethnicity.⁵⁶⁵

Developed in cooperation with the VHA OHE, these new features enable its users to conduct deeper dives into the data.⁵⁶⁶ The user can filter information, allowing for greater investigations into potential disparities, as well.



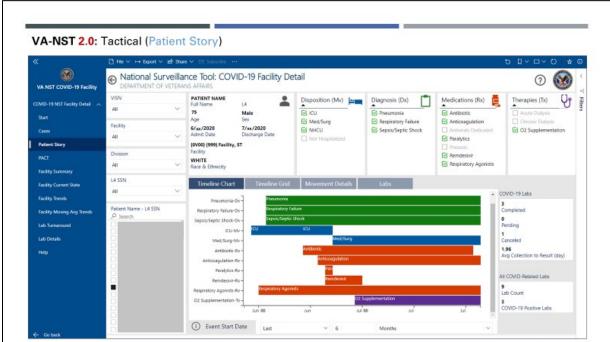
Figure 8.2: VA NST 2.0 Strategic Dashboard

Source: VHA Office of Quality and Patient Safety, "National Surveillance Tool 2.0 Update," p. 7, updated 1/20/2021.

NST 2.0 also provides information on the patient experience.⁵⁶⁷ The "Patient Story" report, shown in Figure 8.3, provides a patient-level visualization of the timeline of movements in the hospital, diagnoses, medications and therapies.⁵⁶⁸ The Patient Insights tool investigates the characteristics of patients and their COVID-19 stories in aggregate over time.⁵⁶⁹

With all these new tools and additional report updates, one can interact with the daily reports to look into and analyze the experiences of these COVID-19 positive patients and their treatments.⁵⁷⁰ The user can also see detailed information on every aspect of testing.⁵⁷¹ Facilities are able to track their patients and cases over time and can also parse this information by age, sex, race and ethnicity.⁵⁷²

Figure 8.3: Patient Story, NST 2.0



Source: VHA Office of Quality and Patient Safety, "National Surveillance Tool 2.0 Update," p. 15, updated 1/20/2021.

According to one VHA leader, NST 2.0 exemplifies the work that can be accomplished with a large integrated team. The NST 2.0 team collaborated across offices to discuss the data and their informational needs throughout the pandemic. Through this collaboration, the data management team was able to develop a more dynamic tool to support VHA's mission.⁵⁷³

Continuity & Risk

VHA leadership noted the importance of continuity when addressing challenges. Internal data and analytical expertise are critical to ongoing success, especially during a pandemic.⁵⁷⁴

To enable continuity, the VHA team has been holding weekly development calls since the beginning of the pandemic.⁵⁷⁵ The calls focus on what is needed next and the team's ability to address those needs.⁵⁷⁶ These communications have led to the updates that are now part of NST 2.0.⁵⁷⁷ Furthermore, the team works together to discuss how to continue to manage data across various technologies and prevent their processes from becoming overwhelmed by the pandemic.⁵⁷⁸

As mentioned previously, as of January 2021, VHA is working to add enhancements to its new electronic employee health record.⁵⁷⁹ However, this new solution will require work to resolve issues with data linkages.⁵⁸⁰

Data Management

NST 2.0 continues to be used to send daily data to HHS and CDC.⁵⁸¹ The data management team is working with CDC so data can be transmitted directly to the states.⁵⁸² This process of data transmission involves a partner of CDC, the U.S. Association of Public Health, which parses and duplicates the information and then sends it to the applicable states.⁵⁸³

One VHA leader stated the need for greater data-sharing coordination on the Federal landscape. Currently, VHA has multiple feeds going out to multiple partners on different systems.⁵⁸⁴ For instance, some data-sharing was fed directly to VHA's Data and Analytics Team, some came through national databases managed by HHS, CDC, state governments, and the Association of Public Health Laboratories. Data was shared on topics ranging from VHA hospitals to testing and vaccinations.⁵⁸⁵

Though some of the transfers are coming from VHA's data management team, most are coming from national data systems.⁵⁸⁶ Due to these various sources and because some Veterans are tested in their communities and then share the results to VHA, this VHA leader stated that duplicative data arises and hardworking staff (both at VHA and at the state lab) become burdened further.⁵⁸⁷

Moreover, although NST 2.0 resolved some data management issues, others still persist.⁵⁸⁸ NST 2.0 addressed the high-level problems that can arise from human reporting errors by providing an authoritative dataset.⁵⁸⁹ However, at a more granular level, systems in some functional areas, such as logistics, are still not consolidated because there is no common platform.⁵⁹⁰

Despite these challenges in data management, the VHA data management team noted it found success with its internal work from its stored data.⁵⁹¹ The Corporate Data Warehouse (CDW), VHA's data mart from NST 2.0, is accessed by approximately 24 operational partners within VA.⁵⁹² The data management team, working with these internal groups regularly, has been developing reports for dialysis for COVID-19 patients, pre-procedural gastrointestinal reporting, as well as analyses for mental health and suicide prevention groups.⁵⁹³

From this work, the data management team collaborates with the research team weekly to discuss the data and NST 2.0. By coordinating across teams, VHA has continued to enhance its reporting capabilities.⁵⁹⁴

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SUPPLY CHAIN

From July 1, 2020, to January 1, 2021, the pandemic continued to impact the national and international supply chain, including VHA's. Globally, manufacturers continued to be challenged by raw material shortages, and the demand for PPE remained at record high levels.⁵⁹⁵

VHA continued to operate at the CDC contingency strategy level for medical gloves and N95 respirators. ⁵⁹⁶ Despite these constraining conditions, VHA continued to provide adequate materiel support to its facilities. ⁵⁹⁷ According to FDA, isolation and surgical gowns, respirators, surgical masks, Severe Acute Respiratory Syndrome / Coronavirus 2 (SARS-CoV-2) testing supplies (for example, kits, reagents, pipette tips) and all forms of medical exam gloves are in short supply, and shortages can be expected until the national emergency ends. ⁵⁹⁸ For more information on this topic, see the Initial Report.

Supply Chain Updates

This section provides details on updates during this timeframe to the following categories: pandemic supplies, Regional Readiness Centers, DMLSS, Government Purchase Cards and freezer procurement.

Pandemic Supplies

Although PPE and other critical pandemic items remained difficult to obtain, VHA continued to meet the demand for its facilities to ensure that employees had adequate supplies. ⁵⁹⁹ To meet its COVID-19 demands, VA continued to use a wide range of acquisition methods, including national and regional contracts, Government Purchase Cards for local buys, and non-traditional resources, including the Veteran Canteen Service and the state of New Hampshire. ⁶⁰⁰ For more information on procurement processes, refer to the Initial Report.

N95 Respirators

As the pandemic continued, the demand for N95 respirators remained high. 601 This high-in-demand PPE product remained difficult to obtain across the United States, and the number of counterfeit N95s increased with the U.S. supply chain. 602 In November 2020, the VHA Assistant Under Secretary for Health for Support Services (AUSH-S) issued a policy, "The Authorized Source for N95 Respirator Purchases," which designated the VA category management Tier 1 enterprise-wide Medical-Surgical Prime Vendor contract as the sole authorized source of supply for N95 respirators. 603 This mandated that N95 respirators could be acquired only from the

manufacturers directly, from the Regional Readiness Centers or through the medical surgical prime vendor.⁶⁰⁴

During this timeframe, the VHA Procurement and Logistics Office (P&LO) awarded contracts to more than one N95 manufacturer (for example, 3M and Honeywell) to meet the demand. The prevalence of 3M-brand respirators within VHA caused VAMC staff to be the most familiar with its brand. Authorized substitutes (from a different manufacturer) for supplies have been used in the past pre-pandemic when needed; however, in the case of N95 respirators, the facilities found the staff were resistant to using other manufacturers; N95 respirators and in some cases would not accept authorized substitutions. Facility staff noted the challenges associated with having to manage multiple N95 types, as well as Safety Officers having to know how to fit-test multiple types of N95 respirators. Selfons For example, there are multiple types of 3M-brand N95 respirators: the 1860/1860S (small) and the 1870. Selfons The 1860/1860S has the traditional cup shape. The 1870 has a convenient three-fold flat panel. According to VHA P&LO, facilities prefer and trust the 1860/1860S N95 respirators and were resistant to using the 1870 N95s. For further information on N95 respirators and the procurement process, see the Initial Report.



National Guard troops unload boxes of PPE masks. (Photo Credit: VA)

Medical Exam Gloves

The procurement of medical exam gloves of any type (nitrile, vinyl, polymer) remained difficult during this time period as well.⁶¹³ Due to the shortage of nitrile, VHA acquired and issued authorized substitutes to VHA facilities.⁶¹⁴ The global glove shortage was exacerbated by raw materiel shortages, which for gloves are the components that are bonded to make acrylonitrile-butadiene rubber.⁶¹⁵ The closure

of Pacific Rim manufacturing sites due to COVID-19 disease among employees contributed to the global glove shortage.⁶¹⁶

Isolation and Surgical Gowns

During the beginning of the pandemic, VHA faced challenges in obtaining gowns due to the global demand.⁶¹⁷ However, during this timeframe, VHA had greater success in procuring gowns and was able to improve the gown stock inventory quantities in its Regional Readiness Centers.⁶¹⁸ For more information on Regional Readiness Centers, refer to the following subsection.

Regional Readiness Centers

VHA's Regional Readiness Centers are now a critical component of VA's COVID-19 response. They function as distribution points for the centrally procured pandemic supplies to support the four VHA VISN Consortia. During this time period, VHA established three interim Regional Readiness Centers in leased facilities. January 1, 2021, VHA had three interim Regional Readiness Centers, consisting of eight separate warehouses, and plans to implement a ninth warehouse in February 2021.

VHA established interagency agreements with HHS and the Department of Defense's DLA to leverage their existing supply chain operations infrastructure. VHA plans to reach Full Operating Capability (FOC) by 2023. VHA is in the process of finalizing an interagency agreement with DLA to enable scaled progression from current state to FOC. As planned, when fully operational, the centers will store and manage 120 days of PPE supplies and critical items to support the VHA VISN Consortia. For more information on VHA's Regional Readiness Centers, refer to the Initial Report.

<u>Defense Medical Logistics Standard System</u>

According to VHA leadership, VA paused DMLSS fielding in fall 2020 due to pandemic travel limitations and the third wave of COVID-19 in the United States. Deploying VHA staff and contractors to accomplish fielding and training was deemed too high a risk for the staff members and for the facility staff who would receive the training. Further, VHA facilities requested delay of fielding so they could focus on the COVID-19 response. VHA is developing virtual training and instructor-led virtual trainings to prevent future deployment delays.

For further information on DMLSS, see the Initial Report.

Government Purchase Cards

Facilities continued to use Government Purchase cards to acquire scarce supplies when necessary. However, central procurement (from medical surgical prime vendor or P&LO national contracts) continues to be the primary mode to obtain medical surgical supplies, including PPE. For more information on purchase card usage, see the Initial Report.

Support to COVID-19 Vaccine Distribution

The Moderna and Pfizer-BioNTech vaccines for COVID-19 became available for distribution in December 2020. 633 The Pfizer-BioNTech vaccine storage requirement was -70 degrees C, which is not typically found in health care facilities that are not engaged in research. 634 In line with the HRO principle of "preoccupation with failure," VHA's goal is to minimize risk of vaccine loss. 635 VHA's Facilities and Engineering Team worked with its pharmacy, operations, logistics and maintenance teams across the country to identify existing ultra-low freezers in VHA to ensure that existing assets met the technical specifications and were properly maintained. 636 They also supported the procurement and contracting teams to acquire new ultra-low freezers. 637 As a result, VHA was successfully able to provide its facilities with the necessary freezer equipment in time for the initial distribution of vaccines. 638

For more information about Vaccine distribution, see the Vaccination Planning, Data Management and Distribution section of this report.

CLINICAL OPERATIONS

Since July 2020, VHA continued to adjust clinical operations in accordance with the VHA COVID-19 Response Plan. This section describes clinical operations updates from July 1, 2020, to January 1, 2021, including:

- New procedures for protecting vulnerable populations within VHA CLCs, operating room (OR) settings, and IHS
- Initiation of the Cancelled Appointments and Consult Management Initiative
- Updates to Clinical Contact Center modernizations efforts, VHA Moving Forward Plan, Virtual Care and COVID-19 testing

Community Living Centers

In December 2020, VHA developed an approach to assess whether CLC residents who tested positive for COVID-19 acquired it inside or outside the CLC. VHA instituted a memo that recommended twice-weekly COVID-19 testing for all CLC residents. This policy was designed to improve detection and curb the spread of COVID-19 within CLCs. CLCs also instituted more stringent visitation guidance to help control community contamination. CLCs.

As can be seen in Figure 10.1, COVID-19 onset within the CLCs remained relatively low and consistent (approximately 45 cases per 1,000 residents) from July 1, 2020, to November 1, 2020.

In early November and throughout December 2020, there was a small uptick in cases, in line with increased prevalence across the United States and within VHA. COVID-19 onset outside the CLCs (Figure 10.1 "All Sources") was elevated from July 1, 2020, to December 31, 2020, ranging from approximately 65 to 155 cases per 1,000 residents.

Analysis performed by VHA indicates that CLC residents who test positive for COVID-19 more frequently acquire it prior to entry into the CLC, and that this gap widened further over time, particularly in fall 2020. The CLC Testing Strategy section of this report describes new testing capabilities and procedures that may help explain the relatively low CLC numbers during fall 2020.

CLC SARS-CoV-2 + Case Trend (All Sources vs. CLC Acquired) cumulative case rate/1000 residents 01APR2020 to 15JAN2021 180.0 160.0 140.0 120.0 100.0 87.8 78.2 76.2 80.0 51.9 60.0 45.6 45.7 40.0 All Sources CLC Onset 01Dec2020 01May2020 01Jun2020 01Jul2020 01Aug2020 01Sep2020 01Oct2020 01Nov2020 01Jan2021

Figure 10.1: CLC Case Trend

Source: VHA, Daily Leadership Briefing Presentation, 1/27/2021.

Indian Health Service

VHA provides services to enrolled Veterans who are also members of tribes under two categories: Veterans who are receiving care through IHS, and Veterans who are members of tribes that have ongoing agreements with VHA.⁶⁴²

During fall 2020, VHA expanded the reimbursement agreements for IHS to include telehealth, as VHA had done with broader community care networks. 643 VHA leadership noted that VHA supported numerous requests for enrolled Veterans receiving care through IHS. 644 This happened because IHS lacked the budget to manage increased demands on its health care system caused by COVID-19 and thus needed more support. 645

Unlike VHA, which receives funding for two years at a time, IHS is on a one-year funding schedule. This impacts its ability to provide services when the system is overwhelmed, as it has been during COVID-19.⁶⁴⁶

Operating Room Cases

As seen in Figure 10.2, OR cases increased by several thousand cases per month from July 2020 to October 2020, and then decreased through November and December 2020, similar to the trends in 2019. The more noteworthy difference is the proportion of cases seen in the OR in 2019 compared to 2020. In July 2020, there were approximately 13,000 fewer OR cases than in 2019 (38% difference). In

December 2020, there were approximately 5,000 fewer cases (19% difference). This trend suggests that in November and December 2020, OR numbers began to become closer (proportionally) to the 2019 numbers. The decline in OR completed cases in November and December can be attributed to a few factors, including the typical decrease during the holiday season (2019 and 2020)⁶⁴⁷; the third COVID wave (2020);⁶⁴⁸ and VISN reduction in OR cases due to COVID-19 surge response protocol or other emergency events.

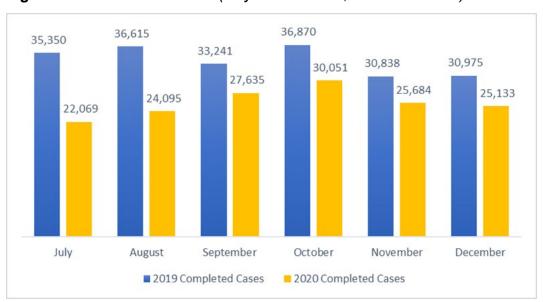
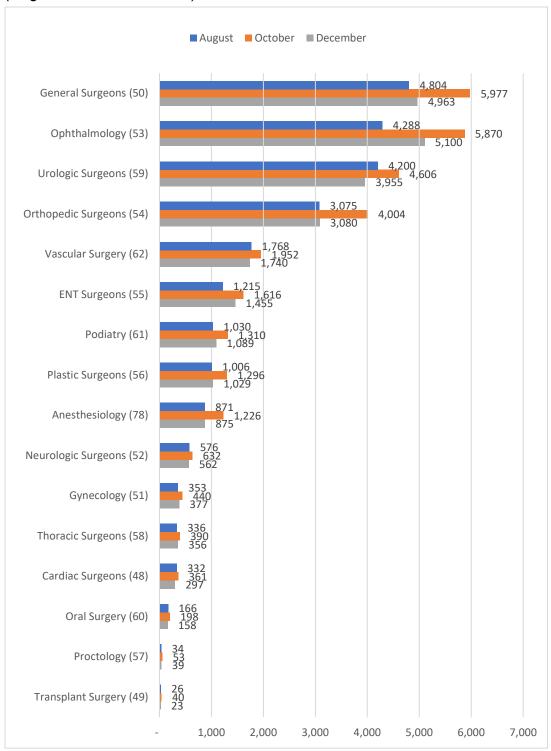


Figure 10.2: Total OR Cases (July – December, 2019 and 2020)

Source: 2019 and 2020 Completed OR Cases Data Set, National Surgery Office, VHA, accessed 1/21/2021.

As shown in Figure 10.3, in each case category, cases increased from August to October, then decreased in December 2020. General Surgery completed the most OR cases (15,744) during the noted months. The decrease in December 2020 cases is related to the contributing factors stated above.⁶⁴⁹

Figure 10.3: Completed OR Cases Across all Medical Specialties (August – December 2020)



Source: 2019 and 2020 Completed OR Cases Data Set, National Surgery Office, VHA, accessed 1/21/2021.

Cancelled Appointments and Consult Management Initiative

VHA implemented the Cancelled Appointments and Consult Management Initiative (CACMI) to assure continued high-quality care delivery and clinical oversight during COVID-19. The purpose of CACMI was to establish guidance, protocols and processes to facilitate VHA follow-up and documentation of Veteran appointment cancellations and scheduling activity. VHA developed processes and tools for clinicians and administrative staff to track clinical care impacted by COVID while providing guidance on moving in-person appointments to virtual care modalities, such as telephone or video visits, to maintain safe care delivery for Veterans. 650

Focused review began in July 2020 for unresolved consults/referrals (cancelled and unscheduled) and for appointments cancelled and not identified on national report of having resolution in VA. All medical centers were required to provide documented review of all COVID-19-related cancelled appointments and cancelled/discontinued consults/referrals (with no documented evidence of follow-up) by November 6, 2020. 651

Since the implementation of CACMI, 99% of the 13,290,327 cancelled appointments have been reviewed. The reviewed appointments were handled in the following ways:⁶⁵²

- Appointment was rescheduled.
- Return to Clinic Order was entered by a provider.
- Recall reminder was entered to initiate scheduling at later date based on a clinical review.
- · Consult was entered to initiate scheduling.
- Patient was contacted to attempt to reschedule the original cancelled appointment.
- Health factor entered into the patient's record via the Computerized Patient Record System to indicate either:
 - Veteran was no longer required appointment based on clinical review by clinician.
 - Veteran declined follow-up.
 - Care was delivered via Community Care.
 - Care was previously completed within VHA.
 - Minimum scheduling contact attempts were completed.

Cancellation volumes have returned to pre-pandemic levels since October 2020 due to increased use of virtual care delivery. Focused efforts continue for unresolved

consults/referrals along with continued monitoring of cancelled appointments to ensure evidence of follow-up care. 653

Clinical Contact Centers Modernization

Clinical Contact Centers (CCCs) provide virtual care modalities to provide immediate triage and urgent care services for enrolled Veterans. CCCs became an area of emphasis during the initial phases of the response because some of the Centers could not keep pace with the demand. In response, VHA developed a modernization strategy for CCCs to gain reliability, central visibility, agile surge adaptation, efficiency and integration of virtual care processes.⁶⁵⁴ Since July 1, 2020, VHA has engaged in the following modernization efforts:

- Staffing: Received approval for 12.5 full-time employees to support modernization via VHACO.
- Software: Moving all CCCs onto Cisco. More than half of VHA have now updated to Cisco telephone software.
- Management: CCCs will be managed by each VISN.
- Workload: CCCs will be able to shift workload if one or more is overwhelmed.
- Technology: VA is developing artificial intelligence and predictive modeling based on data from patient records that will provide insights into patient health behavior; this could facilitate care delivery. For example, data on missed mental health appointments could enable CCCs to connect patients to mental health providers.

The Office of the Assistant Under Secretary for Health for Operations (AUSHO) anticipates that CCCs will be fully modernized in early 2022. 655

Moving Forward Plan

The VHA Moving Forward Guidebook (Guidebook) captures routinely updated COVID-19 guidance and protocols pertaining to service expansion in VA facilities. It covers both internal policies and those from Federal partners like the CDC. The Guidebook is available to all VA staff. Since July 2020, VHA has released nine updates to the Guidebook, representing the development of new customized guidance in the areas of mental health residential treatment, visitation, dental services, primary care, testing and vaccination, and others. The Guidebook has received over 10,000 views, as of January 1, 2021.

Since July 2020, VHA has updated guidance and planning with a clear goal: to support local leadership decisions to balance non-emergent care with acute COVID-19 response efforts. Documents such as the Moving Forward Readiness Quick

Guide released in July 2020 provided guidance for acute COVID response during resurgence. As the pandemic continued during fall 2020, VHA focused heavily on prevention, particularly primary care for important preventive care such as mammograms, cervical cancer screening, diabetes monitoring, and screening for depression and food insecurity. 658 VHA released the Reinforcing Prevention Supplement in November 2020, which provided a streamlined prioritization of preventive care services to assist sites in balancing non-urgent services with acute needs during the pandemic. 659

As the emphasis on COVID-19 care continued to grow, the Office of the AUSHO worked with medical centers to make sure that preventive measures were not overlooked. They also worked to adapt prevention measures to virtual settings. For example, the AUSHO:

- Provided detailed procedures for physicians, including steps to follow when visually inspecting a patient (for example, how to visually monitor blood pressure checks on camera)⁶⁶¹
- Created note templates for providers to document prevention procedures done in virtual settings⁶⁶²

The VHA Moving Forward Data Resource Guide provides an overview of the multiple data tools that were developed for COVID-19 reporting and monitoring. This includes tools that monitor and report real-time operational data at the national, regional and local levels. Throughout the pandemic, VHACO and VISN leadership have participated in daily enterprise-wide meetings to review this data, discuss current operational status, and mitigate COVID-related risks and barriers across the system. 663

Virtual Care

Connected Care Tools

Throughout their response to COVID-19, VA has created a series of connected care tools and platforms to help augment virtual care. In September 2020, VA created Digital Divide Consult (Consult), which is a national digital divide consult process within the electronic health record. It is used to assess Veteran technology needs and support reliable access and services to rural Veteran communities. Providers use the Consult to identify Veterans who would benefit from connected care technologies, but lack access to the technology or internet connection necessary to participate. Through this Consult, VA can help Veterans access benefits available from VA, other Federal agencies and the private sector. 664

Veterans are introduced to the digital divide process by their VA care providers. Criteria have been established to determine which Veterans qualify for a VA-loaned device through the consult. Veterans may qualify if they do not have their own device or connectivity, live a certain distance from a VAMC, have been hospitalized recently or face transportation difficulties. Requests for tablets are filled in the order they are received. The digital divide process has helped more than 12,000 Veterans obtain internet access or a video-capable device for their health care needs. 665

In October 2020, VA launched VA Video Connect (VVC) Now, which permits providers to email or text a VVC link by entering the patient's email address or phone number. VVC Now provides the clinical staff with a flexible tool to quickly establish and conduct a Veteran video visit. Approximately 3,300 VVC Now sessions are created each day. 666

Finally, My HealtheVet provides a secure portal through which Veterans can schedule appointments online, refill prescriptions, view their health records and communicate with their care team. From July 1, 2020, through December 31, 2020, Veterans and their care teams exchanged over 14 million messages. My HealtheVet also provides Veterans new and timely COVID-19 content related to prevention and treatment. Subscriptions increased 4% from July to December 2020 and reached one million active subscribers in October 2020. 668

Telehealth Usage during COVID-19

As shown in Figure 10.4, from July to December 2020, there were approximately one million fewer in-person care appointments per month than the same period in 2019. Clinical Video Telehealth (CVT) and telephone encounters were much higher in 2020, compared to 2019. There were approximately 3.1 million telephone and 750,000 CVT encounters per month in 2020, a noteworthy increase from 2019 encounters (approximately 1.5 million, and 100,000, respectively).

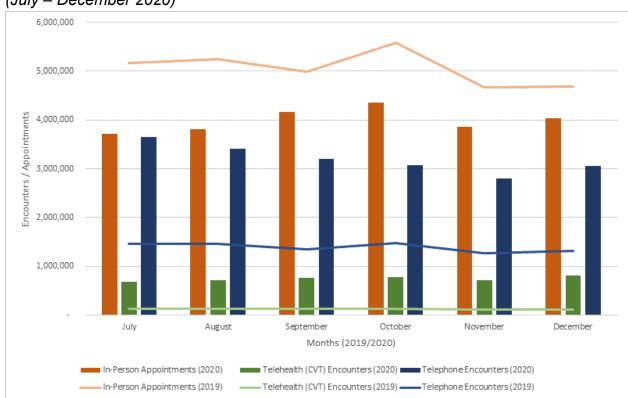


Figure 10.4: Virtual Encounters vs. In-Person Appointments - all VISNs (July – December 2020)

Notes: CVT refers to unique encounters that are attributed to clinical video telehealth. Visual represents a seven-day week starting on the date indicated.

Sources: Telehealth Cube, VSSC, VHA, accessed 1/20/2021; Encounters Cube, VSSC, VHA, accessed 1/20/2021; Appointments Cube, VSSC, VHA, accessed 1/20/2021.

Mental Health Services

VHA mental health services continued to be a priority throughout the Annex period; however, many services (particularly in-person appointments) were cancelled due to the risks posed by COVID-19.⁶⁶⁹ Despite this, there still remained an increased need for mental health support during fall 2020.⁶⁷⁰

Appointments and Outreach

To meet increased demand, VHA developed virtual tools and new mechanisms to support virtual mental health visits.⁶⁷¹ These virtual appointments were administered through VVC and over the phone.⁶⁷²

From July through December 2020, VAMCs greatly increased the number of VVC appointments.⁶⁷³ In December 2020 alone, VHA conducted over one million virtual one-on-one appointments and over 100,000 VVC group appointments.⁶⁷⁴ For comparison, during the 5 months prior to the pandemic, VHA Mental Health

providers averaged approximately 27,000 VVC sessions and 170,000 outreach calls each month. 675

During the Annex period, most appointments were for general mental health, substance use disorders and PTSD.⁶⁷⁶ Psychologists, social workers and other psychotherapy/non-medical providers had the highest VVC visit usage.⁶⁷⁷

VHA conducted special outreach to Veterans who had cancelled mental health appointments.⁶⁷⁸ These communications aimed to encourage continued engagement between mental health staff and Veterans.⁶⁷⁹

Outreach also included the implementation of a new initiative, "COVID-19 Outreach for Suicide Risk." This program worked to engage with COVID-19-infected Veterans with an active Patient Risk Flag—High Risk for Suicide. VHA initiated the development of a Peer Support Outreach Call Center to provide support and resources to Veterans identified at an increased risk for suicide. When launched in summer 2021, the call center will conduct follow-up calls and provide support, hope and recovery-oriented services to these Veterans.

Access to Services

VHA completed extra steps to ensure that Veterans had access to mental health care services, even as in-person appointment were more restricted due to the pandemic. 684 VHA improved its coding practices and developed mechanisms to provide Veterans with digital devices and Internet connectivity. 685 VHA also administered test calls to enable successful telehealth appointments. 686

To expand its critical crisis intervention work, VHA's Veterans Crisis Line (VCL) implemented a Caring Letters Program. This evidence-based suicide prevention program, works by encouraging individuals to send letters of care and concern. Started in July 2020, Caring Letters worked to engage with Veterans following their calls to VCL. From its initiation through December 2020, this project has reached over 60,000 Veterans and was the largest of its kind, sending 9 letters a year to each caller.

Mental Health Coordination

Coordination between mental health leaders increased during the Annex period.⁶⁹¹ VHA conducted weekly meetings between VISN Mental Health Officers, VISN Telemental Health Leads, Suicide Prevention Coordinators and Office of Mental Health and Suicide Prevention staff.⁶⁹² VHA also organized community calls with (among others):

- Telemental health staff
- Psychiatry and psychology chiefs
- Inpatient care and Mental Health Rehabilitation Treatment Program managers
- Substance use disorder treatment teams
- Esketamine pilot sites
- Evidence-based psychotherapy coordinators
- Primary Care—Mental Health Integration staff
- Behavioral Health Interdisciplinary Program teams
- Women's mental health teams
- Military sexual trauma teams
- Geriatric mental health⁶⁹³

According to the Office of Mental Health and Suicide Prevention, the regular communication between these groups led to the creation and dispersion of novel ideas and practices within VHA.⁶⁹⁴

Future Plans

Going forward, VHA intends to keep a blended model of care that balances inperson and virtual modalities, even as the incidence of COVID-19 begins to decrease. AUSHO leadership noted that it is likely that some departments may continue with a virtual model of care that exceeds 50% of patient encounters (for example, primary care and mental health). Specialty care clinics that are typically suited for in-person care (for example, surgery and physical therapy) will still have a virtual component moving forward; AUSHO leadership noted that some of these clinics are currently (and successfully) operating at a 30% virtual capacity.

Testing

Clinical Care

On November 9, 2020, FDA issued an EUA for the investigational monoclonal antibody therapy, Bamlanivimab, for the treatment of COVID-19 in adults. On November 22, FDA issued an EUA for Asirivimab and Imdevimab, which are additional monoclonal antibody therapies that have been evidenced to reduce COVID-19-related hospitalization in high-risk patients. VA began using these monoclonal antibody therapies with high-risk Veteran patient groups diagnosed with COVID-19.

VA also participate in NIH's Clinical Care COVID-19 Treatment Guidelines Panel (the Panel) to provide to clinicians updated COVID-19 guidance on how to care for

patients with COVID-19.⁷⁰⁰ The Panel published "The Coronavirus Disease 2019 (COVID-19) Treatment Guidelines" and routinely updates the guidance based on the latest published research findings and evolving clinical information.⁷⁰¹ All recommendations included in the Guidelines are endorsed by a majority of Panel members from Federal agencies, health care and academic organizations, and professional societies.

Testing Capacity

VHA decreased dependence on external referral laboratories by coordinating testing access and capacity at 24 VA facilities. VHA expanded its overall testing capacity in fall 2020 to approximately 80,000 PCR tests and several thousand antigen tests per week. ⁷⁰³

VHA diagnostic testing platforms added antigen testing, which included participation in the HHS contract for the Abbott BINAX Now testing kit. As testing capacity increases through 2021, VHA plans to conduct more pre-procure testing, which would be a major step toward allowing medical centers to expand services and reopen more fully. ⁷⁰⁴ By March 2021, Roche plans to double the amount of PCR testing available to the VA, which will provide VA the capacity to resume routine elective procedures. ⁷⁰⁵ With this expanded testing capacity, more patients will be able to returns to in-person care. ⁷⁰⁶

CLC Testing Strategy

CMS released guidance on monitoring nursing home staff for COVID-19 infection. Testing was conducted as a function of local testing positivity rates. VHA adopted this policy and began testing all VHA staff in spring 2020.

During fall 2020, VHA infectious disease specialists held regular meetings to promote best practices and to update VHA guidance in accordance with CDC recommendations. The group developed a risk model based on a variety of testing strategies that included frequency and turnaround time of antigen and PCR tests, symptom screening and others. Based on these inputs, the model then determined the percent of infectiousness removed by each strategy. To accordance with CDC recommendations.

The group developed a risk calculator based on this model.⁷⁰⁹ As prevalence increased during fall 2020, the calculator recommending testing twice a week for CLC/SCI-D residents and staff throughout the country, with very few exceptions. The calculator helped drive the need to procure antigen tests in large volume from HHS.⁷¹⁰

During the third COVID-19 surge, VHA CLCs were monitoring their staff for COVID-19 twice-weekly.⁷¹¹ This strategy has increased infectiousness.⁷¹²

CLC residents are not routinely tested because the only penetration into the CLC would be brought in from a non-resident.⁷¹³ If penetration does occur, the CLC would be considered in an outbreak status, and all residents would be tested.⁷¹⁴

VHA developed a series of testing guidelines and protocols to protect vulnerable populations within CLCs and SCIs that include:

- Testing requirements within 72 hours before a high-risk procedure
- Staff screening procedures for high-risk units, using a risk-based model
- Antigen testing algorithms, including for diagnostic antigen testing of symptomatic individuals and screening/monitoring testing of asymptomatic individuals, using guidance from FDA and CDC
- Database development that contains symptom factors and results of PCR, antigen, and antibody tests to understand the strengths and weaknesses of each testing modality
- Quantitative antibody validation within VA (at a national level), and development of thresholds to grant exemptions from routine screening (asymptomatic) testing for a defined period of time, 60 days (This exemption was rescinded in 2021 in response to changing conditions.)⁷¹⁵
- Testing Guidebook (v1.0) issuance covering multiple scenarios and suggesting recommended testing strategies with interpretive guidance⁷¹⁶

As shown in Table 10.1, VHA tested over 878,000 (or 13.6% of) Veterans Using VHA Services for COVID-19 through January 1, 2021. Of Veterans Using VHA Services, 2.3% tested positive for COVID-19.⁷¹⁷

Table 10.1: Summary COVID-19 Statistics of Veterans Using VHA Services - Tests, Confirmed Cases of COVID-19 and Deaths (as of January 1, 2021)

	Veterans Using VHA	Veterans Using VHA Services Tested		Veterans Using VHA Services Confirmed Cases of COVID 19	
VISN	Services	Total	% of Users	Total	% of Users
1	249,544	35,514	14.2%	4,688	1.9%
2	281,563	44,493	15.8%	6,345	2.3%
4	284,268	32,296	11.4%	6,335	2.2%
5	203,880	28,092	13.8%	3,668	1.8%
6	402,481	54,140	13.5%	7,822	1.9%
7	465,357	55,586	11.9%	11,509	2.5%

	Veterans Using VHA	Veterans Using VHA Services Tested		Veterans Using VHA Services Confirmed Cases of COVID 19	
VISN	Services	Total	% of Users	Total	% of Users
8	588,591	85,690	14.6%	11,242	1.9%
9	280,841	41,431	14.8%	6,742	2.4%
10	498,448	59,296	11.9%	11,953	2.4%
12	271,792	42,077	15.5%	8,418	3.1%
15	245,783	38,963	15.9%	7,899	3.2%
16	429,386	53,417	12.4%	10,380	2.4%
17	436,458	49,038	11.2%	11,392	2.6%
19	320,111	44,312	13.8%	8,075	2.5%
20	329,171	32,550	9.9%	4,032	1.2%
21	336,310	49,660	14.8%	6,405	1.9%
22	509,653	90,540	17.8%	12,645	2.5%
23	324,535	41,303	12.7%	10,015	3.1%
Grand Total	6,458,171	878,398	13.6%	149,565	2.3%

Notes: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition for this report in order to quantify Veterans at risk for COVID-19. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests, confirmed positives and deaths figures exclude Veteran-Employees.

Note: Totals may not add due to rounding.

Sources: Veterans Using VHA Services Data, ARC, VHA, 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021.

FOURTH MISSION

As described in the Initial Report, in addition to its support for Veterans, VA's Fourth Mission supports humanitarian assistance to non-enrolled Veterans, Veterans with less than honorable discharges, First Responders, the public and U.S. operations during a national emergency. The Emergencies may include war, terrorist attacks, pandemics and natural disasters. Fourth Mission supports local emergency management, public health, safety and homeland security efforts. COVID-19-related support includes making beds available for non-Veteran patients and deploying VHA personnel to non-VHA facilities.

Fourth Mission Update

From July 1, 2020, through December 31, 2020, VHA continued its Fourth Mission efforts, including taking on new assignments.⁷²¹ Many of the assignments were long-term and continued throughout 2020 even if they were initiated prior to July.⁷²² Overall, according to VHA leadership, these Fourth Mission Assignments were similar to those at the beginning of the pandemic.⁷²³ States continued to request beds and support for SVHs, and IHS requested additional support.⁷²⁴

According to one VHA leader, Fourth Mission efforts were challenged towards the end of 2020 by the surges in COVID-19 infections.⁷²⁵ This was a challenge because it led to an increase in the demand for staffing, especially in California and the Southwest region.⁷²⁶ In response to the increased needs, VHA provided increased support. For instance, to support the Oklahoma City VAMC, VHA deployed a mobile ICU and employees from other facilities to staff it.⁷²⁷

Response to Communities

During this time period, many local VHA systems took on Fourth Mission work. In July 2020, the Phoenix VA Health Care System (PVAHCS) expanded its services to its community to care for non-Veteran COVID-19 patients.⁷²⁸ Due to the high occupancy rates Arizona's hospitals were experiencing, FEMA and Arizona reached out to VA through the state's surge line.⁷²⁹ In response, VA opened 10 beds (5 acute care and 5 intensive care) at the Carl T. Hayden VAMC in Phoenix, Arizona.⁷³⁰

According to the director of the PVAHCS, Dr. Alyshia Smith, this VAMC opened itself to additional COVID-19 patients in need because she felt confident that the VAMC could continue carrying out its primary mission (caring for Veterans) while also providing care to non-Veteran patients.⁷³¹



Soldiers in training with nurses, learning about pandemic support. (Photo Credit: VA)

Since the onset of the crisis, PVAHCS supported the American public by deploying 16 nurses to support Native Americans in hard-hit Arizona communities and 4 nurses to a community nursing home in Los Angeles. Additionally, PVAHCS provided supplies to the Navajo Nation and lent clinical expertise where needed in the region. After July 1, 2020, PVAHCS continued to provide support to nearby communities in need while also opening up its hospital doors to support the American public.

State Veteran Homes

SVHs provide nursing home, domiciliary or adult day care to Veterans. They are owned, operated and managed by state governments, and are overseen by VA.⁷³⁴ During this time period, SVHs were hit hard by the virus. VHA had 82 Mission Assignments in progress from July 1, 2020, to December 31, 2020; of those, 25 were to support SVHs.⁷³⁵

The Yukio Okutsu SVH in Hilo, Hawaii, experienced an outbreak of COVID-19 in late August 2020.⁷³⁶ By September 2020, 63 of the 67 SVH residents were infected with COVID, and 10 had died due to COVID.⁷³⁷ Of the 143 staff members, 24 were COVID-positive.⁷³⁸

This outbreak led VHA to deploy a team to the SVH to conduct a one-day assessment to understand the needs and provide recommendations. ⁷³⁹ From its observations, VA provided recommendations to the SVH to be acted on immediately and recommended that the State of Hawaii provide a Tiger Team to implement VA's recommendations, provide training and oversight, and provide needed staffing

support and respite.⁷⁴⁰ The assessment team administered a second visit that week to assess the SVH's progress toward the team's recommendations while the Tiger Team was assembled.⁷⁴¹

In response, VA's Fourth Mission supported the State of Hawaii and Yuki Okutsu SVH with a 20-person Tiger Team as a second Mission Assignment. This Tiger Team was not only one of the largest of VA's Fourth Mission teams deployed for an assignment, but also one of the most diverse in specialty. The team consisted of medical personnel from several nursing specialties, including infection control, industrial hygiene, housekeeping, logistics and emergency management. The for one month, this team fought the outbreak to support the elderly Veteran patients.

Lessons Learned

One lesson VHA learned was the need to conduct due diligence in relation to its Fourth Mission requests. During this period, VHA began to analyze Fourth Mission requests more closely. The VHA worked to determine actual need before deploying resources. The For example, VHA might receive a request from a SVH for 50 RNs. The But once VHA delved into the request and worked with the associated VISNs, it would find that 20 RNs or 10 LPNs could meet the needs of the request.

To make this type of analysis, VHA would connect with the local VAMC to understand its relationship with the SVH in question. T50 VHA would inquire about the SVH's staffing plan, how many staff were available, how many Veterans were infected with COVID-19 and the severities of the illness in its patients. S1 By surveying the facility, VHA would be able to better determine needs. According to one VHA leader, this type of analysis reduced the number of staff deployed. T53 Often, the analysis would also reveal other needs at the SVH (for example, an infection control specialist), allowing VHA to deploy the appropriate resources.

According to VHA, a second lesson learned is to ensure that all interagency agreements are finalized prior to action. Without agreements in place, projects may be delayed. For instance, when VHA wanted to deploy a mobile ICU to El Paso, Texas, the necessary interagency agreement was not yet complete. This made it difficult to establish the mobile ICU. To minimize delays, VHA created space within its brick and mortar facilities to support El Paso. More details on interagency agreements can be found in the National and Interagency Coordination section of this report.

In order to understand the full needs of any Fourth Mission Assignment, VHA leadership emphasized the importance of clear start and end dates.⁷⁵⁸ OEM ensures that the FEMA Mission Assignment included clear start and end dates.⁷⁵⁹ Although

amendments to the end dates are acceptable, setting start dates is necessary to ensure that VHA is fully prepared for the task on time.⁷⁶⁰

High Reliability for Fourth Mission

VA is committed to becoming an HRO. According to a VHA leader, VHA staff performing Fourth Mission duties did so with the consideration of the HRO commitment to patient safety. ⁷⁶¹ Staff members deployed to SVHs or non-VA facilities were encouraged to cultivate a culture of safety at their assigned facilities. ⁷⁶² Staff members were also expected to ensure that the facilities provided safe housing and had adequate PPE available. ⁷⁶³

In line with HRO expectations, employees were encouraged to report concerns regarding unsafe conditions. Staff members who raised concerns were recognized with a cash award for promoting a culture of safety.⁷⁶⁴ VHA leadership reported that promoting HRO culture beyond VHA hospitals is critical for strengthening the foundation of a culture of safety at VHA.⁷⁶⁵

Refer to the High Reliability Organization section of this report for more information on HROs.

RESEARCH AND INNOVATION

This section highlights the research and innovation efforts taken by VHA's ORD and the Office of Healthcare Innovation and Learning (OHIL) from July 1, 2020, to January 1, 2021, but it does not provide a comprehensive description of all activities undertaken by ORD and OHIL in response to COVID-19.

During this period, ORD supported a variety of research programs, including vaccines, therapeutic interventions and other research studies that do not involve interventions, such as diagnostic technology. As shown in Table 12.1, there were over 200 distinct COVID-19-related projects, including 5 ongoing vaccine clinical trials, across 70 different VA facilities that were initiated from July 1, 2020, through January 1, 2021. Many of these studies were conducted across multiple VHA sites.

Table 12.1: Summary of Studies Initiated during the Annex Period (July 1, 2020 – January 1, 2021)

Status of Studies	Total Studies (Including each Multi Site Study)		
Completed	7		
Ongoing (Active, Approved, Awarded)	285		

Source: VHA Office of Research and Development, response to questionnaire, 1/19/2021.

As part of its mission, ORD partnered with organizations in private industry, academic institutions and other Federal institutions.⁷⁶⁸ Examples of each are provided and labeled in the tables in this section.

Progress and Updates

From July 2020 to January 2021, VA participated in Phase III vaccine trials⁷⁶⁹ sponsored by Moderna, AstraZeneca, Janssen, Novavax and Pfizer-BioNtech with over 1,300 Veteran participants at 22 VA facilities. Table 12.2 shows more information about clinical trials and their progress. The majority of these trials were part of the OWS COVID-19 response.⁷⁷⁰

Multi-site studies were already a priority for ORD before the pandemic. Offering more sites allows trials to reach more patients.⁷⁷¹ To help meet recruitment goals for these trials, ORD developed a registry of Veterans who wanted to volunteer for COVID-19 trials.⁷⁷² ORD has continued to coordinate across multiple Federal agencies and industries, serving in a variety of roles as needed, under OWS efforts.⁷⁷³

According to ORD leadership, VHA is in a unique position to study the potential long-term effects of new vaccines and vaccine technologies.⁷⁷⁴ The trials themselves will

follow up with patients about specific topics related to their studies, but VHA can use its national health care system to collect insights about vaccine attributes outside of specific clinical trials.⁷⁷⁵ Furthermore the diverse minority and elderly population of the VA's health care system provides a potential subpopulation that may provide valuable data on vaccine effects.⁷⁷⁶

Table 12.2: Summary of Ongoing Vaccine Trials (July 1, 2020 – January 1, 2021)

Name of product	Trial Phase	Partner Organization	Notes
mRNA-1273	III	Moderna	Prevention of COVID-19 in adults ages 18 years and older up to 2 years after the second dose
AZD1222	III	AstraZeneca	Prevention of COVID-19
Ad26.COV2.S	III	Janssen ^A	Prevention of COVID-19 in adults ages 18 years and older
SARS-CoV-2 rS with Matrix-M1 Adjuvant	III	Novavax	Prevention of COVID-19
BNT162b2	III	Pfizer-BioNTech	Prevention of COVID-19 in adults ages 18 years and older

Source: VHA Office of Research and Development, response to questionnaire, 1/19/2021.

A Janssen Pharmaceutical Companies of Johnson & Johnson, https://www.janssen.com/

ORD supports trials across a diverse number of therapeutic interventions, including the Accelerating COVID-19 Therapeutic Interventions and Vaccines (ACTIV) program. As of January 1, 2021, protocols for new SARS-CoV-2 neutralizing monoclonal antibodies (mAbs) were in various stages of study, depending on the protocol. ACTIV-2 is a Phase II/III outpatient trial of COVID-19-positive adults to test neutralizing mAbs that target the virus. ACTIV-3 protocols test neutralizing mAbs that target the virus in hospitalized adult COVID-19 patients.

During this reporting period, VAMCs registered their sites, enrolled participants and actively participated in ACTIV-3 protocols.⁷⁸¹ Participants were not yet enrolled in ACTIV-2 protocols, but VA clinical sites expected to enroll participants in early 2021.⁷⁸²

In addition to the above, VHA helped support an ongoing study sponsored by Alexion that examined Ravulizumab, a monoclonal antibody.⁷⁸³ The study focused on the effect of the drug on patients with severe pneumonia.⁷⁸⁴

VHA also funded its own studies on non-monoclonal antibody therapeutics. For instance, VHA supported a Phase II clinical trial called the Hormonal Intervention for the Treatment of Veterans with COVID-19 Requiring Hospitalization. The trial will determine if temporary androgen suppression using degarelix in conjunction with best supportive care improves clinical outcomes.⁷⁸⁵

A convalescent plasma initiative run by the Mayo Clinic involved 90 VAMCs and a subset of Veteran participants. This study is in the process of analysis for publication.⁷⁸⁶

Finally, the VA Coronavirus Research and Efficacy Studies (CURES) master protocol was launched in August 2020, enabling a series of clinical trials. The trials planned to include more than 700 Veterans hospitalized for COVID-19 across 25 VA clinical sites. 787 VA CURES offered a standardized framework aimed to improve access to treatments and test their efficacy without the need for new study design and with improved efficiency of startup. 788

An overview of therapeutic trials that VHA has supported or participated in during the reporting period is provided in Table 12.3. ORD continued to support investigators in the development of next generation diagnostic technology.⁷⁸⁹ A summary of these studies are described in Table 12.4.

Table 12.3: Summary of Selected Therapeutic Trial Projects during the Annex Period (July 1, 2020 – January 1, 2021)

(out) 1, 2020 Canaday 1, 2021)					
Name of product	Trial Phase	Sponsor/ Funding Type	Notes		
Anticoagulation with and without platelet therapy	IV	TIMI Study Group/ Private	Prevention of arteriovenous thrombotic events in critically ill COVID-19 patients trial (COVID-PACT)		
Nitazoxanide (NTZ)	III	Romark Medical Institute/Private	Post-exposure prophylaxis in patients with COVID-19 and other respiratory illnesses in elderly residents of long-term care facilities		
Nitazoxanide (NTZ)	III	Romark Medical Institute/Private	Post-exposure prophylaxis of COVID-19 and other viral respiratory illnesses in health care workers		
Ramipril	III	UC San Diego/ Academic	Prevention of ICU admission, mechanical ventilation or death in persons with COVID-19		
hIVIG	III	NIH/Agency collaboration	Treatment of adult hospitalized patients at onset of clinical progression of COVID-19		
Baricitinib	Ш	Eli Lilly/Private	Treatment of COVID-19 in hospitalized patients		
Tocilizumab (TCZ)	III	Genentech/Private	Treatment of hospitalized patients with COVID-19 pneumonia (EMPACTA trial) ^A		
Pegylated Interferon Lambda	II	Eiger Biopharmaceuticals/ Private	Treatment of COVID-19		
Convalescent Plasma	III	ORD-CSRD/VA	Improvement of clinical outcomes in Veterans who are hospitalized and require supplemental oxygen due to COVID-19 (VA CURES-1: VA Coronavirus Research and Efficacy Studies)		
Leronlimab (PRO 140)	IIb/III	CytoDyn/Private	Treatment of patients with severe or critical COVID-19 disease VA Informatics and Computing Infrastructure (VINCI) has opportunity to run analysis of study results ^B		

Name of product	Trial Phase	Sponsor/ Funding Type	Notes
rNovel therapeutic agents (multiple)	11/111	NIAID/Agency collaboration	Treatment of COVID-19 in hospitalized adults (Adaptive COVID-19 Treatment Trial 1 [ACTT-1])
Baricitinib; remdesivir	11/111	NIAID/Agency collaboration	Treatment of COVID-19 in hospitalized patients, baricitinib + remdesivir vs. remdesivir alone (ACCT-2)
Interferon beta- 1a; remdesivir	11/111	NIAID/Agency collaboration	Treatment of COVID-19 in hospitalized patients, interferon beta-1a + remdesivir vs. remdesivir alone (ACCT-3)
PTC299	11/111	PTC Therapeutics/ Private	Treatment of COVID-19 in hospitalized patients
Degarelix	II	ORD-CSRD/VA	Treatment (hormonal interventions) of Veterans with COVID-19 who require hospitalization
Astegolimab (MSTT1041A); UTTR1147A	III	Genentech/Private	For each product, treatment of patients hospitalized with severe COVID-19 pneumonia
AT-527	II	Atea/Private	Treatment of patients with moderate COVID-19 and risk for poor outcomes (obesity, hypertension, diabetes, asthma)
Sarilumab	П	VISN 1/VA (non- ORD)	Treatment of moderate COVID-19 disease
LSALT Peptide	II	Arch Biopartners/ Private	Prevention of Acute Respiratory Distress Syndrome (ARDS) and acute kidney injury in patients infected with COVID-19 ^c
Otilimab	II	GlaxoSmithKline /Private	Treatment of severe pulmonary COVID-19 related disease (OSCAR trial)
ADX-629	II	Aldeyra Therapeutics/ Private	Treatment of COVID-19 infection
REGN10933; REGN10987; REGN10989	1/11	Regeneron/Private	Combination (REGN10933 + REGN10987) and monotherapy (REGN10989) for treatment of hospitalized adult patients with COVID-19

Sources: VHA Office of Research and Development, response to questionnaire, 1/19/2021.

https://clinicaltrials.gov/ct2/show/NCT04372186?term=empacta&draw=2&rank=1, accessed 2/19/2021.

^A National Library of Medicine (U.S.), "A Randomized, Double-Blind, Placebo-Controlled, Multicenter Study to Evaluate the Efficacy and Safety of Tocilizumab in Hospitalized Patients With COVID-19 Pneumonia," Identifier NCT04372186, 5/2020,

^B National Library of Medicine (U.S.), "A Phase 2b/3, Randomized, Double Blind, Placebo Controlled, Adaptive Design Study to Evaluate the Efficacy and Safety of Leronlimab for Patients With Severe or Critical Coronavirus Disease 2019 (COVID-19)," Identifier NCT04347239, 4/2020, https://clinicaltrials.gov/ct2/show/NCT04347239?term=leronlimab&draw=2&rank=5, accessed 2/19/2021.

^c National Library of Medicine (U.S.), "LSALT Peptide vs. Placebo to Prevent ARDS and Acute Kidney Injury in Patients Infected With SARS-CoV-2 (COVID-19)," Identifier NCT04402957, 4/2020, https://clinicaltrials.gov/ct2/show/NCT04402957, accessed 2/19/2021.

Table 12.4: Summary of Diagnostics Initiated during the Annex Period (July 1, 2020 – January 1, 2021)

Project Title	Project Summary
Comparison of 3 Different Diagnostic Tests to Make a Positive Diagnosis of SARS CoV-2 in Veterans at Jesse Brown VAMC	Comparison of three diagnostic tests (traditional nasopharyngeal swab, nasal swab and oral swab/saliva sample) in the same patient to determine sensitivity and specificity of each for positive diagnosis of SARS-CoV-2 ^A
Multisite 3DP Swab For Diagnostic Testing	Multi-site Nasal Swab Objective and Statistical Evaluation (NOSE) Study ^A of the effectiveness of 3DP nasal swabs vs. traditional swabs under VHA's Agile Design and Production Transformation (ADAPT) initiative, which uses 3DP technologies in VA clinics (The NOSE study created #PD nasal swabs with open-source digital blueprints ^B VHA then partnered with FDA to develop standards for the manufactured swabs by studying their effectiveness vs. that of traditional swabs.)
Vessel at Home Testing	Clinical trial of at-home rapid antigen test (Cellex) that targets the
using Cellex	nucleocapsid (N) protein on the SARC-CoV-2 virus. ^A

Sources:

In addition to the multitude of vaccine and therapeutic projects, ORD has continued to support non-clinical research and innovations. For example, multiple VHA offices, including Geriatrics and Extended Care, will participate in a pilot study for wastewater utility surveillance at a building level. ⁷⁹⁰ During this six-month pilot study, wastewater will be collected from eight standalone CLCs that are not part of acute care facilities. The wastewater will be tested for the presence of SARS-CoV-2 virus using PCR. ⁷⁹¹ The ability to detect this viral RNA can serve as a potential early warning innovation for the existence of COVID-19 in the CLC. Examples of additional non-clinical studies are provided in Table 12.5.

As noted by ORD leadership, knowledge collected from these types of studies will be shared with other Government agencies, including CDC, for additional collaboration. ⁷⁹²

Of the 2,320 ORD-funded projects in 2020 across all topics, 1,298 (56%) projects reported having to be put on hold as non-critical studies to minimize risk of exposure to participants and staff. At the time of this reporting, approximately 380 projects were still on hold.⁷⁹³

A VHA Office of Research and Development, response to questionnaire, 1/19/2021.

^B VHA Leadership Interview #19, timestamp 13:44, 1/15/2021.

Table 12.5: Examples of Non-interventional COVID-19 Studies during the Annex Period (July 1, 2020 – January 1, 2021)

Project Type	Project Title	Project Summary
Mental Health	Changes in the Delivery of Evidenced Based Psychotherapies for Depression and PTSD as the Result of COVID-19 Pandemic COVID-19 Impact on Biopsychosocial Factors of Loneliness in Rural Older Veterans and Caregivers Impact of COVID-19 and Social Distancing on Mental Health and Suicide Risk in Veterans Veterans Experiences During the COVID-19 Pandemic	These studies aim to investigate the impact of the COVID-19 pandemic on the mental and emotional health of Veterans. In particular, these studies focus on the effects of social restrictions during the pandemic on various psychological and social risk factors for Veterans, including PTSD, suicide risk and depression.
Effect on Veteran Caregivers	Understanding the Emotional Impact of Pandemics on Caregivers The Impact of the COVID-19 Pandemic on Veteran Caregivers: A Mixed Methods Study to inform the VA Caregiver Support System	These studies look at the impact of COVID-19 and social restrictions due to the pandemic on both formal and informal (essential ally) caregivers to Veterans.
Risk Factors	COVID-19: Multi-Omics Approach to Identify Molecular Mechanisms Responsible for Risk and Resilience to Adverse Outcomes Impacts of COVID-19 on African-American Veterans with Chronic Pain JBVAMC Registry for Research on Risk Factors and Outcomes of Veterans Evaluated for COVID-19 Multi-level Factors Underlying VA Racial/Ethnic Disparities in Covid-19 Infection and Complications	These studies examine the potential risk factors for adverse outcomes on Veteran populations. Studies range from possible molecular mechanism to racial/ethnic, to geographic (for example, rural) risk factors that may affect outcomes for Veterans with COVID-19 infection.

Source: VHA Office of Research and Development, response to questionnaire, 1/19/2021.

The COVID-19 response has increased transformative innovation within VHA. The VHA Innovation Ecosystem (IE) has demonstrated significant impact by formalizing partnerships and expanding its network.⁷⁹⁴ Through these collaborative and novel efforts, the IE has resulted in innovations, including:

- The Initiative to End Diabetic Limb Loss, in partnership with Podimetrics, uses remote temperature monitoring of high-risk diabetic Veterans' feet to detect diabetic foot ulcers up to five weeks prior to their normal presentation. New COVID-19 virtual care models are being tested at 3 of the 40 implementing sites.
- VHA IE teamed with FDA, NIH 3D Print Exchange and America Makes to harness the efforts of makers and engineers to rapidly create solutions and test 3DP COVID-19 solutions.
- VHA IE initiated Agile Design and Production Transformation Initiative (ADAPT) to enable VHA to pivot in-house resources, priorities, technology and expertise towards critical health care needs.

- Project Resilience uses the biosensors in popular smartwatch designs to identify the lingering impacts of COVID-19 and uses the resulting data to increase access to care, reduce costs and improve clinical outcomes.
- VHA IE, VHA Caregiver Support Program, VHA Geriatrics and Extended Care, and Veterans Experience Office are collaborating with the Elizabeth Dole Foundation to grant access to no-cost, short-term respite support for caregivers.
- Adaptation of the Boston Rideshare Program, in partnership with Uber and Lyft, to deliver supplies, meals and other essential goods to Veterans.
- In partnership with Challenge America, the COVID Makers Challenge formed teams to design and test solutions for front line and emergency workers (for example, ultra-violet sanitation boxes and quick release police masks).

Data Collection and Analytics

During this time period, researchers with the VA Informatics and Computing Infrastructure (VINCI) initiative joined the Observational Health Data Sciences and Informatics program. The researchers will collaborate with this international, interdisciplinary group on large-scale analytics of health data. Furthermore, the VA's National Artificial Intelligence Institute (NAII) is planning to utilize its capabilities in informatics and Artificial Intelligence (AI) for data mining and development of advanced algorithms for COVID-19 research. The NAII has been working with the Washington, D.C. VAMC and a dozen other sites to pilot a COVID-19 dashboard with explainable AI for feedback.

Other VHA research efforts, as described in the first report, continued from July 1, 2020, to January 1, 2021. These included the COVID-19 Insights Partnership (with the Department of Energy), the Million Veteran Program (MVP) and the COVID Observational Research Collaboratory. One highly impactful Insights Partnership publication reported on the development and validation of a tool helping to identify those at higher risk for COVID-19 mortality. In-person enrollment in the MVP resumed in August 2020, and as of January 2021, 25 of the 66 sites have reopened, taking all necessary precautions. Prior to that, 200,000 surveys on COVID-19 were completed by the MVP cohort. Furthermore, MVP began genetic analyses of susceptibility for SARS-CoV-2 outcomes and targets for treatment. The COVID Observational Research Collaboratory was in the process of analyzing more than 7.6 million electronic health records to estimate risks for SARS-CoV-2-related death.

Collaboration

VHA responded to the pandemic and the complex challenges that emerged by enhancing its coordination towards optimal integration with their offices to behave more like a fully integrated system working towards a common challenge.⁸⁰⁰ This included establishing a regular cadence for meetings with leadership and formal touchpoints between quality managers and chief medical officers.⁸⁰¹

Key Partnerships

In addition to the improved internal collaborations, ORD has worked with external partners to develop novel solutions that address Veteran needs. For example, VHA partnered with Walmart to improve access to telehealth care for Veterans in rural areas through the VA-led Accessing Telehealth through Local Area Stations program.802

Under the COVID-19 Evidence Accelerator initiative of the FDA's Reagan Udall Foundation, 803 VA has supported four real-world evidence studies that examine the effectiveness of hydroxychloroquine, anti-coagulants, remdesivir and steroids. These studies have already contributed to changes in VA care and are contributing information about therapies where clinical trial evidence may be incomplete or conflicting. 804

VHA also partnered with Fitbit in the development of a new initiative to track sleep and physiology of 10,000 Veterans. The study aims to increase understanding of the effects of the pandemic on mental health issues.805

Looking forward, VHA leadership recognizes the potential to optimize both academic medical centers' and VHA's capacities as hubs for innovation. 806 VHA through ORD and OHIL plans to pursue a continued partnership with academic medical centers beyond their current focus on medical center capabilities. 807

VETERAN INTEGRATED SERVICE NETWORKS (VISNs)

VA health care systems are organized into regional jurisdictions known as VISNs. There are 18 VISNs, each representing a system of care for a geographical area. Each VISN is responsible for managing the day-to-day functions of VA facilities under its purview, as well as health care planning and resource allocation.

During the Annex period, VISNs activated surge plans for locations where COVID-19 cases were likely to exceed community capacity (based on forecast analytics). They identified VAMCs that might be able to relieve pressure on community hospitals and tribal health systems and prioritized those VAMCs for augmented resources. VISNs also identified VAMCs that might need to receive significant numbers of inpatients from SVHs and prioritized those VAMCs for augmented resources.

VHA provided a unified and coordinated approach in response to surges in COVID-19 and staffing needs across 18 networks from July 1, 2020, to January 1, 2021. Enterprise support for VISNs included:

- VHA Incident Command System, which provided management and coordination of incidents and designated special events at VHA⁸⁰⁸
- VISN Incident Command Centers, which coordinated and communicated VISN response actions
- VHA Health Operations Center (HOC), which hosted operations updates that included VHA leadership, COVID-19 response leadership, Network Directors, VAMC leadership and VHACO program offices⁸⁰⁹

In addition, routine communication with EIC and VHACO provided VISNs with timely information and provided Network Directors a routine forum to communicate resourcing, supply and capacity needs.

See the "Cross-VISN Summary" section of the Initial Report for a further description of VISN geographic regions, and the "Leadership and Organization" section for a description of how VA coordinated response actions across the enterprise.

VISN 1, NEW ENGLAND HEALTH CARE NETWORK

Emergency Events and Responses

From July 1, 2020, to January 1, 2021, VISN 1 continued to manage its emergency pandemic response as cases rose across all six New England states in its region.

VISN 1's prevalence of confirmed COVID-19 cases among Veterans Using VHA Services reached 1.9%, compared to 4.7% among the general community, as of January 1, 2021 (see Figure 13.2 for more details). 810 As shown in Table 13.1, there were a total of 4,688 Veteran COVID-19 cases with 348 associated deaths. Employee COVID-19 cases totaled 592 with 2 associated deaths. 811 During that time, the 7-day rolling average of positive test rates for Veterans Using VHA Services varied from 1% to 7% from July to October, increasing to 24% in December (see Figure 13.1 for more details). For more information on testing, see Table 13.2.812

All VISN 1 facilities were involved with mitigating a rise in cases: VA Boston HCS, VA Connecticut HCS, Edith Nourse Rogers Memorial Veterans Hospital (Bedford), VA Maine HCS, White River Junction VAMC, VA Central Western Massachusetts HCS, Providence VAMC and Manchester VAMC.⁸¹³

In September 2020, VISN 1 responded to the upsurge in COVID-19 cases across its region by initiating the Incident Command System and holding daily calls with all facilities.⁸¹⁴ VISN 1 leadership reported that each day, VISN leadership and facilities discussed a range of topics that included:

- COVID-19 census
- Logistics (PPE supplies and resources)
- OIT status of networks
- Telehealth status of networks
- Consolidated Laboratory Facilities
- DEMPS program
- Clinical workgroup developments⁸¹⁵

Following these meetings, groups from Incident Command met to develop action plans in response to issues. Many of these action plans involved pooling resources and abilities. For instance, the VA Connecticut HCS supported other VISN 1 facilities in processing COVID-19 tests for CLCs, employees and Veterans.⁸¹⁶ The VISN also procured PPE for its facilities and responded to FEMA and DEMPS missions, internal and external to the VISN.

Issues and Adjustments

During summer 2020, VISN 1 had disengaged its Incident Command System because of lower COVID-19 prevalence. This allowed the VISN to prepare for anticipated COVID-19 case increases in the fall.⁸¹⁷ During that time, staff could recover, resume operations that had been previously deferred, and prepare for upcoming challenges.⁸¹⁸

Vaccination Planning

When COVID-19 rates increased in the fall, many VISNs met challenges in vaccine planning and distribution. VISN 1 reported difficulties stemming from uncertainty about:

- The type of COVID-19 vaccine that would be approved
- Where the vaccine would be distributed
- How to handle the vaccine in alignment with protocols (for example, temperature control)
- Its documentation of doses distributed to patients⁸¹⁹

VISN 1 prepared a series of approaches to handle the uncertainty until more information was disseminated about the vaccine. The VISN conducted over 20 tabletop exercises based on protocols released to VHA facilities. VISN leadership also reported identifying a clinical vaccine coordinator to coordinate with all VAMCs on the development, implementation, execution and documentation of all VISN 1 vaccine administration.

Fourth Mission

VISN 1 continued its Fourth Mission support from July 1, 2020, to January 1, 2021, as shown in Appendix B, Fourth Mission Table 16.2. In July, VISN 1 supported IHS and tribal health system facilities by sending two RNs to the Summit Arizona Indian Reservation and four RNs to the White River Navajo Nation Indian Reservation.⁸²³ In October, VISN 1 directed resources to community medical providers, allocating three Certified Nursing Assistants (CNAs), two LPNs, and one RN to New Hampshire's Catholic Medical Center, and seven RNs and three housekeepers to New Hampshire's St. Teresa Hospital.

From October to December 2020, VISN 1 dedicated resources to SVHs and private nursing home partners.⁸²⁴ It deployed one LPN to the St. James Missouri SVH; five RNs and five CNAs to the Connecticut SVH; three RNs, three medical support assistants (MSA) and one clerk to the Deer Isle Maine Community Nursing Home;

and two RNs, an LPN and two CNAs to the New Hampshire SVH in Tilton, New Hampshire.⁸²⁵

Movement of Resources

VISN 1 facilities also sent support to other VISNs. Five facilities outside VISN 1 received staffing support on rotations. Received Staffing support on rotations. The VA Maine HCS sent the San Antonio VAMC six staff members in July and August. VISN 1 facilities—including White River Junction VAMC, VA Boston HCS and Bedford—provided a total of 10 RNs to the Tucson VAMC in VISN 22. During the same months, the VA Maine HCS sent VISN 9's Memphis VAMC one lab technician. Per In September, VISN 1's VA Connecticut HCS sent two CNAs as staffing support to Hawaii in VISN 21, and in October, Bedford provided a nurse manager to Richmond, Virginia, in VISN 6.

Other

VISN 1 leadership reported the following lessons learned for this period: VISN 1's comprehensive planning in advance of receiving COVID-19 vaccines engaged staff across various levels, which built much needed confidence in the preparation phases, according to VISN 1 leadership.⁸³¹

- VISN 1 simplified vaccine distribution by grouping patients based on age to receive vaccinations.⁸³²
- VISN 1 employed its Incident Command System daily to manage or coordinate replenishing consumables such as disposable procedure gloves, masks, gowns and face shields at facilities.⁸³³

Tables and Figures

Table 13.1: VISN 1 Key COVID-19 Statistics (March 1, 2020 – January 1, 2021)

Category	Number
Veterans Using VHA Services	249,544
Veteran COVID-19 Cases	4,688
Veteran COVID-19 Inpatients	584
Veteran Deaths (COVID-19 related)	348
VISN Employees	15,913
Employee COVID-19 Cases	592
Employee Deaths (COVID-19 related)	2

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the

cost of care. Veteran tests, confirmed positives and deaths figures exclude Veteran-Employees. Employee tests, confirmed positives and deaths include both Veteran-Employees and Non-Veteran Employees. VHA Employee Deaths (COVID-19 related) were identified from Issue Briefs from the deceased's local VAMC. The deceased may have been tested at a VHA test location or an outside location.

Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; Employee Deaths data provided by VHA on 2/3/2021; HR Employee Cube, VSSC, VHA, accessed on 1/25/2021.

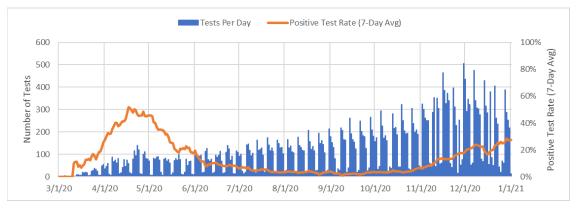
Table 13.2: VISN 1 Veteran Testing (March 1, 2020 – January 1, 2021)

Category		Veterans Using VHA Services		CLC Residents	
Testing	Population Tested	35,514	14%	873	95%
Rate	Population	249,544	14 /0	915	93 /0
	Population Positive	4,688	2%	197	19%
Case Rate	Population	249,544		1,028	

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests and confirmed positives figures exclude Veteran Employees. CLC resident population counts for positive cases were aggregated from March 1, 2020, to January 1, 2021, and CLC resident population counts for testing were aggregated from April 1, 2020, to January 1, 2021 to account for all resident testing after the advent of national universal testing. CLC population tested percentage was calculated using a CLC resident population denominator aggregated from April 1, 2020, through January 1, 2021. CLC population counts as of March 1, 2020, may exclude patients who transferred between VISN CLC locations. COVID-19 case indication is for the period of March 1, 2020 through January 1, 2021 and COVID-19 infection may have occurred prior to (or after) a CLC stay. A portion of CLC patients may be untested due to the following reasons, including but not limited to: CLC patient residence in a CLC facility prior to national universal testing implementation, CLC patient movement between centers, inability to test per decision from the local clinical team, patient discharge or other unique circumstances.

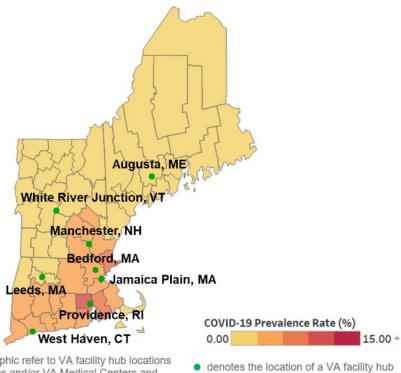
Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; CLC Testing Data provided by HOC, VHA on 2/25/2021; CLC Positivity Data provided by HOC, VHA on 5/4/2021.

Figure 13.1: VISN 1 COVID-19 Tests and Positive Test Rate (Daily, March 1, 2020 – January 1, 2021)



Notes: This chart contains testing data for Veterans Using VHA Services compiled from Case Reviews and VA Lab-certified COVID-19 tests. Case Reviews tests are conducted outside of VHA network. Source: NST Dataset, HOC, VHA, accessed 2/21/2021.

Figure 13.2: VISN 1 Prevalence of Confirmed COVID-19 Cases



Note 1: The cities shown on this graphic refer to VA facility hub locations made up by VA Health Care Systems and/or VA Medical Centers and their accompanying divisions and campuses, where applicable.

Note 2: The counties shown on this graphic are based on the alignment of County FIPS codes to VISN locations as per "Veterans Integrated Services Networks (VISN), Markets, Submarkets, Sectors and Counties by Geographic Location", VA, last updated on January 5, 2021

Source: John Hopkins University; US Census 2019 Estimate; US Department of Veterans Affairs.

Data as of 1/21/2021

VISN 2, NEW YORK & NEW JERSEY HEALTH CARE NETWORK

Emergency Events and Responses

From July 1, 2020, to January 1, 2021, VISN 2 sustained its response to the pandemic but experienced no events requiring emergency action. The VISN continued to manage pandemic developments, execute Moving Forward plans and prepare for vaccination distribution.⁸³⁴

VISN 2 prevalence of confirmed COVID-19 cases among Veterans Using VHA Services reached 2.3%, compared to 5.4% among the general community, as of January 1, 2021 (see Figure 13.4 for more details). As shown in Table 13.3, there were a total of 6,345 Veteran COVID-19 cases with 520 associated deaths. Employee COVID-19 cases totaled 889 with 16 associated deaths. During that time, the 7-day rolling average of positive test rates for Veterans Using VHA Services varied from 1% to 19% from July to November, increasing to 29% in December (see Figure 13.3 for more details). For more on testing, see Table 13.4.837

Issues and Adjustments

VISN 2 opened an Incident Command Center to better coordinate with facility leaders. 838 Using daily calls with the VISN Incident Command Center, the VISN facilitated staffing, supplies and equipment distribution to VISN facilities. 839

At the facility level, several HCSs and VAMCs adjusted to manage the pandemic while taking steps in their Moving Forward process. Some of these adjustments are listed below:

- The New Jersey HCS opened drive-thru COVID-19 testing at three Community-Based Outpatient Centers (CBOCs) in July 2020 and developed a screening and testing program for its staff in August 2020.⁸⁴⁰
- The Northport VAMC expanded telehealth services, and in September 2020, rescheduled elective surgeries and procedures impacted by earlier surges.⁸⁴¹
- The Western New York HCS adjusted the type of care provided in its surge unit deployed to the Buffalo Nursing Home to focus on nursing home patients who remained COVID-19 positive but showed no symptoms; it also suspended elective surgeries for acute care on December 7, 2020, to create space for COVID-19 admissions.⁸⁴²
- In July 2020, the New York Harbor HCS created a Moving Forward Planning team and provided technology to clinical providers aimed at making virtual outpatient care "the norm and not the exception," as reported by VISN

leadership. The HCS also maintained its surge bed availability for a subsequent COVID-19 wave.⁸⁴³

When VISN 2 saw a decrease in COVID-19 prevalence, it encouraged sites to pursue Moving Forward plans that would restore services for Veterans.⁸⁴⁴

Vaccination Planning

As with many VISNs, VISN 2 faced uncertainty about vaccine allotments for its various facilities. This made it difficult to schedule appointments based on supply.⁸⁴⁵ VISN 2 noted that as vaccination distribution progressed, the supply became more consistent.⁸⁴⁶

VISN 2 also reported that facilities faced initial challenges with recording vaccine documentation into the Occupational Health Record-keeping System (OHRS).⁸⁴⁷ Staff received additional training on the OHRS, which largely remediated the issue according to VISN 2 leadership.⁸⁴⁸

Fourth Mission

VISN 2 continued its Fourth Mission support from July 2020 to January 2021, as shown in Appendix B, Fourth Mission Table 16.2. From July to December 2020, VISN 2 sent 44 staff members to 16 unique sites, including IHS and tribal health system facilities such as the Hopi Health Care Center and the Whiteriver Indian Hospital, the Hurricane Delta support area, and six SVHs.⁸⁴⁹

Movement of Resources

Intra-VISN movement of resources continued during this time period and focused on providing facilities with equipment and supplies. From July to October, the VISN provided critical pandemic items and PPE to Western New York HCS, New York Harbor HCS, Northport VAMC, New Jersey HCS and Finger Lakes HCS.⁸⁵⁰

VISN 2 facilities also exchanged supplies as needed: the Northport VAMC sent the Bronx VAMC 15,000 nitrile gloves in July; in August, the Bronx VAMC sent the Northport VAMC 300 viral transport media (VTM) kits used for viral specimen collection for COVID-19.851 In December, the New York Harbor HCS St. Albans location sent the Western New York Buffalo location a minus-70-degree C freezer for vaccine storage.852

Although the movement of resources outside VISN 2 was predominantly related to Fourth Mission assignments, the Bath VAMC sent the Office of Emergency Management police and fire staff support in December 2020.⁸⁵³

Other

According to VISN 2 leadership, VISN 2 attributes its success in disseminating CDC and VHA information to local facilities to the Incident Command Structure and a dedicated COVID-19 Vaccination Committee workgroup.⁸⁵⁴

VISN 2 made progress towards several Moving Forward process milestones from July 1, 2020, to January 1, 2021. In December 2020, VISN leadership reported that surgical in-person encounters at the Albany VAMC reached 100.5% compared to the prior fiscal year (November 2019 to October 2020). 855 Three other facilities achieved 90% or higher for surgical in-person encounters by December 22, 2020:

- VA Western New York HCS at 92.8%
- Syracuse VAMC at 96.3%
- Finger Lakes HCS at 90.8%⁸⁵⁶

As of December 22, 2020, nine VISN 2 facilities reported achieving 56% to 65% of total in-person compared to the previous fiscal year.⁸⁵⁷

Tables and Figures

Table 13.3: VISN 2 Key COVID-19 Statistics (March 1, 2020 – January 1, 2021)

Category	Number
Veterans Using VHA Services	281,563
Veteran COVID-19 Cases	6,345
Veteran COVID-19 Inpatients	1,250
Veteran Deaths (COVID-19 related)	520
VISN Employees	18,758
Employee COVID-19 Cases	889
Employee Deaths (COVID-19 related)	16

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests, confirmed positives and deaths figures exclude Veteran-Employees. Employee tests, confirmed positives and deaths include both Veteran-Employees and Non-Veteran Employees. VHA Employee Deaths (COVID-19 related) were identified from Issue Briefs from the deceased's local VAMC. The deceased may have been tested at a VHA test location or an outside location.

Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; Employee Deaths data provided by VHA on 2/3/2021; HR Employee Cube, VSSC, VHA, accessed on 1/25/2021.

Table 13.4: VISN 2 Veteran Testing (March 1, 2020 – January 1, 2021)

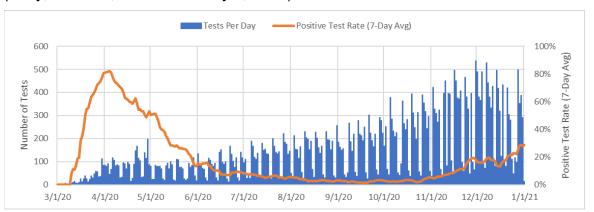
Category		Veterans Using VH	HA Services CLC Residents		sidents
Testing	Population Tested	44,493	16%	1,224	99%
Rate	Population	281,563	10%	1,235	99%
Casa Data	Population Positive	6,345	2%	412	29%
Case Rate	Population	281,563		1,423	

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests and confirmed positives figures exclude Veteran Employees. CLC resident population counts for positive cases were aggregated from March 1, 2020, to January 1, 2021, and CLC resident population counts for testing were aggregated from April 1, 2020, to January 1, 2021 to account for all resident testing after the advent of national universal testing. CLC population tested percentage was calculated using a CLC resident population denominator aggregated from April 1, 2020, through January 1, 2021. CLC population counts as of March 1, 2020, may exclude patients who transferred between VISN CLC locations. COVID-19 case indication is for the period of March 1, 2020 through January 1, 2021 and COVID-19 infection may have occurred prior to (or after) a CLC stay. A portion of CLC patients may be untested due to the following reasons, including but not limited to: CLC patient residence in a CLC facility prior to national universal testing implementation, CLC patient movement between centers, inability to test per decision from the local clinical team, patient discharge or other unique circumstances.

Through manual tracking, VISN 2 identified 282 COVID-19 cases that were CLC onset for the period of March 1, 2020, through January 1, 2021. According to VISN 2, differences observed in this count to the reported above are due to specific circumstances such as admission of COVID-19 convalescent patients into isolated COVID-19 cohort units to ensure adequate acute care bed capacity or prior historical COVID-19 infection significantly before CLC admission.

Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; CLC Testing Data provided by HOC, VHA on 2/25/2021; CLC Positivity Data provided by HOC, VHA on 5/4/2021.

Figure 13.3: VISN 2 COVID-19 Tests and Positive Test Rate (Daily, March 1, 2020 – January 1, 2021)



Notes: This chart contains testing data for Veterans Using VHA Services compiled from Case Reviews and VA Lab-certified COVID-19 tests. Case Reviews tests are conducted outside of VHA network. Source: NST Dataset, HOC, VHA, accessed 2/21/2021.

New York City Area Bronx, NY Syracuse, N Northport, NY Buffalo, NY East Orange, NJ Canandaigua, NY New York, NY Albany, NY Bath, NY Montrose, NY New York, NY Northport, NY East Orange, NJ COVID-19 Prevalence Rate (%) 15.00 + 0.00 Note 1: The cities shown on this graphic refer to VA facility hub locations denotes the location of a VA facility hub made up by VA Health Care Systems and/or VA Medical Centers and their accompanying divisions and campuses, where applicable. Source: John Hopkins University; US Census 2019 Estimate; US Department of Note 2: The counties shown on this graphic are based on the alignment Veterans Affairs. of County FIPS codes to VISN locations as per "Veterans Integrated

Figure 13.4: VISN 2 Prevalence of Confirmed COVID-19 Cases

Services Networks (VISN), Markets, Submarkets, Sectors and Counties by Geographic Location", VA, last updated on January 5, 2021.

Data as of 1/21/2021

VISN 4, VA HEALTH CARE NETWORK

Emergency Events and Responses

From July 1, 2020, to January 1, 2021, VISN 4 managed surge responses, provided PPE to various locations, and began to prepare for vaccinations.⁸⁵⁸

VISN 4 prevalence of confirmed COVID-19 among Veterans Using VHA Services reached 2.2%, compared to 5.2% among the general community, as of January 1, 2021 (see Figure 13.6 for more details). 859 As shown in Table 13.5, there were a total of 6,335 Veteran COVID-19 cases with 366 associated deaths. Employee COVID-19 cases totaled 825 with 6 associated deaths. 860 During that time period, the 7-day rolling average of positive test rates among Veteran Using VHA Services remained below 12% from July to October and increased to 42% in December (see Figure 13.5 for more details). 861 For more information about testing, see Table 13.6.

Issues and Adjustments

VISN 4's approach to the pandemic response continued to evolve during this reporting period. For instance, VISN 4's Human Engineering Research Laboratory (HERL), a collaboration of the Pittsburgh HCS and the University of Pittsburgh, adjusted its focus and began to provide PPE and 3D-printed nasopharyngeal swabs for VISN 4 facilities. HERL dedicated 30% of its engineering staff hours to creating COVID-19 items, including a rolling bed shield to prevent droplets from being shared between clinicians and patients at the patient's bedside. Both the Philadelphia VAMC and the Pittsburgh HCS have used HERL products.

VA HCSs also made adjustments to virtual care. In August 2020, the VA reported that the Pittsburgh HCS chaplains conducted virtual encounters with family members and loved ones of Veterans to keep people connected, even at times of death.⁸⁶⁵

In September 2020, after a summer of low infection rates, VISN 4 cancelled its Incident Command calls and transitioned to holding VISN operations meetings daily. Incident Command calls resumed in November with a rise in COVID-19 cases. 866 The increase coincided with 350 nurses at the VISN 4 Corporal Michael J. Crescenz VAMC completing cross-trainings necessary to augment their skills to fit pandemic needs. 867 Nurses were then reassigned to various units to deploy their training. 868

VISN 4 leadership also reported new issues that required VISN action. These included sharing resources across facilities, testing capabilities, vaccine, supplies and equipment, as well as clarification on policy.⁸⁶⁹ Since July 1, 2020, VISN 4 used daily issue identification to tackle these challenges and has resolved them.⁸⁷⁰

Vaccine Planning

As with many VISNs, VISN 4 faced challenges with vaccine planning and distribution. Balancing vaccine administrations was a significant issue, and the VISN created a vaccine tracking process to monitor vaccines by type and location to address it. ⁸⁷¹ Medical center leadership reported the number of vaccines on site and shared doses with facilities running low. ⁸⁷² VISN 4's vaccination scheduling tool review team helped mitigate tracking challenges. ⁸⁷³ As a result, the VISN was able to administer vaccines to employees efficiently until the VISN could access nationally released solutions. ⁸⁷⁴

In addition, VISN 4 reported needing additional OHRS licenses necessary for administering the vaccines to accelerate the number of vaccines that could be administered each day.⁸⁷⁵ VISN 4 identified as another significant issue building a documentation process for vaccine administration and proposed using scribes in the future to process documentation.⁸⁷⁶ Despite these issues, VISN 4's Pittsburgh HCS was "one of the first 37 VA sites across the country to give vaccines."⁸⁷⁷

Fourth Mission

VISN 4 continued its Fourth Mission support from July 1, 2020, to January 1, 2021, as shown in Appendix B, Fourth Mission Table 16.2. In July 2020, VISN 4 sent 68 staff members across missions to the Southeastern Veterans Center, the Southwestern Veterans Center and for missions in VISNs 9, 17 and 22.878 VISN 4 also sent thousands of supplies to the Southwestern Veterans Center in Pittsburgh, Pennsylvania.879 Throughout the summer, five staff members were deployed to White River, Arizona, to support the IHS and tribal health systems, and two staff members and numerous supplies traveled to a community hospital in Yuma, Arizona.880 VISN 4 also delivered supplies and staffing to nine SVHs across Mississippi, Missouri, New Jersey, Virginia, Kentucky and Pennsylvania.881

Movement of Resources

Intra-VISN support included the movement of staff, equipment and patients. In November and December 2020, the Wilmington VAMC transferred one ICU patient to the Philadelphia VAMC. The Pittsburgh VAMC transferred eight CLC patients to Coatesville VAMC and six CLC patients to Butler VAMC. The Pittsburgh VAMC received 10,000 isolation gowns from the Butler VAMC, and the Philadelphia VAMC received over a thousand surgical respirators from the Lebanon VAMC. The Pittsburgh VAMC received over a thousand surgical respirators from the Lebanon VAMC.

VISN 4 facilities also sent resources to other VISNs. VISN 4 facilities sent hundreds of gloves, gowns, surgical masks, face shields and other critical pandemic supplies

to the San Antonio VAMC, Oklahoma City VAMC, Biloxi VAMC and facilities in Hawaii, Missouri, North Carolina and Roanoke.⁸⁸⁵

Other

VISN 4 documented two lessons learned for this time period:

- VISN 4 observed accelerated growth in virtual care during the pandemic and approved plans to maintain that growth in virtual care modalities in daily operations.⁸⁸⁶
- VISN 4 leadership credited daily calls through Incident Command as the reason for both its strong market-level operations and its success managing issues and risks and developing and implementing processes related to the general pandemic response and vaccination.⁸⁸⁷

Tables and Figures

Table 13.5: VISN 4 Key COVID-19 Statistics (March 1, 2020 – January 1, 2021)

Category	Number
Veterans Using VHA Services	284,268
Veteran COVID-19 Cases	6,335
Veteran COVID-19 Inpatients	753
Veteran Deaths (COVID-19 related)	366
VISN Employees	15,116
Employee COVID-19 Cases	825
Employee Deaths (COVID-19 related)	6

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests, confirmed positives and deaths figures exclude Veteran-Employees. Employee tests, confirmed positives & deaths include Veteran-Employees and Non-Veteran Employees. VHA Employee Deaths (COVID-19 related) were identified from Issue Briefs from the deceased's local VAMC. The deceased may have been tested at a VHA test location or an outside location. Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; Employee Deaths data provided by VHA on 2/3/2021; HR Employee Cube, VSSC, VHA, accessed on 1/25/2021.

Table 13.6: VISN 4 Veteran Testing (March 1, 2020 – January 1, 2021)

	Category	Veterans Using VHA	Services	CLC Residents	
Testing Rate	Population Tested	32,296	11%	1,127	94%
	Population	284,268		1,197	
Case Rate	Population Positive	6,335	2%	219	16%
	Population	284,268		1,360	

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests and confirmed positives figures exclude Veteran Employees. CLC resident population counts for positive cases were aggregated from March 1, 2020, to January 1, 2021, and CLC resident population counts for testing were aggregated from April 1, 2020, to January 1, 2021 to account for all resident testing after the advent of national universal testing. CLC population tested percentage was calculated using a CLC resident population denominator aggregated from April 1, 2020, through January 1, 2021. CLC population counts as of March 1, 2020, may exclude patients who transferred between VISN CLC locations. COVID-19 case indication is for the period of March 1, 2020 through January 1, 2021 and COVID-19 infection may have occurred prior to (or after) a CLC stay. A portion of CLC patients may be untested due to the following reasons, including but not limited to: CLC patient residence in a CLC facility prior to national universal testing implementation, CLC patient movement between centers, inability to test per decision from the local clinical team, patient discharge or other unique circumstances.

Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; CLC Testing Data provided by HOC, VHA on 2/25/2021; CLC Positivity Data provided by HOC, VHA on 5/4/2021.

Figure 13.5: VISN 4 COVID-19 Tests and Positive Test Rate

(Daily, March 1, 2020 – January 1, 2021) Tests Per Day Positive Test Rate (7-Day Avg) 500 450 Positive Test Rate (7-Day Avg 400 80% Number of Tests 350 300 250 200 150 50 0 0% 3/1/20 4/1/20 8/1/20 9/1/20 10/1/20

Note: This chart contains testing data for Veterans Using VHA Services compiled from Case Reviews and VA Lab-certified COVID-19 tests. Case Reviews tests are conducted outside of VHA network. Source: NST Dataset, HOC, VHA, accessed 2/21/2021.

Figure 13.6: VISN 4 Prevalence of Confirmed COVID-19 Cases



Note 1: The cities shown on this graphic refer to VA facility hub locations made up by VA Health Care Systems and/or VA Medical Centers and their accompanying divisions and campuses, where applicable.

Note 2: The counties shown on this graphic are based on the alignment of County FIPS codes to VISN locations as per "Veterans Integrated Services Networks (VISN), Markets, Submarkets, Sectors and Counties by Geographic Location", VA, last updated on January 5, 2021

denotes the location of a VA facility hub

Source: John Hopkins University; US Census 2019 Estimate; US Department of Veterans Affairs.

Data as of 1/21/2021

VISN 5, VA CAPITOL HEALTH CARE NETWORK

Emergency Events and Responses

From July 1, 2020, to January 1, 2021, VISN 5 directed resources to manage emergency COVID-19 outbreaks at two facilities while maintaining operations throughout the VISN.

VISN 5 prevalence of confirmed COVID-19 among Veterans Using VHA Services reached 1.8%, compared to 4.6% among the general community, as of January 1, 2021(see Figure 13.8 for more details). 888 As shown in Table 13.7, there were 3,668 Veteran COVID-19 cases including 214 associated deaths. Employee COVID-19 cases totaled 557 with 6 associated deaths. 889 During that time period, the 7-day rolling average of positive test rates among Veterans Using VHA Services varied from 3% to 14% from July through October, increasing to 31% on January 1, 2021 (see Figure 13.7 for more details). 890 For more information about testing, see Table 13.8.

From September to November 2020, multiple VAMCs in VISN 5 managed COVID-19 outbreaks within CLCs, a Nutrition and Food Staff unit and a cardiac ICU.

On September 11, 2020, a CLC COVID-19 outbreak began at the Loch Raven VAMC.⁸⁹¹ In response, Loch Raven VAMC moved patients to the Baltimore VAMC and requested 20 additional staff from the VISN.⁸⁹² VISN 5 sent 10 clinical staff from other VISN 5 facilities, which proved sufficient to support mitigating the outbreak at Loch Raven VAMC.⁸⁹³

On November 14, 2020, a COVID-19 outbreak among the staff began at the Baltimore VAMC cardiac ICU.⁸⁹⁴ The Baltimore VAMC requested staff support from the VISN on November 18, 2020, to mitigate the outbreak. When additional staff from other VISN 5 facilities were unavailable to support, the Baltimore VAMC shifted staff from other specialties and locations within the VA Maryland HCS.⁸⁹⁵ Until the original staff could return to work approximately two weeks later, the Baltimore VAMC shifted cardiac ICU admissions to other ICU areas.⁸⁹⁶

The Louis A. Johnson VAMC in Clarksburg, West Virginia, experienced two outbreaks of COVID-19 in fall 2020.⁸⁹⁷ The first outbreak began within the CLC on October 2, 2020, and the facility took action that same day to request five additional staff members.⁸⁹⁸ VISN 5 fulfilled the five positions requested using staff from other facilities within the VISN.⁸⁹⁹ The second outbreak began on Thanksgiving Day, November 26, 2020, within the facility's Nutrition and Food Service staff unit.⁹⁰⁰ A significant number of the Nutrition and Food Service staff had to be quarantined,

which disrupted the VAMC's meal service to patients. 901 The Louis A. Johnson VAMC requested support from the VISN for meal service help, and suspended most admissions until the Nutrition and Food Service unit had enough staff to resume. 902 With staff support from the VISN and through DEMPS, the VAMC was able to resume medical center admissions and meal service five days later, on December 1, 2020. 903

VISN 5 leadership reported that its surge plan activities from July 1, 2020, to December 31, 2020, prepared stations to address COVID-19 surges, which resulted in a decreased need for resource shifting.⁹⁰⁴

Issues and Adjustments

VISN 5's pandemic response approach continued to evolve during this period. Over the summer, when rates of transmission were relatively lower, VISN 5 disengaged its Incident Command Management Team. 905 It used a Weekly Watch Officer to maintain coordination with VAMCs until the surge began again. 906 In December 2020, the VISN Incident Command Management Team was re-engaged. 907 Incident Command teams at the VAMC level remained active throughout this timeframe. 908

In December, the re-activated VISN Incident Command made the following adjustments:

- Clarified bed capacity numbers with medical centers and facility Incident Command teams⁹⁰⁹
- Added a vaccine planning and execution section to the Incident Command structure⁹¹⁰
- Coordinated information sharing around COVID-19, combining and streamlining daily communications while maintaining Incident Command reporting calls with VAMCs three times per week⁹¹¹
- Created and filled a full-time emergency manager position to support OEM area managers⁹¹²
- Developed COVID-19 dashboards to facilitate Moving Forward process decision making⁹¹³

Vaccination Planning

As with many VISNs, VISN 5 noted challenges with vaccine planning and distribution. Due to limited and fluctuating vaccine allotments, VISN 5 required Veterans to schedule vaccine appointments.⁹¹⁴ As facilities adapted to accommodate more walk-ins and better understood Veteran interest in the vaccine, sites began

using a multi-pronged approach, distributing the vaccine through both scheduled appointments and walk-in capabilities. ⁹¹⁵

Fourth Mission

VISN 5's Fourth Mission support continued from July 1, 2020, to January 1, 2021, as shown in Appendix B, Fourth Mission Table 16.2. The VISN sent a total of 17 RNs, LPN/LVNs, health technicians, nursing assistants, nurse practitioners, nurse managers and trade support staff to a combination of 11 SVHs, IHS and tribal health system facilities, and community medical centers. 916

Throughout this period, the Martinsburg VAMC sent PPE to the Pendleton Manor Community senior living facility in Franklin, West Virginia, and sent PPE, fit testing equipment and training support to the Berkley Medical Center at West Virginia University. 917 The Beckley VAMC sent equipment and supplies to the Beckley Area Regional Hospital and Princeton Community Hospital. 918 The Beckley VAMC provided a ventilator and Bipap masks to two local community medical centers, Beckley Appalachian Regional Hospital and Princeton Community Hospital.

VISN 5 also began a significant effort, according to VISN leadership, in planning vaccination support to Department of Homeland Security (DHS) staff located within the Washington, DC, metropolitan area.⁹¹⁹

Movement of Resources

Intra-VISN 5 movement of staff continued through this period. For instance, the Baltimore VAMC received 11 total staff members in July and September from Huntington, Martinsburg, Washington and Beckley facilities, including one health technician, one LPN/LVN for medical surgery, one microbiologist, two NAs for medical surgery and six RNs. 920 From October to December 2020, in addition to meal service support during the November outbreak, the Louis A. Johnson VAMC received two medical surgery LPN/LVNs and three RNs, and the Office of Emergency Management received one driver. 921

VISN 5 facilities also sent support to other VISNs. Three facilities outside VISN 5 received support: Gulf Coast Veterans Health System (seven staff members), Thomas E. Creek VAMC (three) and Oklahoma City VAMC (two). 922 VISNs 4, 6, 10, 12, 15 and 22 sent VISN 5 support, including eight food service staff members to the Louis A. Johnson VAMC in December in response to the Louis A. Johnson VAMC outbreak, and four medical technologists and two laboratory technicians to the Baltimore VAMC. 923

Other

VISN 5 leadership reported the following lessons learned for this period:

- Re-opening has been limited due to space constraints and the ability to distance within existing layouts.
- If COVID-19 surges had resulted in a higher number of cases, staffing would have been a limiting factor in managing those increases.

VISN 5 leadership also noted updates to its Moving Forward process. In late 2020, Moving Forward progress for the VISN fluctuated by facility. In November, VISN 5 contributed to Moving Forward progress by returning to 100% of pre-pandemic care levels for its appointments in gastrointestinal services at the Washington, DC VAMC. 924 In contrast, Clarksburg VAMC and Huntington VAMC had to reduce inperson appointments in November and December 2020 due to increased prevalence of COVID-19. 925

Tables and Figures

Table 13.7: VISN 5 Key COVID-19 Statistics (March 1, 2020 – January 1, 2021)

Category	Number
Veterans Using VHA Services	203,880
Veteran COVID-19 Cases	3,668
Veteran COVID-19 Inpatients	634
Veteran Deaths (COVID-19 related)	214
VISN Employees	12,296
Employee COVID-19 Cases	557
Employee Deaths (COVID-19 related)	6

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests, confirmed positives and deaths figures exclude Veteran-Employees. Employee tests, confirmed positives & deaths include Veteran-Employees and Non-Veteran Employees. VHA Employee Deaths (COVID-19 related) were identified from Issue Briefs from the deceased's local VAMC. The deceased may have been tested at a VHA test location or an outside location. Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; Employee Deaths data provided by VHA on 2/3/2021; HR Employee Cube, VSSC, VHA, accessed on 1/25/2021.

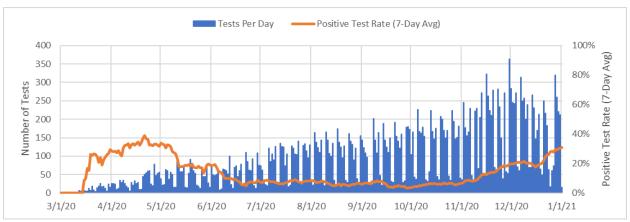
Table 13.8: VISN 5 Veteran Testing (March 1, 2020 – January 1, 2021)

Category		Veterans Using VHA Services		CLC Resident	S
Testing Rate	Population Tested	28,092	14%	602	97%
	Population	203,880		623	
Case Rate	Population Positive	3,668	2%	85	12%
	Population	203,880		726	

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests and confirmed positives figures exclude Veteran Employees. CLC resident population counts for positive cases were aggregated from March 1, 2020, to January 1, 2021, and CLC resident population counts for testing were aggregated from April 1, 2020, to January 1, 2021 to account for all resident testing after the advent of national universal testing. CLC population tested percentage was calculated using a CLC resident population denominator aggregated from April 1, 2020, through January 1, 2021. CLC population counts as of March 1, 2020, may exclude patients who transferred between VISN CLC locations. COVID-19 case indication is for the period of March 1, 2020 through January 1, 2021 and COVID-19 infection may have occurred prior to (or after) a CLC stay. A portion of CLC patients may be untested due to the following reasons, including but not limited to: CLC patient residence in a CLC facility prior to national universal testing implementation, CLC patient movement between centers, inability to test per decision from the local clinical team, patient discharge or other unique circumstances.

Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; CLC Testing Data provided by HOC, VHA on 2/25/2021; CLC Positivity Data provided by HOC, VHA on 5/4/2021.

Figure 13.7: VISN 5 COVID-19 Tests and Positive Test Rate (Daily, March 1, 2020 – January 1, 2021)



Notes: This chart contains testing data for Veterans Using VHA Services compiled from Case Reviews and VA Lab-certified COVID-19 tests. Case Reviews tests are conducted outside of VHA network. Source: NST Dataset, HOC, VHA, accessed 2/21/2021.

Figure 13.8: VISN 5 Prevalence of Confirmed COVID-19 Cases



Note 1: The cities shown on this graphic refer to VA facility hub locations made up by VA Health Care Systems and/or VA Medical Centers and their accompanying divisions and campuses, where applicable.

Note 2: The counties shown on this graphic are based on the alignment of County FIPS codes to VISN locations as per "Veterans Integrated Services Networks (VISN), Markets, Submarkets, Sectors and Counties by Geographic Location", VA, last updated on January 5, 2021



denotes the location of a VA facility hub

Source: John Hopkins University; US Census 2019 Estimate; US Department of Veterans Affairs.

Data as of 1/21/2021

VISN 6, MID-ATLANTIC HEALTH CARE NETWORK

Emergency Events and Responses

From July 1, 2020, to January 1, 2021, VISN 6 managed support to SVHs and maintained operations amidst increased COVID-19 prevalence.

VISN 6 prevalence of confirmed COVID-19 among Veterans Using VHA Services reached 1.9%, compared to 4.8% among the general community, as of January 1, 2021 (see Figure 13.10 for more details). P26 As shown in Table 13.9, there were a total of 7,822 Veteran COVID-19 cases with 365 associated deaths. Employee COVID-19 cases totaled 800 with 3 associated deaths. P27 During that time period, the 7-day rolling average of positive test rates among Veterans Using VHA Services varied from 2% to 13% from June to September, increasing to 32% in December 2020. See Figure 13.9 and Table 13.10 for more information.

On November 4, 2020, the Executive Leadership Team at Salem VA HCS approved activating COVID-19 surge beds in alignment with the facility surge plan. ⁹²⁹ In response to increased COVID-19 cases within the community, Salem VA HCS cancelled all elective procedures that required admission from November 5, 2020, to November 13, 2020. ⁹³⁰ When elective procedures did resume, facilities required COVID-19 test results from patients prior to procedures. ⁹³¹ Also as part of the surge plan, the facility began operating a 16-bed COVID-19 unit beginning on November 6, 2020, and running through January 1, 2021. ⁹³²

The Salisbury HCS began to hold daily incident command meetings, starting on December 17, 2020. The frequent meetings were designed to improve information sharing, planning for surges, and preparing for vaccination distribution and reporting. Separate teams met daily or weekly to discuss surge planning and vaccine programs. Separate teams met daily or weekly to discuss surge planning and vaccine programs.

Issues and Adjustments

VISN 6's pandemic response approach continued to evolve during this time frame. Compared with supply chain issues early in the pandemic, VISN 6 reported better access to supplies from July to December 2020. 935 When the VISN did see drops in inventory, its facilities logistics or supply chains were able to address them effectively, according to VISN 6 leadership. 936

As operations continued, VISN 6 decreased the number of meetings for Incident Management Teams. 937 According to VISN leadership, this was a result of improving

COVID-19 case tracking, using existing meetings to discuss COVID-19 needs and creating a SharePoint site to share information.⁹³⁸

Additional adjustments during this period included:

- Installing screening stations, tents and processes to manage COVID-19 expansion, pharmacy drive-thru and employee safety⁹³⁹
- Hiring surge staff for vaccine distribution 940
- Implementing a virtual check-in process for Veterans (VeText) ⁹⁴¹
- Moving clinics to effectively distribute space for safety⁹⁴²
- Creating a COVID-19 infection control risk assessment subcommittee to monitor care items such as gloves, masks and other PPE flagged as needing attention⁹⁴³
- Gathering a COVID-19 prevalence group to analyze prevalence testing⁹⁴⁴

In December 2020, the VISN submitted DEMPS requests to fill staff shortages due to employees unable to work as a result of COVID-19.945 The VISN sought seven lab technicians and received four before January 1, 2021.946

Vaccination Planning

As with many VISNs, VISN 6 noted a significant challenge managing vaccine supply and demand. The number of vaccines delivered to the VISN differed from week to week. 947 Without a clear sense of its allotment, the VISN struggled to predict how many vaccinations it could provide to Veterans and staff. 948 According to VISN leadership, to mitigate the impact of varying allocations on Veteran care, the VISN 6 COVID-19 vaccine team constantly monitored existing supply on hand, strategically allocated vaccine at the facility level, and communicated quickly and effectively all changes in supply that would affect Veteran-facing operations. 949

Fourth Mission

VISN 6 continued its Fourth Mission support from July 2020 to January 2021, as shown in Appendix B, Fourth Mission Table 16.2. VISN 6 provided 18 staff members on rotations to Commonwealth of Virginia locations, including SVHs. 950 For example, from July to September 2020, the Fayetteville VA HCS completed 20 rounds of testing for the Fayetteville SVH staff and residents, supplemented by ongoing guidance on testing, preventative measures and resiliency for SVH staff. 951

In August 2020, the VISN provided three RNs to accommodate staff shortages via DEMPS at the Silver Bluff Long Term Care Facility in North Carolina, sent one RN to

Whiteriver, Arizona, and two RNs to Hopi, Arizona, and supported the Hurricane Laura effort with three additional staff members. 952

Additional Fourth Missions included:

- 1 staff member to Operation Warp Speed in Charlotte NC to support the national effort to maximize the collection of COVID-19 Convalescent Plasma⁹⁵³
- 1 staff member to Hilo, Hawaii⁹⁵⁴
- 2 staff members on rotations to Show Low, Arizona⁹⁵⁵
- 3 staff members to Duplin County, North Carolina⁹⁵⁶
- 4 staff members to Hurricane Laura at Chaplain 957
- 4 staff members to Black Mountain Neuro Treatment Center in North Carolina to complete COVID-19 testing for 346 staff members⁹⁵⁸

Movement of Resources

Intra-VISN 6 movement of supplies and patients continued through this period. For instance, the Asheville VAMC sent face shields, masks and gowns to facilities in Durham, Salisbury, Salem, Hampton and Fayetteville. Sent face of January 1, 2021, the Durham VAMC received ongoing testing support from 6 locations within the VISN to complete 25,237 COVID-19 tests. Sent Durham VAMC also accepted two patients from the Fayetteville VAMC. Sent As a result of requests made through the National COVID-19 Request Tool, VHACO purchases and VHA transfers, the Hampton VAMC received numerous supplies from ventilators to transport tubes from July to November 2020.

VISN 6 also provided support to and received support from other VISNs:

- Supplies to New Orleans, Louisiana; Phoenix, Arizona; Oklahoma City, Oklahoma; Washington, DC; and Martinsburg, West Virginia⁹⁶³
- Three RNs on rotation to San Antonio, Texas; two RNs to Honolulu, Hawaii; and one social worker to Lake Charles, Louisiana 964
- Four Nutrition Food Service (NFS) staff to Clarksburg VAMC and two RNs to the Oklahoma VAMC⁹⁶⁵
- Seven VISNs (4, 7, 9, 10, 12, 19 and 20) provided the Asheville VAMC with four respiratory therapists and four medical technologists, ⁹⁶⁶ and VISN 1 supported VISN 6 with testing assistance. ⁹⁶⁷

Other

VISN 6 leadership noted progress in its Moving Forward process. From late July 2020 to September 2020, the Asheville VAMC surgery facility increased outpatient

care to 25% of full capacity. ⁹⁶⁸ The Asheville VAMC laboratory was at full operation as part of Phase 1.1 in the Moving Forward Plan. ⁹⁶⁹ In October 2020, the Franklin VA Clinic, Rutherford County VA Clinic and the Hickory VA Clinic CBOCs returned to 50% in-person capacity while specialty services returned to 75%. ⁹⁷⁰

Tables and Figures

Table 13.9: VISN 6 Key COVID-19 Statistics (March 1, 2020 – January 1, 2021)

Category	Number	
Veterans Using VHA Services	402,481	
Veteran COVID-19 Cases	7,822	
Veteran COVID-19 Inpatients	808	
Veteran Deaths (COVID-19 related)	365	
VISN Employees	20,269	
Employee COVID-19 Cases	800	
Employee Deaths (COVID-19 related)	3	

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests, confirmed positives and deaths figures exclude Veteran-Employees. Employee tests, confirmed positives & deaths include Veteran-Employees and Non-Veteran Employees. VHA Employee Deaths (COVID-19 related) were identified from Issue Briefs from the deceased's local VAMC. The deceased may have been tested at a VHA test location or an outside location. Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; Employee Deaths data provided by VHA on 2/3/2021; HR Employee Cube, VSSC, VHA, accessed on 1/25/2021.

Table 13.10: VISN 6 Veteran Testing (March 1, 2020 – January 1, 2021)

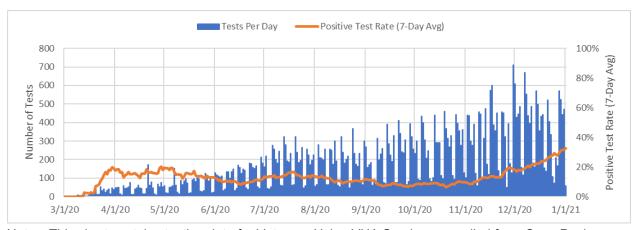
Category		Veterans Using V	HA Services	CLC Residents	
Testing	Population Tested	54,140	13%	610	91%
Rate	Population	402,481	13%	673	9170
Case Rate	Population Positive	7,822	2%	57	7%
	Population	402,481		824	7 70

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests and confirmed positives figures exclude Veteran Employees. CLC resident population counts for positive cases were aggregated from March 1, 2020, to January 1, 2021, and CLC resident population counts for testing were aggregated from April 1, 2020, to January 1, 2021 to account for all resident testing after the advent of national universal testing. CLC population tested percentage was calculated using a CLC resident population denominator aggregated from April 1, 2020, through January 1, 2021. CLC population counts as of March 1, 2020, may exclude patients who transferred between VISN CLC locations. COVID-19 case indication is for the period of March 1, 2020 through January 1, 2021 and COVID-19 infection may have occurred prior to (or after) a CLC stay.

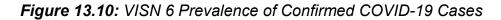
A portion of CLC patients may be untested due to the following reasons, including but not limited to: CLC patient residence in a CLC facility prior to national universal testing implementation, CLC patient movement between centers, inability to test per decision from the local clinical team, patient discharge or other unique circumstances.

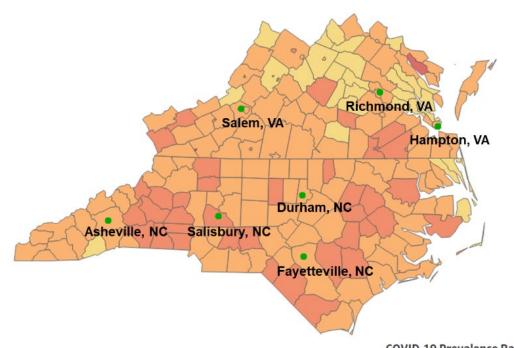
Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; CLC Testing Data provided by HOC, VHA on 2/25/2021; CLC Positivity Data provided by HOC, VHA on 5/4/2021.

Figure 13.9: VISN 6 COVID-19 Tests and Positive Test Rate (Daily, March 1, 2020 – January 1, 2021)



Notes: This chart contains testing data for Veterans Using VHA Services compiled from Case Reviews and VA Lab-certified COVID-19 tests. Case Reviews tests are conducted outside of VHA network. Source: NST Dataset, HOC, VHA, accessed 2/21/2021.





Note 1: The cities shown on this graphic refer to VA facility hub locations made up by VA Health Care Systems and/or VA Medical Centers and their accompanying divisions and campuses, where applicable.

Note 2: The counties shown on this graphic are based on the alignment of County FIPS codes to VISN locations as per "Veterans Integrated Services Networks (VISN), Markets, Submarkets, Sectors and Counties by Geographic Location", VA, last updated on January 5, 2021

COVID-19 Prevalence Rate (%)
0.00 15.00 +

denotes the location of a VA facility hub

Source: John Hopkins University; US Census 2019 Estimate; US Department of Veterans Affairs.

Data as of 1/21/2021

VISN 7, MIDSOUTH HEALTH CARE NETWORK

Emergency Events and Responses

From July 1, 2020, to January 1, 2021, VISN 7 sustained its pandemic response and experienced no incidents requiring emergency action. The VISN continued to manage pandemic developments and prepare for vaccination distribution.⁹⁷¹

VISN 7 prevalence of confirmed COVID-19 among Veterans Using VHA Services reached 2.5%, compared to 6.4% among the general community, as of January 1, 2021 (see Figure 13.12 for more details). Provided As shown in Table 13.11, there were a total of 11,509 Veteran COVID-19 cases with 436 associated deaths. Employee COVID-19 cases totaled 963 with 8 associated deaths. During that timeframe, the 7-day rolling average of positive test rates among Veterans Using VHA Services varied between 10% and 20% from September to November, increasing to 46% on January 1, 2021 (see Figure 13.11 for more details). For more information on testing, see Table 13.12.

Issues and Adjustments

VISN 7's approach continued to evolve as more information about COVID-19 became available. VISN leadership noted that as of January 1, 2021, its COVID-19 response is part of routine operations, allowing for continued attention to COVID-19-specific issues, as well as resuming operations and focus in normal business areas. 975

In October 2020, some VISN 7 facilities observed testing supply shortages while others experienced a surplus. 976 VISN leadership collaborated with facility leadership to re-distribute supplies equitably among facilities. 977 This required moving inventories from surplus locations to those with shortages so that each facility could always access a 14-day supply. 978 Future distribution was then based on a facility's 14-day supply quantities. 979 On October 29, 2020, the VISN 7 Executive Leadership Council approved this plan for redistribution and inventory planning, resolving the issue as of January 1, 2021. 980

Vaccination Planning

As with many VISNs, VISN 7 noted challenges with vaccine planning and distribution. A primary challenge for VISN 7 was the refrigeration requirements for the vaccines. 981 Because of these requirements, VISN 7 was unable to distribute vaccines to CBOCs. 982 VISN 7 leased spaces for many of its CBOCs, restricting its ability to alter existing spaces to meet storage requirements. 983 As such, facilities did

not have access to backup power for freezers, nor could the VISN use refrigeration systems with centralized temperature monitoring or alarms per the requirements of the VHA Pharmacy Benefits Management Office.⁹⁸⁴

To address this issue, VISN 7 transported vaccines to CBOCs on a daily basis. At the same time, the VISN worked to connect CBOC freezers to parent facility equipment. 985 If a connection could be established, CBOCs could store small quantities of the vaccine as long as there were contingencies for power outages. 986

Fourth Mission

VISN 7 continued its Fourth Mission support from July 1, 2020 to January 1, 2021, as shown in Appendix B, Fourth Mission Table 16.2. It provided PPE, training and staffing support for 23 missions. Por instance, VISN 7 sent PPE and a total of 64 nursing assistants, RNs, a nurse manager, and LPNs to 11 SVHs across South Carolina, Missouri, Wisconsin, Kentucky, Virginia and Alabama. In August 2020, VISN 7 provided PPE to the South Carolina Department of Health and Environmental Control. In August and September 2020, the Bill Nichols SVH in Alexander City, Alabama, received consultative visits to review infection control practices.

Movement of Resources

Intra-VISN 7 movement of patients, staff and supplies continued through this period. For instance, 4 of VISN 7's facilities sent a total of 49 patients to other HCSs and VAMCs within the VISN:⁹⁹¹

- Tuscaloosa sent two COVID-19 positive patients to the Birmingham VAMC.⁹⁹²
- Birmingham VAMC sent four COVID-19 positive patients to the Atlanta HCS for COVID rehabilitation.⁹⁹³
- Charleston VAMC sent 11 stable non-COVID-19 patients to the Augusta VAMC to create surge capacity space to admit COVID patients.⁹⁹⁴
- Dublin VAMC sent 27 COVID-19 positive patients to the Augusta VAMC and 5 COVID-19 positive patients to the Atlanta HCS.⁹⁹⁵

Staff and supplies also moved within the network. The Atlanta HCS sent the Augusta VAMC one nurse manager, on ongoing rotation since July 9, 2020, and two nurse assistants to the Central Alabama HCS from July to September 2020. 996 The Atlanta HCS also received two TeleCritical Care Carts, or systems that combine cameras, screens and network access to enable telehealth engagements, from the Dublin VAMC in August 2020. 997

<u>Other</u>

VISN 7 leadership noted lessons learned for this period. Shortages of PPE and testing materials remain the most critical and limiting factors in VISN 7's pandemic response. 998 To combat shortages, VISN 7 facilities created 3D printed face shields and swabs for testing. 999

VISN 7 also made progress in its Moving Forward process. From late June 2020 to October 2020, VISN 7 leadership stated that all of VISN 7's facilities had returned to 25% of Phase I capacity, and most were at 50% of Phase II capacity or greater. However, starting in November 2020, the VISN paused all Moving Forward plans due to rising cases. How II capacity or greater.

Tables and Figures

Table 13.11: VISN 7 Key COVID-19 Statistics (March 1, 2020 – January 1, 2021)

Category	Number
Veterans Using VHA Services	465,357
Veteran COVID-19 Cases	11,509
Veteran COVID-19 Inpatients	1,499
Veteran Deaths (COVID-19 related)	436
VISN Employees	22,230
Employee COVID-19 Cases	963
Employee Deaths (COVID-19 related)	8

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests, confirmed positives and deaths figures exclude Veteran-Employees. Employee tests, confirmed positives & deaths include Veteran-Employees and Non-Veteran Employees. VHA Employee Deaths (COVID-19 related) were identified from Issue Briefs from the deceased's local VAMC. The deceased may have been tested at a VHA test location or an outside location. Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; Employee Deaths data provided by VHA on 2/3/2021; HR Employee Cube, VSSC, VHA, accessed on 1/25/2021.

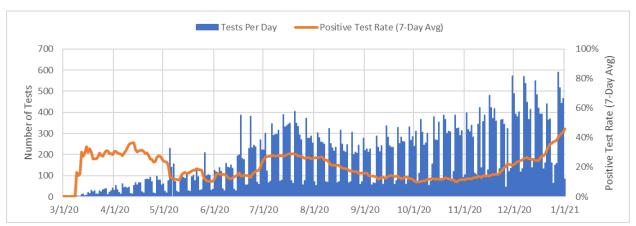
Table 13.12: VISN 7 Veteran Testing (March 1, 2020 – January 1, 2021)

Category		Veterans Using VHA Services		CLC Residents	
Testing	Population Tested	55,586	12%	592	97%
Rate	Population	465,357		612	
Case Rate	Population Positive	11,509	2%	109	15%
	Population	465,357		718	

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests and confirmed positives figures exclude Veteran Employees. CLC resident population counts for positive cases were aggregated from March 1, 2020, to January 1, 2021, and CLC resident population counts for testing were aggregated from April 1, 2020, to January 1, 2021 to account for all resident testing after the advent of national universal testing. CLC population tested percentage was calculated using a CLC resident population denominator aggregated from April 1, 2020, through January 1, 2021. CLC population counts as of March 1, 2020, may exclude patients who transferred between VISN CLC locations. COVID-19 case indication is for the period of March 1, 2020 through January 1, 2021 and COVID-19 infection may have occurred prior to (or after) a CLC stay. A portion of CLC patients may be untested due to the following reasons, including but not limited to: CLC patient residence in a CLC facility prior to national universal testing implementation, CLC patient movement between centers, inability to test per decision from the local clinical team, patient discharge or other unique circumstances.

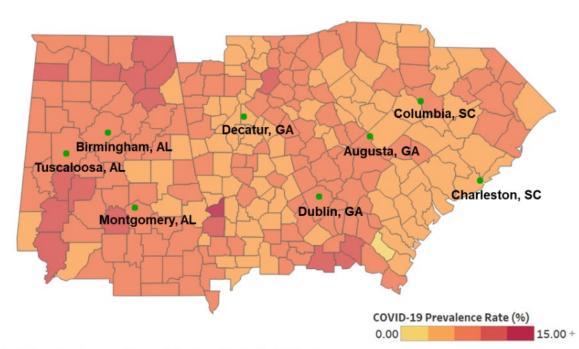
Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; CLC Testing Data provided by HOC, VHA on 2/25/2021; CLC Positivity Data provided by HOC, VHA on 5/4/2021.

Figure 13.11: VISN 7 COVID-19 Tests and Positive Test Rate (Daily, March 1, 2020 – January 1, 2021)



Notes: This chart contains testing data for Veterans Using VHA Services compiled from Case Reviews and VA Lab-certified COVID-19 tests. Case Reviews tests are conducted outside of VHA network. Source: NST Dataset, HOC, VHA, accessed 2/21/2021.

Figure 13.12: VISN 7 Prevalence of Confirmed COVID-19 Cases



Note 1: The cities shown on this graphic refer to VA facility hub locations made up by VA Health Care Systems and/or VA Medical Centers and their accompanying divisions and campuses, where applicable.

Note 2: The counties shown on this graphic are based on the alignment of County FIPS codes to VISN locations as per "Veterans Integrated Services Networks (VISN), Markets, Submarkets, Sectors and Counties by Geographic Location", VA, last updated on January 5, 2021

denotes the location of a VA facility hub

Source: John Hopkins University; US Census 2019 Estimate; US Department of Veterans Affairs.

Data as of 1/21/2021

VISN 8, SUNSHINE HEALTH CARE NETWORK

Emergency Events and Responses

From July 1, 2020, to January 1, 2021, VISN 8 managed hurricanes, COVID-19 outbreaks and staff shortages while preparing to distribute COVID-19 vaccinations.

VISN 8 prevalence of confirmed COVID-19 among Veterans Using VHA Services reached 1.9%, compared to 5.6% among the general community, as of January 1, 2021 (see Figure 13.14 for more details). 1002 As shown in Table 13.13, there were a total of 11,242 Veteran COVID-19 cases with 430 associated deaths. Employee COVID-19 cases totaled 1,429 with 5 associated deaths. 1003 During that time period, the 7-day rolling average of positive test rates among Veterans Using VHA Services started out with a peak of 27% in July, varied from 6% to 18% from August through November, and rose moderately to 23% by January 1, 2021 (see Figure 13.13). For more information on testing, see Table 13.14.1004

In August 2020, Hurricane Laura hit the Louisiana coastline. The damage caused by the storm disrupted operations at several VA facilities already managing their COVID-19 response. West Palm Beach VAMC shifted resources to those facilities while planning for vaccine distribution and increasing elective procedures to 50% in August. 1007

On October 21, 2020, a COVID-19 outbreak began at the Acute Mental Health Unit at the James A. Haley Veterans Hospital (Tampa) in Tampa, Florida. The Tampa facility moved patients to the Bay Pines HCS in response. In August, a peak of 29,000 COVID-19 cases observed in the North Florida-South Georgia HCS closed all in-person encounters. Since August, in-person encounters have resumed while COVID-19 cases declined.

The San Juan facilities closed admissions to observation beds due to the lack of clinicians. One May 2020, seven clinicians have waited in San Juan's onboarding pipeline facing challenges due to the significant credentialing required for onboarding. One Additional staff resignations created gaps in staff coverage as an anticipated third surge drew closer. One of the facility also faced increased workloads due to staff being monitored for COVID-19. One of Juan staff are being actively monitored for COVID-19, as of January 1, 2021.

Issues and Adjustments

VISN 8's pandemic response approach has continued to evolve since July 1, 2020. Adjustments included:

- The Orlando VAMC adjusted surge locations within the hospital, supported COVID-19 testing with the Alinity M testing platform, and developed standard operating procedures for Monoclonal Antibody Infusion.¹⁰¹⁷
- The West Palm Beach VAMC converted units to help transition patients back to CLCs after admission to the hospital and converted a main hospital building into a vaccination clinic.¹⁰¹⁸
- The North Florida/South Georgia HCS planned for reopening operations while remaining flexible in adjusting its in-person care levels based on COVID-19 staffing impacts, requirements and local data.¹⁰¹⁹
- The San Juan facilities assisted the Ceiba Clinic in Puerto Rico with preprocedure tests after a testing location collapsed due to strong winds. 1020
- The Bay Pines HCS retrained 300 nurses to augment staff based on surge projections, enhanced patient tracking capabilities with a tool it replicated for other VISN 8 facilities, provided telework assistance to employees working from home that was recognized as a best practice by the VISN, and developed national recognized resources to enhance VEText, a mobile solution to confirm and cancel appointments with Veterans.¹⁰²¹

Vaccination Planning

As with many VISNs, VISN 8 reported significant issues with vaccine planning and distribution. Facilities determined how to navigate space constraints at their sites to accommodate COVID-19 vaccine clinics. They worked in close coordination with medical center leadership and nursing leadership to find employees to staff vaccination clinics. 1023

VISN 8 mitigated staff shortages in vaccination personal by utilizing virtual job fairs, 3-day hiring, and traveling nurses to bring in medical professionals. 1024 The VISN also required facilities to send freezers to areas that needed them to ensure that they had proper equipment for the Pfizer-BioNTech vaccine, which required ultracold freezers. 1025

VISN 8 leadership attributed the VISN's success distributing the vaccine to the early August 2020 start in planning. 1026 VISN 8 and each VISN 8 facility began forming vaccination teams to prepare and plan for vaccine distribution while considering logistical and staffing needs. 1027 In December 2020, the Miami HCS became one of four facilities to provide vaccinations to DHS staff. 1028 VISN 8's vaccine plan also

included distributing vaccines to the U.S. Virgin Islands. The VISN collaborated with government officials in the Virgin Islands in the planning process. 1029

Fourth Mission

VISN 8 continued its Fourth Mission support from July 2020 to January 2021, as shown in Appendix B, Fourth Mission Table 16.2.

- The VISN sent a total of 263 staff members to support 35 locations, including to VISN 16, to assist with Hurricane Laura impacts and to 5 SVHs, 3 IHS and tribal health system facilities and 26 community medical centers.¹⁰³⁰
- It also provided 1,050 swab collection kits in supplies support to the Emory L. Bennett SVH in Daytona and conducted a total of 2,012 COVID-19 tests for individuals at Emory L. Bennett SVH, Robert H. Jenkins SVH, Clyde E. Lassen SVH and University of Central Florida's Nemours Children's Hospital.¹⁰³¹
- VISN 8 maintained bed capacity to accommodate COVID-19 patients. It admitted a total of 123 patients from 4 SVHs and 2 community medical centers. 1032
- VISN 8 also provided staff to support a VHA and DHS interagency effort to vaccinate DHS employees. Starting in December 2020, VISN 8 sent one Pharmacist from the Miami VA to serve as the Vaccine Distribution Lead for the VHA/DHS Interfacility Partnership planning group and two medical staff assistant leads as facility points of contact for coordination of registration and appointment scheduling.¹⁰³³

Movement of Resources

Intra-VISN 8 movement of staff, supplies and patients continued from July 1, 2020, to January 1, 2021. The Miami VA HCS provided staff support to two VISN 8 facilities to support with compliance, business integrity matters and infectious disease expertise. 1034 VISN 8 facilities supported one another by admitting patients; in October 2020, the Bay Pines HCS admitted eight acute mental health patients from the Tampa facility. 1035 VISN 8 provided all of its HCSs either PPE, swab kits, urine collection kits, vaccine doses or freezers based on need. 1036

Inter-VISN support also continued during this time period. VISN 8 deployed 14 staff members across VISNs 5, 16, 17, 19, 21 and 22. 1037 The Orlando VA HCS received a Ventilator from VISN 9, and the Tampa VA HCS received 18 ventilators from the VHACO and 10 vent systems from VISN 6. 1038

Other

VISN 8 leadership reported the following lessons learned for this period:

- Enrollment bottlenecks emerged due to the limited number of staff members equipped to enroll Veterans. For instance, the West Palm Beach VAMC's already limited enrollment staff was met with larger-than-expected numbers of Veterans seeking enrollment who had never used VHA services before. 1039 Although the medical center observed additional enrollments due to economic impacts of COVID-19, the largest portion of these new enrollments coincided with VA offering vaccinations to eligible Veterans. 1040
- Regular communication with external and internal stakeholders was critical when disseminating information. North Florida/South Georgia shared data during employee town halls with Veteran Service Organizations, Congress and patients. 1041
- Bay Pines observed difficulty fulfilling high-intensity, long-term Incident Command roles because the leaders typically filling those roles were dually expected to maintain normal day-to-day service line responsibilities. With advanced knowledge of the intensity and duration of the Incident Command roles, facilities could have implemented staffing strategies to reduce workload for leadership in dual roles and to provide other staff opportunities to participate in Incident Command or stretch assignments to maintain serviceline coverage. 1042

Tables and Figures

Table 13.13: VISN 8 Key COVID-19 Statistics (March 1, 2020 – January 1, 2021)

Category	Number		
Veterans Using VHA Services	588,591		
Veteran COVID-19 Cases	11,242		
Veteran COVID-19 Inpatients	1,710		
Veteran Deaths (COVID-19 related)	430		
VISN Employees	32,066		
Employee COVID-19 Cases	1,429		
Employee Deaths (COVID-19 related)	5		

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests, confirmed positives and deaths figures exclude Veteran-Employees. Employee tests, confirmed positives & deaths include Veteran-Employees and Non-Veteran Employees.

VHA Employee Deaths (COVID-19 related) were identified from Issue Briefs from the deceased's local VAMC. The deceased may have been tested at a VHA test location or an outside location. Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; Employee Deaths data provided by VHA on 2/3/2021; HR Employee Cube, VSSC, VHA, accessed on 1/25/2021.

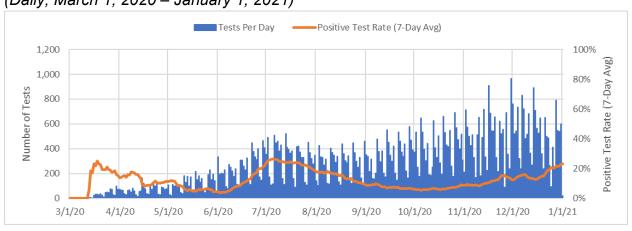
Table 13.14: VISN 8 Veteran Testing (March 1, 2020 – January 1, 2021)

Category		Veterans Using VHA Services		CLC Residents	
Testing	Population Tested	85,690	15%	1,838	94%
Rate	Population	588,591	1570	1,945	J + /0
Case Rate	Population Positive	11,242	2%	199	11%
	Population	588,591		1,868	11%

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests and confirmed positives figures exclude Veteran Employees. CLC resident population counts for positive cases were aggregated from March 1, 2020, to January 1, 2021, and CLC resident population counts for testing were aggregated from April 1, 2020, to January 1, 2021 to account for all resident testing after the advent of national universal testing. CLC population tested percentage was calculated using a CLC resident population denominator aggregated from April 1, 2020, through January 1, 2021. CLC population counts as of March 1, 2020, may exclude patients who transferred between VISN CLC locations. COVID-19 case indication is for the period of March 1, 2020 through January 1, 2021 and COVID-19 infection may have occurred prior to (or after) a CLC stay. A portion of CLC patients may be untested due to the following reasons, including but not limited to: CLC patient residence in a CLC facility prior to national universal testing implementation, CLC patient movement between centers, inability to test per decision from the local clinical team, patient discharge or other unique circumstances.

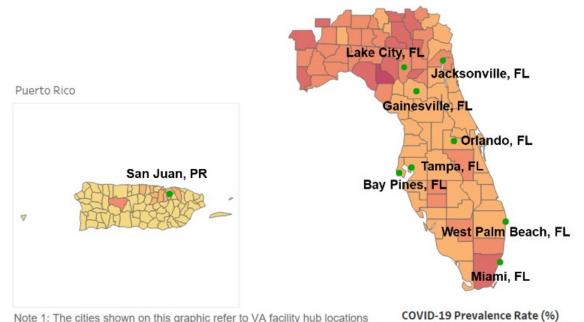
Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; CLC Testing Data provided by HOC, VHA on 2/25/2021; CLC Positivity Data provided by HOC, VHA on 5/4/2021.

Figure 13.13: VISN 8 COVID-19 Tests and Positive Test Rate (Daily, March 1, 2020 – January 1, 2021)



Notes: This chart contains testing data for Veterans Using VHA Services compiled from Case Reviews and VA Lab-certified COVID-19 tests. Case Reviews tests are conducted outside of VHA network. Source: NST Dataset, HOC, VHA, accessed 2/21/2021.

Figure 13.14: VISN 8 Prevalence of Confirmed COVID-19 Cases



Note 1: The cities shown on this graphic refer to VA facility hub locations made up by VA Health Care Systems and/or VA Medical Centers and their accompanying divisions and campuses, where applicable. Other US Territories, such as the US Virgin Islands, are not shown above or included in the VISN statistics described in the narrative due to a lack of COVID-19 data available by county for these territories.

Note 2: The counties shown on this graphic are based on the alignment of County FIPS codes to VISN locations as per "Veterans Integrated Services Networks (VISN), Markets, Submarkets, Sectors and Counties by Geographic Location", VA, last updated on January 5, 2021.

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denotes the location of a VA facility hub

Source: John Hopkins University; US Census 2019 Estimate; US Department of Veterans Affairs.

Data as of 1/21/2021

VISN 9, MIDSOUTH HEALTH CARE NETWORK

Emergency Events and Responses

From July 1, 2020, to January 1, 2021, VISN 9 responded to COVID-19 case surges that primarily impacted the Lexington HCS and prepared for vaccination distribution. VISN 9 prevalence of confirmed COVID-19 among Veterans Using VHA Services reached 2.4%, compared to 7.6% among the general community, as of January 1, 2021, as shown in Figure 13.16.¹⁰⁴³

As shown in Table 13.15, there were a total of 6,742 Veteran COVID-19 cases with 375 associated deaths. Employee COVID-19 cases totaled 827 with 12 associated deaths. During that time period, the 7-day rolling average of positive test rates among Veterans Using VHA Services varied from 3% to 15% from June to October and then steadily increased to 38% in December (see Figure 13.15). For more information about testing, see Table 13.16. 1045

The Lexington VA HCS engaged a 10-bed COVID-19 surge unit to respond to an outbreak at Thomson Hood SVH in Wilmore, Kentucky. 1046 On October 6, 2020, the Lexington VA HCS activated a second, 26-bed COVID-19 surge unit. The space was designated in response to the large number of COVID-19-positive Veterans needing hospitalization. 1047 Lexington HCS's surge plan included staffing the unit with existing resources. The plan was executed with no impact to other operations. Lexington had prepared and stocked the unit with existing supplies in advance so it took only a few hours to activate. 1048 Since its opening in October 2020, Lexington HCS has continuously operated the 26-bed surge unit with staff, closing only during drops in surge demand. 1049

Issues and Adjustments

To manage local outbreaks and the corresponding spikes in hospitalizations, VISN 9 made changes to its COVID-19 standard operating procedures. This included adjustments to eye protection, patient placement, universal masking and facility screening. ¹⁰⁵⁰ The VISN switched all in-person meetings to virtual Microsoft Teams meetings. ¹⁰⁵¹ Facility leaders noted that they also increased bed capacity by placing patients in droplet isolation in addition to negative pressure rooms in response to a bed availability policy change. ¹⁰⁵²

VISN 9 had to regularly adjust its care operations throughout this time period. After seeing increases to 100% in-person care at some CBOCs and 75% in-person care at all VISN 9 VAMCs in July, those facilities reduced in-person encounters to more virtual appointments during COVID-19 case spikes. 1053 After additional surges

around Thanksgiving in November, the VISN implemented a Disaster Response Plan in December, moving resources from outpatient care to inpatient care. 1054

Military deployments created a new issue for VISN 9 during this time period. 1055 VA staff members serving in the armed forces were activated to fill national shortages in military medical staff. 1056 With limited staff available, the Memphis VAMC requested and received approval for cancellations or modifications to armed forces deployment requests. 1057 The Memphis VAMC also submitted DEMPS requests for additional staffing and received 6 personnel over 14 days to support staff shortages. 1058 However, as of January 1, 2021, the facility continued to face staffing shortages. 1059

Vaccination Planning

As with most VISNs, VISN 9 reported challenges with vaccine planning and distribution.

In preparation for the arrival of a vaccine, VISN 9 focused on planning for mass vaccination, improving communication with key facility stakeholders, and coordinating with VHACO for support. It also adjusted its pharmacy protocols and established a request system in LEAF, a program that can be tailored to let patients register for vaccination appointments. It Facilities like the Robley Rex VAMC in Louisville prepared by establishing Incident Management Teams for vaccinations, augmenting its staff to accommodate a vaccine drive-thru and walk-in clinic, and creating a Veteran call center for vaccine scheduling and a LEAF system process for staff vaccination appointments. In Incident Management Teams for vaccination appointments.

When coordinating with VHACO, VISN 9 experienced issues with VHACO resources and support to its facilities. 1063 According to VISN leadership, VHACO did not provide centralized tools for data collection on employee vaccinations. 1064 While waiting on CDC guidance to develop national tools, VISN 9 facilities created their own systems to determine employee interest in vaccinations, and to schedule appointments for shots. 1065 The lack of streamlining in VHACO tools posed challenges to enterprise data collection. 1066

By the time VHACO created a Veteran Interest Dashboard in early December 2020¹⁰⁶⁷, it was too late to collect necessary data, and therefore did not reflect the true level of interest as facilities created their own systems. ¹⁰⁶⁸

Additional concerns included:

- Delays in vaccination training, which left only a narrow window for staff to complete trainings
- Confusion caused by multiple communications streams within VHACO

 Data inconsistency within the Veteran Service Support Center (VSSC) tools¹⁰⁶⁹

Fourth Mission

VISN 9 continued its Fourth Mission support from July 2020 to January 2021, as shown in Appendix B, Fourth Mission Table 16.2. Some highlights include:

- VISN 9 deployed 44 staff to 9 locations including SVHs, IHS and tribal health system facilities, and community medical centers.¹⁰⁷⁰
- VISN 9 conducted 541 COVID-19 tests at Thomson-hood SVH; Oxford, Missouri SVH; Carl M. Brashear SVH; and Eastern Kentucky SVH.¹⁰⁷¹
- VISN 9 sent thousands of supplies to SVHs and community medical centers, including 960 N95 masks, VTM and PPE supplies, such as gloves, isolation gowns, face shields and hand sanitizer.¹⁰⁷²

Movement of Resources

Intra-VISN 9 movement of patients, staff and supplies continued through this period. For instance, the Lexington HCS performed 21,048 COVID-19 tests at 5 VISN 9 facilities. VISN 9 facilities received thousands of caps, sanitary wipes, gloves and transport coolers from James H. Quillen VAMC in Mountain Home, Tennessee; two ventilators from the Robley Rex VAMC in Louisville, Kentucky; and 3,360 N-95 masks from the Memphis VAMC.

VISN 9 also participated in inter-VISN support, providing VISNs 6, 10, 16 and 17 with staff support and administering 6,574 COVID-19 tests at VISN 10 facilities. 1074

Other

As of January 1, 2021, VISN 9 leadership recommended having Veterans arrive in groups during time-restricted windows based on last names to reduce wait times and improve satisfaction for walk-in vaccination events.¹⁰⁷⁵

Tables and Figures

Table 13.15: VISN 9 Key COVID-19 Statistics (March 1, 2020 – January 1, 2021)

Category	Number
Veterans Using VHA Services	280,841
Veteran COVID-19 Cases	6,742
Veteran COVID-19 Inpatients	1,171
Veteran Deaths (COVID-19 related)	375
VISN Employees	14,434
Employee COVID-19 Cases	827
Employee Deaths (COVID-19 related)	12

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests, confirmed positives and deaths figures exclude Veteran-Employees. Employee tests, confirmed positives & deaths include Veteran-Employees and Non-Veteran Employees. VHA Employee Deaths (COVID-19 related) were identified from Issue Briefs from the deceased's local VAMC. The deceased may have been tested at a VHA test location or an outside location. Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; Employee Deaths data provided by VHA on 2/3/2021; HR Employee Cube, VSSC, VHA, accessed on 1/25/2021.

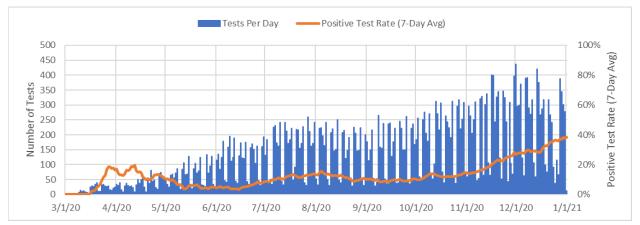
Table 13.16: VISN 9 Veteran Testing (March 1, 2020 – January 1, 2021)

Category		Veterans Using	VHA Services	CLC Residents	
Testing	Population Tested	41,431	15%	456	96%
Rate	Population	280,841		476	
Case Rate	Population Positive	6,742	2%	70	12%
	Population	280,841		568	

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests and confirmed positives figures exclude Veteran Employees. CLC resident population counts for positive cases were aggregated from March 1, 2020, to January 1, 2021, and CLC resident population counts for testing were aggregated from April 1, 2020, to January 1, 2021 to account for all resident testing after the advent of national universal testing. CLC population tested percentage was calculated using a CLC resident population denominator aggregated from April 1, 2020, through January 1, 2021. CLC population counts as of March 1, 2020, may exclude patients who transferred between VISN CLC locations. COVID-19 case indication is for the period of March 1, 2020 through January 1, 2021 and COVID-19 infection may have occurred prior to (or after) a CLC stay. A portion of CLC patients may be untested due to the following reasons, including but not limited to: CLC patient residence in a CLC facility prior to national universal testing implementation, CLC patient movement between centers, inability to test per decision from the local clinical team, patient discharge or other unique circumstances.

Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; CLC Testing Data provided by HOC, VHA on 2/25/2021; CLC Positivity Data provided by HOC, VHA on 5/4/2021.

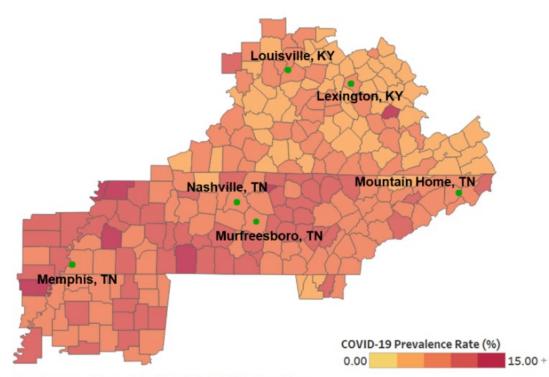
Figure 13.15: VISN 9 COVID-19 Tests and Positive Test Rate (Daily, March 1, 2020 – January 1, 2021)



Notes: This chart contains testing data for Veterans Using VHA Services compiled from Case Reviews and VA Lab-certified COVID-19 tests. Case Reviews tests are conducted outside of VHA network.

Source: NST Dataset, HOC, VHA, accessed 2/21/2021.

Figure 13.16: VISN 9 Prevalence of Confirmed COVID-19 Cases



Note 1: The cities shown on this graphic refer to VA facility hub locations made up by VA Health Care Systems and/or VA Medical Centers and their accompanying divisions and campuses, where applicable.

Note 2: The counties shown on this graphic are based on the alignment of County FIPS codes to VISN locations as per "Veterans Integrated Services Networks (VISN), Markets, Submarkets, Sectors and Counties by Geographic Location", VA, last updated on January 5, 2021

denotes the location of a VA facility hub

Source: John Hopkins University; US Census 2019 Estimate; US Department of Veterans Affairs.

Data as of 1/21/2021

VISN 10, VA HEALTH CARE NETWORK SERVING INDIANA, OHIO & MICHIGAN VETERANS

Emergency Events and Responses

From July 1, 2020, to January 1, 2021, VISN 10 confronted a COVID-19 outbreak at a CLC, conducted an internal audit to remove counterfeit PPE and anticipated challenges with vaccine planning and distribution.

Prevalence of confirmed COVID-19 among Veterans Using VHA Services reached 2.4%, compared to 6.0% among the general community, as of January 1, 2021 (see Figure 13.18 for more details). ¹⁰⁷⁶ As shown in Table 13.17, there were a total of 11,953 Veteran COVID-19 cases with 652 associated deaths. Employee COVID-19 cases totaled 1,334 with 13 associated deaths. ¹⁰⁷⁷ During that time, the 7-day rolling average of positive test rates varied from 4% to 19% from June to November, increasing to 39% in December (see Figure 13.17 for more details). ¹⁰⁷⁸ For more information about testing, see Table 13.18.

In October 2020, VISN 10 reported an emergency COVID-19 outbreak at Battle Creek CLC in Michigan. ¹⁰⁷⁹ The spike in cases required the facility to remove symptomatic staff, causing staffing shortages at the CLC. ¹⁰⁸⁰ In October and November, other VISN 10 facilities deployed staff members who were experienced in extended care to assist with the staffing shortfall. ¹⁰⁸¹ The additional staff support allowed the CLC to continue providing patient care from October to November 2020. ¹⁰⁸²

Issues and Adjustments

Anticipating a potential surge at the end of the summer, VISN 10 facilities prepared plans that could shift staff and resources within facilities, from market area partner facilities, or from any VISN 10 facility to the facilities in need of resources. The plans were in place prior to the surge, which allowed the VISN to seek support from Saginaw, Ann Arbor and Detroit facilities and obtain resources to continue care for Battle Creek CLC patients throughout the surge in cases. 1084

From July 2020 to January 2021, VISN 10 became aware that they had counterfeit PPE supplies, including N95 respirators. The VISN conducted an inventory audit and removed the counterfeit PPE from its stock. The VISN originally ordered its supplies from both medical prime vendors and local contracts, but as of January 1, 2021, many items were ordered through National COVID Request Tool. VISN leadership reported that local sources became more unreliable as counterfeit products become more prevalent. 1088

Vaccination Planning

VISN 10 also anticipated vaccine planning and distribution challenges. The VISN activated a team of VISN and facility staff to coordinate the vaccine rollout within the VISN. 1089 The team drafted a protocol for tabletop exercises to address potential gaps arising from vaccine manufacturer storage and vaccine administration requirements. 1090

In keeping with team recommendations, each facility in VISN 10 prepared vaccine administration plans. They coordinated with larger facilities and at off-campus locations to create definitive plans. ¹⁰⁹¹ To counteract impacts of limited vaccine supply, facilities used weekly clinic schedules to manage Veteran demand with weekly vaccine dose allocations. ¹⁰⁹²

Fourth Mission

VISN 10 continued its Fourth Mission support from July 2020 to January 2021, as shown in Appendix B, Fourth Mission Table 16.2. The VISN coordinated directly with local partners under the CARES Act within communities in Battle Creek, Michigan; Ann Arbor, Michigan; Cleveland, Ohio; and Cincinnati, Ohio. 1093 After determining needs, VISN 10 distributed PPE, testing swabs and testing staff to the Grand Rapids SVH and the Georgetown SVH. 1094 Specifically, the Grand Rapids SVH received 700 isolation gowns, 4,000 N95 masks and a train-the-trainer exercise demonstration for proper wear of N95 masks. 1095 The Georgetown SVH received 11,000 isolation gowns, 200 face shields, 2,800 N95 masks, 30 testing swabs and fit-tested 30 SVH staff members.

In July and August 2020, VISN 10 delivered infection control education support to Florida communities in Winter Haven, Marianna, Avon Park, St. Augustine and Mayo with 34 staff members deployed. 1096 Also that summer, VISN 10 provided the Virginia Department of Health Community Nursing Home with 3 RNs. 1097 In September, VISN 10 sent one LPN/LVN and one nursing assistant to Yukio Okutsu SVH. 1098 The VISN also sent three respiratory therapists, two social workers, two RNs and one nurse practitioner to support hurricane relief efforts in Houston, Texas. 1099 For additional Fourth Mission activity, see Appendix B, Fourth Mission Table 16.2.

Movement of Resources

Intra-VISN 10 movement of patients, staff and supplies continued throughout this period. For instance, Ann Arbor, Cleveland, Detroit and Saginaw facilities provided the Battle Creek CLC with three RNs and nine nursing assistants during its outbreak. Saginaw provided an RN to the Dayton ICU/Critical Care Unit in October 2020. 1101

VISN 10 also participated in inter-VISN support. Forty staff members from across eight VISN 10 facilities were deployed to other VISNs, including 17, 19 and 21 from July 2020 to January 2021. 1102

Tables and Figures

Table 13.17: VISN 10 Key COVID-19 Statistics (March 1, 2020 – January 1, 2021)

Category	Number
Veterans Using VHA Services	498,448
Veteran COVID-19 Cases	11,953
Veteran COVID-19 Inpatients	1,539
Veteran Deaths (COVID-19 related)	652
VISN Employees	26,099
Employee COVID-19 Cases	1,334
Employee Deaths (COVID-19 related)	13

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests, confirmed positives & deaths figures exclude Veteran-Employees. Employee tests, confirmed positives & deaths include Veteran-Employees and Non-Veteran Employees. VHA Employee Deaths (COVID-19 related) were identified from Issue Briefs from the deceased's local VAMC. The deceased may have been tested at a VHA test location or an outside location.

Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; Employee Deaths data provided by VHA on 2/3/2021; HR Employee Cube, VSSC, VHA, accessed on 1/25/2021

Table 13.18: VISN 10 Veteran Testing (March 1, 2020 – January 1, 2021)

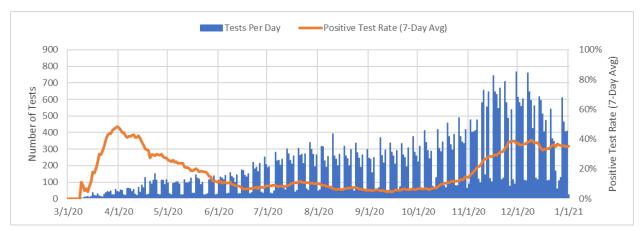
Category		Veterans Using VHA	A Services CLC Resident		sidents
Testing	Population Tested	59,296	12%	1,601	96%
Rate	Population	498,448	1270	1,674	90 78
Case Rate	Population Positive	11,953	2%	233	12%
	Population	498,448		1,950	

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests and confirmed positives figures exclude Veteran Employees. CLC resident population counts for positive cases were aggregated from March 1, 2020, to January 1, 2021, and CLC resident population counts for testing were aggregated from April 1, 2020, to January 1, 2021 to account for all resident testing after the advent of national universal testing. CLC population tested percentage was calculated using a CLC resident population denominator aggregated from April 1, 2020, through January 1, 2021. CLC population counts as of March 1, 2020, may exclude patients who transferred between VISN CLC locations. COVID-19 case indication is for the period of March 1, 2020 through January 1, 2021 and COVID-19 infection may have occurred prior to (or after) a CLC stay.

A portion of CLC patients may be untested due to the following reasons, including but not limited to: CLC patient residence in a CLC facility prior to national universal testing implementation, CLC patient movement between centers, inability to test per decision from the local clinical team, patient discharge or other unique circumstances.

Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; CLC Testing Data provided by HOC, VHA on 2/25/2021; CLC Positivity Data provided by HOC, VHA on 5/4/2021.

Figure 13.17: VISN 10 COVID-19 Tests and Positive Test Rate (Daily, March 1, 2020 – January 1, 2021)



Notes: This chart contains testing data for Veterans Using VHA Services compiled from Case Reviews and VA Lab certified COVID-19 tests. Case Reviews tests are conducted outside of VHA network. Source: NST Dataset, HOC, VHA, accessed 2/21/2021.

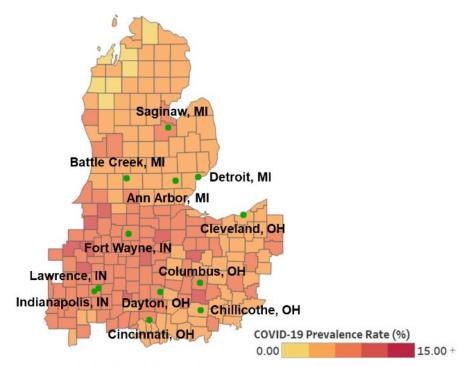


Figure 13.18: VISN 10 Prevalence of Confirmed COVID-19 Cases

Note 1: The cities shown on this graphic refer to VA facility hub locations made up by VA Health Care Systems and/or VA Medical Centers and their accompanying divisions and campuses, where applicable.

Note 2: The counties shown on this graphic are based on the alignment of County FIPS codes to VISN locations as per "Veterans Integrated Services Networks (VISN), Markets, Submarkets, Sectors and Counties by Geographic Location", VA, last updated on January 5, 2021

denotes the location of a VA facility hub

Source: John Hopkins University; US Census 2019 Estimate; US Department of Veterans Affairs.

Data as of 1/21/2021

VISN 12, GREAT LAKES HEALTH CARE NETWORK

Emergency Events and Responses

From July 1, 2020, to January 1, 2021, VISN 12 faced some unprecedented challenges, from COVID-19 surges across the VISN to a particularly high staff "unable to work" rate at the Milwaukee VAMC.

VISN 12 prevalence of confirmed COVID-19 among Veterans Using VHA Services reached 3.1%, compared to 8.0% among the general community, as of January 1, 2021 (see Figure 13.20 for more details). 1103 As shown in Table 13.19, there were a total of 8,418 Veteran COVID-19 cases with 357 associated deaths. Employee COVID-19 cases totaled 1,018 with 3 associated deaths. 1104 During that time period, the 7-day rolling average of positive test rates Veterans Using VHA Services varied from 7% to 20% from June to October, increasing to 33% in November (see Figure 13.19 for more details). For more information about testing, see Table 13.20.1105

VISN 12 experienced a second wave of COVID-19 cases during this time period, increasing sharply in late October and beginning a downward trend toward the end of December 2020. 1106 Although all sites across VISN 12 observed rises in hospital admissions, select HCS and VAMC facilities were most involved in responding to emergency actions described below affected by increasing COVID-19 cases since June 30, 2020: Clement J. Zablocki VAMC (Milwaukee), Edward Hines Jr. VA Hospital (Hines), William S. Middleton Memorial Veteran Hospital (Madison), Jesse Brown VAMC (Chicago) and Captain James A. Lovell Federal Health Care Center (North Chicago). 1107

Starting in October 2020 and extending through late December 2020, the Milwaukee VAMC observed significant staff outages. At its daily peak in mid-December, over 300 staff were unable to work. In response, the VISN remained in close contact with Milwaukee leadership and prepared to deploy resources from other sites. In Locally, Milwaukee reduced its care services, which allowed the Milwaukee facility to move staff to areas impacted by staff absences.

The VISN supported the development and implementation of surge plans that included activating surge beds, decreasing Patient Aligned Care Team and outpatient visits, reducing surgeries and elective procedures, and reassigning staff to positions with critical needs. 1112 On a local level, the Jesse Brown VAMC opened an acute mental health inpatient COVID-19 unit to increase more medical-surgery (med surg) bed availability at other facilities. 1113 The unit admitted 26 patients from other VISN 12 facilities. 1114

These emergency events during the pandemic required:

- Developing and implementing surge plans¹¹¹⁵
- Engaging Incident Command, including meetings with senior site leadership¹¹¹⁶
- Reassigning staff to compensate for staff shortages¹¹¹⁷

Issues and Adjustments

To handle surges across the region, VISN 12 adjusted its efforts from earlier in the pandemic response. In November 2020, the VISN added a new COVID-19 Critical Staffing Plan that divided staff into two teams. 1118 Direct contact between personnel was allowed only between members of the same team. This policy was designed to reduce COVID-19 exposures and improve contact tracing. 1119 Staff arriving to sites in-person would be placed on a specific team and then required to maintain that team's schedule. 1120 This included dividing leadership travel schedules to guarantee leadership coverage. 1121 Those eligible for telework continued to work remotely. 1122

To replace outdated equipment, VISN 12 ordered a Roche C6800 molecular testing instrument in March 2020. 1123 However, Roche faced production delays, and the instrument did not arrive until October 2020. 1124 The delayed receipt of the Roche C6800 molecular testing instrument limited the amount of polymerase chain reaction tests that VISN 12 could perform in-house and prolonged the VISN's reliance on outside labs until the instrument arrived. 1125 Compounding the production delay impacts, the same facility expecting the instrument received a limited number of weekly test kits starting in November 2020. 1126

In the face of supply chain issues, specifically around VTM, Milwaukee staff produced large quantities of home-made VTM to support the depleting VISN inventories. Medical technologists making the VTM had to take time away from patient testing to replenish supply. 1128

VISN 12 navigated challenges brought on by new testing protocols to screen staff at CLCs and SCI units twice a week. 1129 VHACO recommended antigen testing to complete this request, and VISN 12 leadership noted that the VISN mobilized quickly across sites and provided necessary trainings. 1130

Vaccination Planning

As with most VISNs, VISN 12 faced challenges with vaccination planning and distribution. Distributing the vaccine to rural areas presented a challenge due to the vaccine's temperature restrictions. ¹¹³¹ Nevertheless, the Oscar G. Johnson VAMC in Iron Mountain, Michigan, drafted a protocol to safely transport and distribute vaccine

to its outlier clinics. 1132 VISN 12 also noted that planning for vaccine distribution was an early issue to which VISN 12 developed a forecasting tool to anticipate supply and demand. 1133

Fourth Mission

VISN 12 continued its Fourth Mission support from July 2020 to January 2021, as shown in Appendix B, Fourth Mission Table 16.2. In August 2020, a VISN 12 Infection Control lead engaged with the Union Grove, Wisconsin SVH in response to a COVID-19 outbreak. The lead also conducted an outbreak control assessment with the King, Wisconsin SVH and participated in an Interagency Infection Prevention project with Illinois SVHs and in locations in VISNs 15 and 23. In addition, VISN 12 provided 52 total staff workers to King, Wisconsin SVH and Union Grove, Wisconsin SVH. In November 2020, the LaSalle, Illinois SVH received 21,600 N95 masks from VISN 12. In

Movement of Resources

Intra-VISN movement of staff, supplies and patients continued from July 1, 2020, to January 1, 2021. By December 31, 2021, VISN 12 moved a total of 130 patients between 8 facilities. The Jesse Brown VAMC received three staff members, and the Captain James A. Lovell Federal Health Care Center received one staff member from VISN 12 facilities. VISN 12 facilities also exchanged thousands of masks, face shields, gowns, ventilators and freezers. 1140

Inter-VISN support included VISN 12 receiving 23,000 N95 masks from VISN 23 and sending 8,960 3M 1860 masks to VISN 23. 1141 VISN 12 also received 2 staff members to Hines and Milwaukee facilities and provided a total of 12 staff members across VISNs 5, 6, 9, 16, 17 and 21. 1142

<u>Other</u>

VISN 12 leadership noted the following lessons learned for this period:

- Using the National COVID Response Tool to successfully address supply chain challenges¹¹⁴³
- Executing four VISN procurements with mid-continent region VISNs to support facility stock when a prime vendor could not meet requirements and collaborated jointly between sites to share procurement sources/opportunities¹¹⁴⁴
- Documenting outcomes and insights from infection control consultative work with the VISN 12 Infection Control Lead and SVHs¹¹⁴⁵

In July, VISN 12 made progress in its Moving Forward process, reporting services expanding in specialty care and primary care, sometimes beyond 50% in-person appointments. 1146 Later in November 2020, all VISN 12 sites reduced elective surgeries that required inpatient beds. 1147

Tables and Figures

Table 13.19: VISN 12 Key COVID-19 Statistics (March 1, 2020 – January 1, 2021)

Category	Number
Veterans Using VHA Services	271,792
Veteran COVID-19 Cases	8,418
Veteran COVID-19 Inpatients	1,358
Veteran Deaths (COVID-19 related)	357
VISN Employees	19,534
Employee COVID-19 Cases	1,018
Employee Deaths (COVID-19 related)	3

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests, confirmed positives and deaths figures exclude Veteran-Employees. Employee tests, confirmed positives & deaths include Veteran-Employees and Non-Veteran Employees. VHA Employee Deaths (COVID-19 related) were identified from Issue Briefs from the deceased's local VAMC. The deceased may have been tested at a VHA test location or an outside location.

Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; Employee Deaths data provided by VHA on 2/3/2021; HR Employee Cube, VSSC, VHA, accessed on 1/25/2021.

Table 13.20: VISN 12 Veteran Testing (March 1, 2020 – January 1, 2021)

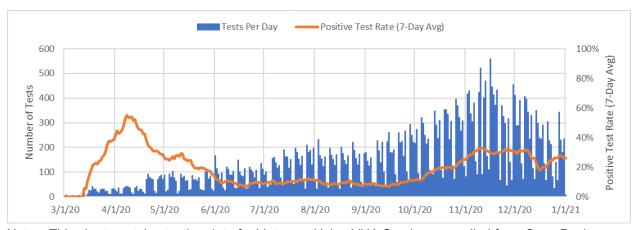
Category		Veterans Using VHA Services		CLC Residents	
Testing	Population Tested	42,077	15%	1,364	96%
Rate	Population	271,792		1,422	
Case Rate	Population Positive	8,418	3%	316	18%
	Population	271,792		1,736	

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests and confirmed positives figures exclude Veteran Employees. CLC resident population counts for positive cases were aggregated from March 1, 2020, to January 1, 2021, and CLC resident population counts for testing were aggregated from April 1, 2020, to January 1, 2021 to account for all resident testing after the advent of national universal testing. CLC population tested percentage was calculated using a CLC resident population denominator aggregated from April 1, 2020, through January 1, 2021. CLC population counts as of March 1, 2020, may exclude patients who transferred between VISN CLC locations. COVID-19 case indication is for the period of March 1, 2020 through January 1, 2021 and COVID-19 infection may have occurred prior to (or after) a CLC stay.

A portion of CLC patients may be untested due to the following reasons, including but not limited to: CLC patient residence in a CLC facility prior to national universal testing implementation, CLC patient movement between centers, inability to test per decision from the local clinical team, patient discharge or other unique circumstances.

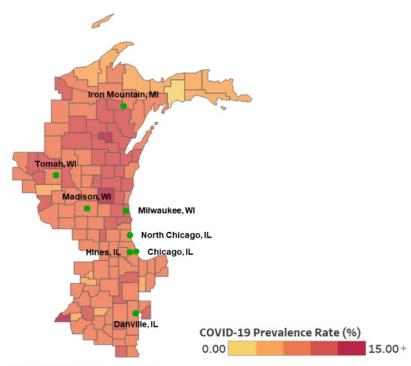
Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; CLC Testing Data provided by HOC, VHA on 2/25/2021; CLC Positivity Data provided by HOC, VHA on 5/4/2021.

Figure 13.19: VISN 12 COVID-19 Tests and Positive Test Rate (Daily, March 1, 2020 – January 1, 2021)



Notes: This chart contains testing data for Veterans Using VHA Services compiled from Case Reviews and VA Lab-certified COVID-19 tests. Case Reviews tests are conducted outside of VHA network. Source: NST Dataset, HOC, VHA, accessed 2/21/2021.

Figure 13.20: VISN 12 Prevalence of Confirmed COVID-19 Cases



Note 1: The cities shown on this graphic refer to VA facility hub locations made up by VA Health Care Systems and/or VA Medical Centers and their accompanying divisions and campuses, where applicable.

Note 2: The counties shown on this graphic are based on the alignment of County FIPS codes to VISN locations as per "Veterans Integrated Services Networks (VISN), Markets, Submarkets, Sectors and Counties by Geographic Location", VA, last updated on January 5, 2021

denotes the location of a VA facility hub

Source: John Hopkins University; US Census 2019 Estimate; US Department of Veterans Affairs.

Data as of 1/21/2021

VISN 15, HEARTLAND HEALTH CARE NETWORK

Emergency Events and Responses

From July 1, 2020, to January 1, 2021, VISN 15's leadership reported that its VAMC faced challenges relating to community transmission rates, inpatient demand, staffing availability and prevalence of COVID-19 cases within the community. 1148 VISN 15 coordinated care and surge bed expansions with Moving Forward plans, DEMPS support requests and a commitment to maintain operations. 1149

VISN 15 prevalence of confirmed COVID-19 among Veterans Using VHA Services reached 3.2%, compared to 7.0% among the general community, as of January 1, 2021 (see Figure 13.22 for more details). 1150 As shown in Table 13.21, there were a total of 7,899 Veteran COVID-19 cases with 417 associated deaths. Employee COVID-19 cases totaled 802 with 0 associated deaths. 1151 During that time, the 7-day rolling average of positive tests among Veterans Using VHA Services varied from 3% to 22% from June to October, increasing to 35% in December (see Figure 13.21). For more information about testing, see Table 13.22. 1152

Select VISN 15 HCSs and VAMCs were involved in responding to emergencies during this period: Kansas City VAMC, Harry S. Truman VAMC, Eastern Kansas HCS, St. Louis HCS, Marion Illinois VAMC, John J. Pershing VAMC and Robert J. Dole VAMC. 1153

The emergency response during this period of the pandemic required the following:

- Establishing a reporting routine with all VAMCs on COVID-19 data, staffing, PPE supply, infrastructure needs and testing¹¹⁵⁴
- Meeting VISN staffing needs before committing to DEMPS deployments¹¹⁵⁵
- Engaging Incident Command 1156

Issues and Adjustments

VISN 15 adjusted its communication with VAMCs between daily, biweekly and ad hoc based on the latest inpatient demand and COVID-19 prevalence data. 1157 It also requested a daily email from VAMCs with an overview of the facility's COVID-19 outpatients, inpatients, staffing, PPE supplies and infrastructure. 1158 VISN 15 used the VHA COVID-19 Response Field Validation Tool within VHA Support Services Center to capture and monitor those VAMC updates. 1159

Vaccination Planning

In November 2020, VISN 15 navigated an issue with vaccine planning and distribution when other Federal agencies requested that VA administer COVID-19 vaccinations for Federal staff. ¹¹⁶⁰ VISN 15 informed its VAMCs that their vaccine planning and distribution exercises should account for additional Federal staff. ¹¹⁶¹

Fourth Mission

VISN 15 continued its Fourth Mission support from July 2020 to January 2021, as shown in Appendix B, Fourth Mission Table 16.2. Facilities within VISN 15 sent 100 staff to 14 unique locations, including 4 IHS and tribal health system facilities and to 6 SVHs to augment the current care provisions. VISN 15 also managed all coordination for Fourth Mission assignments to SVHs in Missouri, including those located in VISN 16.1163

Movement of Resources

VISN 15 reported limited movement of staff, supplies or patients between VISNs, and only minor inter-VISN support continued throughout the time period. VISN 15 provided the Phoenix VAMC with inter-VISN support by providing four RNs. 1164

Tables and Figures

Table 13.21: VISN 15 Key COVID-19 Statistics (March 1, 2020 – January 1, 2021)

Category	Number
Veterans Using VHA Services	245,783
Veteran COVID-19 Cases	7,899
Veteran COVID-19 Inpatients	941
Veteran Deaths (COVID-19 related)	417
VISN Employees	13,512
Employee COVID-19 Cases	802
Employee Deaths (COVID-19 related)	0

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests, confirmed positives & deaths figures exclude Veteran-Employees. Employee tests, confirmed positives and deaths include both Veteran-Employees and Non-Veteran Employees. Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; Employee Deaths data provided by VHA on 2/3/2021; HR Employee Cube, VSSC, VHA, accessed on 1/25/2021.

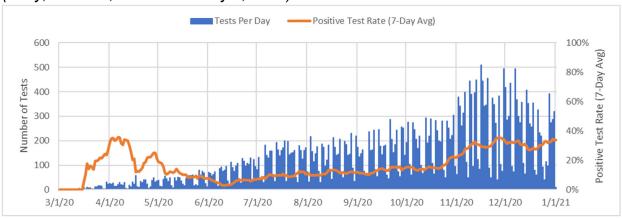
Table 13.22: VISN 15 Veteran Testing (March 1, 2020 – January 1, 2021)

Category		Veterans Using VHA Services		CLC Residents	
Testing	Population Tested	38,963	16%	551	96%
Rate	Population	245,783	1070	574	90 70
Case Rate	Population Positive	7,899	3%	131	18%
	Population	245,783		712	10 /0

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests and confirmed positives figures exclude Veteran Employees. CLC resident population counts for positive cases were aggregated from March 1, 2020, to January 1, 2021, and CLC resident population counts for testing were aggregated from April 1, 2020, to January 1, 2021 to account for all resident testing after the advent of national universal testing. CLC population tested percentage was calculated using a CLC resident population denominator aggregated from April 1, 2020, through January 1, 2021. CLC population counts as of March 1, 2020, may exclude patients who transferred between VISN CLC locations. COVID-19 case indication is for the period of March 1, 2020 through January 1, 2021 and COVID-19 infection may have occurred prior to (or after) a CLC stay. A portion of CLC patients may be untested due to the following reasons, including but not limited to: CLC patient residence in a CLC facility prior to national universal testing implementation, CLC patient movement between centers, inability to test per decision from the local clinical team, patient discharge or other unique circumstances.

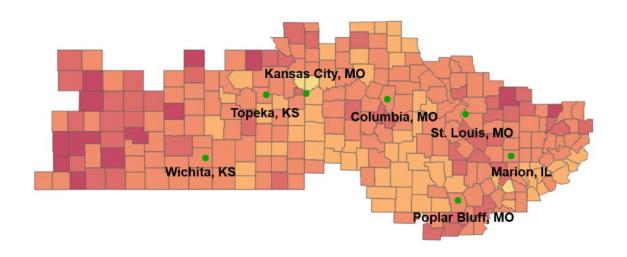
Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; CLC Testing Data provided by HOC, VHA on 2/25/2021; CLC Positivity Data provided by HOC, VHA on 5/4/2021.

Figure 13.21: VISN 15 COVID-19 Tests and Positive Test Rate (Daily, March 1, 2020 – January 1, 2021)



Notes: This chart contains testing data for Veterans Using VHA Services compiled from Case Reviews and VA Lab-certified COVID-19 tests. Case Reviews tests are conducted outside of VHA network. Source: NST Dataset, HOC, VHA, accessed 2/21/2021.

Figure 13.22: VISN 15 Prevalence of Confirmed COVID-19 Cases



Note 1: The cities shown on this graphic refer to VA facility hub locations made up by VA Health Care Systems and/or VA Medical Centers and their accompanying divisions and campuses, where applicable.

Note 2: The counties shown on this graphic are based on the alignment of County FIPS codes to VISN locations as per "Veterans Integrated Services Networks (VISN), Markets, Submarkets, Sectors and Counties by Geographic Location", VA, last updated on January 5, 2021

COVID-19 Prevalence Rate (%) 0.00 15.00+

denotes the location of a VA facility hub

Source: John Hopkins University; US Census 2019 Estimate; US Department of Veterans Affairs.

Data as of 1/21/2021

VISN 16, SOUTH CENTRAL HEALTH CARE NETWORK

Emergency Events and Responses

From July 1, 2020, to January 1, 2021, VISN 16 faced disasters such as hurricanes, tornados and flooding events, compounded by COVID-19, and planned for vaccine distribution.

VISN 16 prevalence of confirmed COVID-19 among Veterans Using VHA Services reached 2.4% compared to 6.8% among the general community as of January 1, 2021 (see Figure 13.24 for more details). 1165 As shown in Table 13.23, there were a total of 10,380 Veteran COVID-19 cases with 515 associated deaths. Employee COVID-19 cases totaled 892 with 10 associated deaths. 1166 During that time, the 7-day rolling average of positive test rates among Veterans Using VHA Services started with a peak of 31% in July, varied from 8% to 23% from August to November, and rose steadily to 38% by January 1, 2021 (see Figure 13.23 for more details). For more information about testing, see Table 13.24). 1167

All VISN 16 facilities were involved in responding to emergency actions described below from July 1, 2020, to January 1, 2021. 1168

During this period, nine hurricanes and one tropical storm hit or threatened the VISN 16 region. 1169 The VISN activated the Network Emergency Operation Center (EOC) and operated two incident commands concurrently—one for its COVID-19 response and the second for its hurricane response. 1170 In August 2020, the VISN 16 EOC activated the Director Advanced Coordination Team to provide the Alexandria VA HCS in Louisiana, the resources it needed to prepare for and evacuate in advance of inbound storms. 1171 The EOC managed impacts from earthquakes, wildfires, tornadoes and other flooding events throughout this time period by conducting daily calls across stakeholders to maintain operations. 1172 Facilities worked to maintain safe sites of care in alternate locations and shelters. 1173

VISN 16 reported that COVID-19 added complications to the hurricane response. 1174 For example, the responses to Hurricane Laura and Hurricane Delta had to be managed while respecting COVID-19 precautions. 1175 According to VISN 16 leadership, while operating in alternate sites and in austere conditions, new protocols around sleeping arrangements and cleaning made regular hurricane response approaches more difficult to execute. 1176 Nevertheless, the Ashley Alternate Care Site after Hurricane Laura and Lake Charles Alternate Care Site after Hurricane Delta provided over 1,200 Veterans and civilians with care during storm events. 1177

These emergency events during the pandemic required the following:

- Management of 27 FEMA mission assignments through communication with local, state and Federal partners¹¹⁷⁸
- Coordination of 355 DEMPS personnel, Inter-VISN support and Intra-VISN deployments, including pre- and post-deployment COVID-19 testing¹¹⁷⁹
- Collaboration between VISN facilities to maintain bed capacity, among management of other critical supplies and resources¹¹⁸⁰
- Procurement and distribution of equipment and supplies (for example, tents, C-FORTS and generators), management of alternative care sites and local community needs, and feeding those supporting hurricane response efforts¹¹⁸¹
- Management of COVID-19 protocols simultaneously with hurricane response protocols, including door-to-door assistance to vulnerable populations, outreach to Veterans in homeless shelters, and helping Veterans recover damaged homes through a partnership with the Team Rubicon Disaster Response nonprofit¹¹⁸²

Issues and Adjustments

To manage two emergency responses at once, VISN 16 adjusted its efforts from earlier in the pandemic response. The VISN 16 EOC remained active and was assigned management of both hurricane and COVID-19 responses. VISN 16 leadership conducted daily Network EOC calls with facility leadership to discuss persistent COVID-19 demands like staffing shortages and PPE supply. The VISN 16 EOC tasked facility Incident Command Teams to manage resource movements, particularly PPE, as necessary. The EOC also implemented structured documents to manage logistics requests during the COVID-19 response and hurricane season.

Vaccination Planning

As with many VISNs, VISN 16 reported challenges with vaccine planning and vaccine distribution. The VISN had to reallocate spaces for check-ins, vaccinations and observation. The decrease in in-person appointments gave the VISN more areas to use for COVID-19 response. 1187

Staff detailing proved difficult; as a result, VISN 16 offered overtime to staff to maintain coverage. 1188 VISN 16 also shifted clinical staff to support front line duties. 1189

VISN 16 reported issues with OHRS 2.0 access and expansion, requiring calls with the OHRS team and VHA leadership to review user access and licenses. 1190

Vaccination also impacted VISN 16 pharmacy workflow.¹¹⁹¹ As a result of National Pharmacy Benefits Management (PBM) services, VISN PBM and local pharmacy team discussions, the VISN was able to integrate vaccine workflows in all VISN 16 VAMCs.¹¹⁹²

As of January 1, 2021, VISN 16 continued to experience shortages of vaccine transport freezers, unknown vaccine allotment and medical support assistant staffing shortages. 1193

Fourth Mission

As shown in Appendix B, Fourth Mission Table 16.2, facilities within VISN 16 supported 33 Fourth Mission assignments to 15 unique locations (including 11 SVHs and 1 IHS/tribal health system facility) by providing supplies, staff support, infection-control training and bed capacity. 1194

For example, VISN 16 directed resources to train staff at SVHs, including training events for nursing leadership and administrators in Jackson, Mississippi; COVID-19 infection control training in Fayetteville, Arkansas; and 26 staff members distributed among Mississippi SVHs to conduct additional trainings. 1195 VISN 16 also provided ongoing testing support in the form of 1,371 COVID-19 tests performed at Clifford Sims SVH in Panama City, Florida, 7,563 tests performed for the Arkansas Department of Health, and 507 tests performed for the Little Rock Arkansas SVH. 1196

Movement of Resources

Intra-VISN 16 movement of staff and supplies continued from July 1, 2020, to January 1, 2021, with facilities exchanging supplies such as N95 masks, ventilators, surgical, test kits and gloves and deploying 54 staff members to VISN 16 facilities requesting resources.¹¹⁹⁷

Inter-VISN support included VISN 16 providing VISNs 6, 17 and 22 with supplies such as thousands of gowns, gloves and test kits and providing VISN 7 with a tent. VISN 16 received two staff members to its Memphis VAMC from VISN 17 and 22. 1198

Tables and Figures

Table 13.23: VISN 16 Key COVID-19 Statistics (March 1, 2020 – January 1, 2021)

Category	Number
Veterans Using VHA Services	429,386
Veteran COVID-19 Cases	10,380
Veteran COVID-19 Inpatients	1,467
Veteran Deaths (COVID-19 related)	515
VISN Employees	21,607
Employee COVID-19 Cases	892
Employee Deaths (COVID-19 related)	10

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests, confirmed positives and deaths figures exclude Veteran-Employees. Employee tests, confirmed positives & deaths include Veteran-Employees and Non-Veteran Employees. VHA Employee Deaths (COVID-19 related) were identified from Issue Briefs from the deceased's local VAMC. The deceased may have been tested at a VHA test location or an outside location. Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; Employee Deaths data provided by VHA on 2/3/2021; HR Employee Cube, VSSC, VHA, accessed on 1/25/2021.

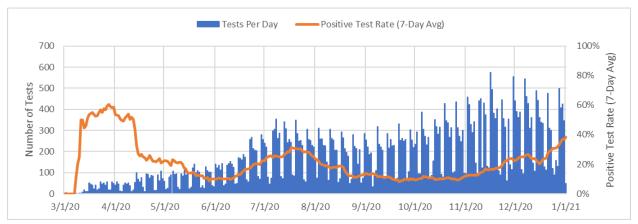
Table 13.24: VISN 16 Veteran Testing (March 1, 2020 – January 1, 2021)

Category		Veterans Using VHA Services		CLC Residents	
Testing	Population Tested	53,417	12%	987	97%
Rate	Population	429,386	1270	1,019	91 /6
Case Rate	Population Positive	10,380	2%	188	15%
Case Rate	Population	429,386		1,224	13 /6

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests and confirmed positives figures exclude Veteran Employees. CLC resident population counts for positive cases were aggregated from March 1, 2020, to January 1, 2021, and CLC resident population counts for testing were aggregated from April 1, 2020, to January 1, 2021 to account for all resident testing after the advent of national universal testing. CLC population tested percentage was calculated using a CLC resident population denominator aggregated from April 1, 2020, through January 1, 2021. CLC population counts as of March 1, 2020, may exclude patients who transferred between VISN CLC locations. COVID-19 case indication is for the period of March 1, 2020 through January 1, 2021 and COVID-19 infection may have occurred prior to (or after) a CLC stay. A portion of CLC patients may be untested due to the following reasons, including but not limited to: CLC patient residence in a CLC facility prior to national universal testing implementation, CLC patient movement between centers, inability to test per decision from the local clinical team, patient discharge or other unique circumstances.

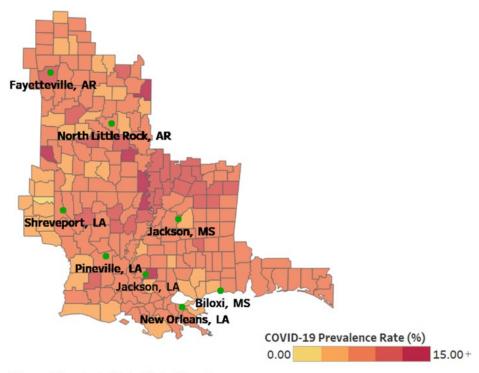
Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; CLC Testing Data provided by HOC, VHA on 2/25/2021; CLC Positivity Data provided by HOC, VHA on 5/4/2021.

Figure 13.23: VISN 16 COVID-19 Tests and Positive Test Rate (Daily, March 1, 2020 – January 1, 2021)



Notes: This chart contains testing data for Veterans Using VHA Services compiled from Case Reviews and VA Lab-certified COVID-19 tests. Case Reviews tests are conducted outside of VHA network. Source: NST Dataset, HOC, VHA, accessed 2/21/2021.

Figure 13.24: VISN 16 Prevalence of Confirmed COVID-19 Cases



Note 1: The cities shown on this graphic refer to VA facility hub locations made up by VA Health Care Systems and/or VA Medical Centers and their accompanying divisions and campuses, where applicable.

Note 2: The counties shown on this graphic are based on the alignment of County FIPS codes to VISN locations as per "Veterans Integrated Services Networks (VISN), Markets, Submarkets, Sectors and Counties by Geographic Location", VA, last updated on January 5, 2021

denotes the location of a VA facility hub

Source: John Hopkins University; US Census 2019 Estimate; US Department of Veterans Affairs.

Data as of 1/21/2021

VISN 17, HEART OF TEXAS HEALTH CARE NETWORK

Emergency Events and Responses

From July 1, 2020, to January 1, 2021, VISN 17 maintained in-person care and balanced staff shortages amidst the VISN's third COVID-19 surge.

VISN 17 prevalence of confirmed COVID-19 among Veterans Using VHA Services reached 2.6%, compared to 6.2% among the general community, as of January 1, 2021 (see Figure 13.26 for more details). 1199 As shown in Table 13.25, there were a total of 11,392 Veteran COVID-19 cases with 535 associated deaths. Employee COVID-19 cases totaled 680 with 13 associated deaths. 1200 During that time period, the 7-day rolling average of positive test rates among Veterans Using VHA Services fluctuated, varying from 7% to 43%, with the highest positive test rates present during December 2020 (see Figure 13.26 for more details). For more information about testing, see Table 13.26. 1201

Select VISN 17 facilities were involved in responding to emergency actions described below since July 1, 2020: VA North Texas HCS (Dallas), South Texas Veterans HCS (San Antonio), Central Texas Veterans HCS (Temple), Amarillo VA HCS, West Texas VA HCS (Big Spring), El Paso VA HCS and VA Texas Valley Coastal Bend HCS (Harlingen). 1202

VISN 17 experienced a third wave of COVID-19 cases just as the VISN initiated its Moving Forward Plan. 1203 The plan involved a phased approach to increasing inperson care. At the time of the surge, VISN 17 had achieved a 75% in-person services level for its network. 1204 The steep increase in cases led to new admissions to hospitals, an increase in employee illness and absence, and a rise in Fourth Mission assignments to San Antonio and Amarillo. 1205 As a result, the VISN shifted the in-person care goal to 50% of its services, the rest of which became virtual visits. 1206 VISN 17 increased to 75% in-person care by early December. 1207

These emergency events during the pandemic required:

- Reducing in-person care 1208
- Conducting operational review calls to connect with medical center leadership¹²⁰⁹
- Communicating medical center site updates and the need for VISN or VHACO assistance 1210
- Targeting resources to cross-level across the VISN¹²¹¹
- Shifting resources to support inpatient care ¹²¹²

Issues and Adjustments

During this period, VISN 17 managed a large increase in staff shortages due to COVID-19 exposure. VISN leadership reported that the state-relaxed social guidelines were "the primary contributing factor to increasing COVID infections in staff." ¹²¹³ In response, VISN 17 deployed stricter contact tracing, instituted staff removal protocols, and increased overtime to balance staff shortages for inpatient care. ¹²¹⁴

These new issues with staff management and shortages required VISN 17 to move staff from one area in the VISN to meet the needs of another area and engage DEMPS. In-person care was reduced, and the VISN's health care systems shifted staff from CBOCs and outpatient care to support inpatient services. 1215

Vaccination Planning

As with most VISNs, VISN 17 faced challenges with vaccination planning and distribution. Pharmacy staff and vaccine administrators noted initial system issues, which made it difficult to conduct training. 1216 At first, VHA's emergency use authorization permitted the VISN to use only the Pfizer-BioNTech vaccine, and that restriction limited some vaccination activity. 1217 According to VISN 17 leadership, freezing and vaccine preparation and transportation requirements limited the scope of use and restricted initial vaccination to the main facilities. 1218 When the Moderna vaccine was approved for emergency use, sites had increased access to vaccines, improving the rate of vaccination for Veterans and staff. 1219 VISN 17 also reported ongoing issues with managing a limited vaccine supply. 1220

Fourth Mission

VISN 17 continued its Fourth Mission support from July 1, 2020, to January 1, 2021, as shown in Appendix B, Fourth Mission Table 16.2. In response to COVID-19 outbreaks at the West Texas SVH and the Temple Texas SVH, VISN 17 sent 8 staff members on 2 missions and administered vaccines to approximately 350 residents and staff to help stop the spread. Starting in July, VISN 17 provided Texas Humanitarian bed support, treating 60 non-Veteran patients and providing 1,100 admitted days of care for those 60 patients. The VISN also provided ambulatory care staff to both the Hopi Health Care Center in Arizona and the Oxford, Missouri SVH. 1223

Movement of Resources

VISN 17 reported movement of staff, supplies and patients within the VISN. On July 14, 2020, the VISN coordinated U.S. Air Force airlift transport of eight non-COVID-19

spinal-cord injury patients from the San Antonio 671 facility to a Dallas VA facility to create space at San Antonio to treat COVID-19 patients. 1224 A total of 55 staff moved between numerous VISN 17 facilities. 1225 These included police officers, RNs, nurse practitioners, administrative support, and EMS and Logistics Technicians. Swab kits, test kits and thousands of gowns (among other equipment) were supplied to six facilities, primarily from the VA North Texas HCS and with additional supplies from Temple, El Paso, San Antonio and Big Spring from July to November 2020. 1226

VISN 17 also moved staff and supplies to other VISNs. VISN 17 supplied VISN 19 with a pallet of Sled 2 Go in July 2020 and a crash cart in December 2020, provided VISN 4 with 28,600 face shields in July 2020, and supplied VA Central Texas HCS with 6 patient circuits in December 2020. 1227 It also sent a medical technician and a medical technologist to the Memphis VAMC in VISN 9 in December 2020. 1228

Other

VISN 17 leadership reported the following lessons learned for this period:

- Processes for identifying the most urgent cases from SVHs shifted from reactive to proactive through a commitment to "clinical consultation and infection control support." 1229
- New data pathways supported clarifying operations overall while permitting facility-level and operational-area-level review of operations.¹²³⁰
- There is now a replicable, flexible supply chain process in place, allowing for forecasting and responding to demand. 1231
- Staff received frequent reminders by email and other communications, such as team meetings, staff huddles and Incident Command reminders on how best to protect patients while the state relaxed social restrictions. 1232

Tables and Figures

Table 13.25: VISN 17 Key COVID-19 Statistics (March 1, 2020 – January 1, 2021)

Category	Number
Veterans Using VHA Services	436,458
Veteran COVID-19 Cases	11,392
Veteran COVID-19 Inpatients	1,138
Veteran Deaths (COVID-19 related)	535
VISN Employees	20,120
Employee COVID-19 Cases	680
Employee Deaths (COVID-19 related)	13

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests, confirmed positives and deaths figures exclude Veteran-Employees. Employee tests, confirmed positives & deaths include Veteran-Employees and Non-Veteran Employees. VHA Employee Deaths (COVID-19 related) were identified from Issue Briefs from the deceased's local VAMC. The deceased may have been tested at a VHA test location or an outside location. Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; Employee Deaths data provided by VHA on 2/3/2021; HR Employee Cube, VSSC, VHA, accessed on 1/25/2021.

Table 13.26: VISN 17 Veteran Testing (March 1, 2020 – January 1, 2021)

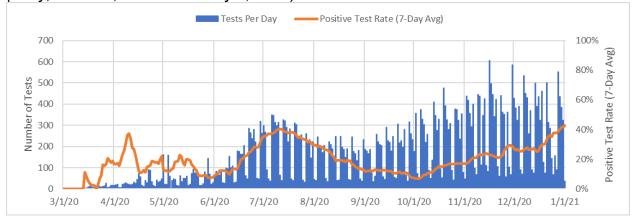
Category		Veterans Using VHA Services		CLC Residents	
Testing	Population Tested	49,038	11%	1,187	95%
Rate	Population	436,458	1170	1,250	9570
Case Rate	Population Positive	11,392	3%	160	11%
	Population	436,458	3%	1,464	1170

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests and confirmed positives figures exclude Veteran Employees. CLC resident population counts for positive cases were aggregated from March 1, 2020, to January 1, 2021, and CLC resident population counts for testing were aggregated from April 1, 2020, to January 1, 2021 to account for all resident testing after the advent of national universal testing. CLC population tested percentage was calculated using a CLC resident population denominator aggregated from April 1, 2020, through January 1, 2021. CLC population counts as of March 1, 2020, may exclude patients who transferred between VISN CLC locations. COVID-19 case indication is for the period of March 1, 2020 through January 1, 2021 and COVID-19 infection may have occurred prior to (or after) a CLC stay. A portion of CLC patients may be untested due to the following reasons, including but not limited to: CLC patient residence in a CLC facility prior to national universal testing implementation, CLC patient movement between centers, inability to test per decision from the local clinical team, patient discharge or other unique circumstances.

Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; CLC Testing Data provided by HOC, VHA on 2/25/2021; CLC Positivity Data provided by HOC, VHA on 5/4/2021.

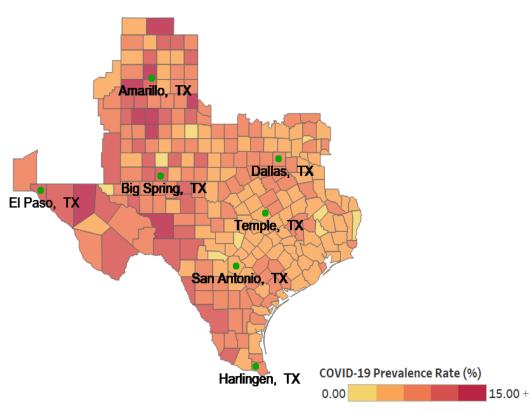
Figure 13.25: VISN 17 COVID-19 Tests and Positive Test Rate

(Daily, March 1, 2020 - January 1, 2021)



Notes: This chart contains testing data for Veterans Using VHA Services compiled from Case Reviews and VA Lab-certified COVID-19 tests. Case Reviews tests are conducted outside of VHA network. Source: NST Dataset, HOC, VHA, accessed 2/21/2021.

Figure 13.26: VISN 17 Prevalence of Confirmed COVID-19 Cases



Note 1: The cities shown on this graphic refer to VA facility hub locations made up by VA Health Care Systems and/or VA Medical Centers and their accompanying divisions and campuses, where applicable.

Note 2: The counties shown on this graphic are based on the alignment of County FIPS codes to VISN locations as per "Veterans Integrated Services Networks (VISN), Markets, Submarkets, Sectors and Counties by Geographic Location", VA, last updated on January 5, 2021

denotes the location of a VA facility hub

Source: John Hopkins University; US Census 2019 Estimate; US Department of Veterans Affairs.

Data as of 1/21/2021

VISN 19, ROCKY MOUNTAIN HEALTH CARE NETWORK

Emergency Events and Responses

From July 1, 2020, to January 1, 2021, VISN 19 faced challenges, including managing deployments in response to an SVH COVID-19 outbreak, windstorms threatening damage to health care campus buildings, and planning for vaccine distribution.

VISN 19 prevalence of confirmed COVID-19 among Veterans Using VHA Services reached 2.5%, compared to 6.7% among the general population, as of January 1, 2021 (see Figure 13.28). 1233 As shown in Table 13.27, there were a total of 8,075 Veteran COVID-19 cases with 412 associated deaths. Employee COVID-19 cases totaled 756 with 8 associated deaths. 1234 During that time, the 7-day rolling average of positive test rates among Veterans Using VHA Services varied from 4% to 18% from June to October, increasing to 38% in December (see Figure 13.27 for more details). For more information about testing, see Table 13.28. 1235

Select VISN 19 VAMCs and HCSs were involved in responding to emergency actions described below from July 1, 2020, to January 1, 2021: Cheyenne VAMC, VA Salt Lake City HCS, VA Western Colorado HCS, VA Eastern Colorado HCS, Fort Harrison VAMC, Eastern Oklahoma VA HCS and Oklahoma City VA HCS. 1236

In August 2020, VISN 19 responded to a FEMA request related to the Claremore SVH in Claremore, Oklahoma. 1237 Claremore SVH had seen a steep rise in COVID-19 cases affecting Veterans and staff. 1238 To prevent further spread of the illness, Claremore SVH converted part of the facility to a COVID-only ward. 1239 The Eastern Oklahoma VA HCS set up, staffed and operated a COVID-19 inpatient unit, including engineering modifications for negative pressure rooms at the Claremore SVH. 1240 Due to the nature of the facility, negative pressure wards and equipment were not available on-site. 1241 Responding to the need, VISN 19 initially sent Infection Control nurses to the Claremore SVH to provide comprehensive training to the SVH staff. Shortly thereafter, the Eastern Oklahoma VA HCS sent 104 nurses and 6 EMS staff to Claremore SVH. 1242 The additional staff minimized patient transport and allowed the Claremore SVH staff to recover from the outbreak. 1243

In September 2020, the VA Salt Lake City HCS suffered building damage after a massive storm hit the city. There were power outages at the medical campus and at the Ogden and Weber VA Clinics. 1244 Local news reported winds up to 111 miles per hour. 1245

Other VISN 19 facilities also managed the activation and reactivation of units to respond to COVID-19 needs. 1246 These emergency actions included the following:

- VA Western Colorado HCS activated COVID-19 floors and responded to VAMC needs for beds and ventilators. 1247
- Eastern Colorado HCS and Cheyenne VAMC activated Incident Command in response to rising COVID-19 cases.¹²⁴⁸
- Oklahoma City VA HCS repurposed CLCs to function as a hospice and COVID-19 recovery unit.
- Eastern Colorado HCS closed operating rooms to accommodate inpatient beds and staff for surge support.
- Cheyenne VAMC reduced in-person appointments from the already reduced 50% to 25%.¹²⁴⁹
- Fort Harrison VAMC cancelled elective surgeries and converted clinical appointments to 50% virtual. 1250
- Oklahoma City HCS responded to a lack of inpatient beds during a community surge by deploying rapidly deployable emergency medical facilities called FORTS.¹²⁵¹

Issues and Adjustments

To handle potential surges across the region, VISN 19 adjusted its efforts from earlier in the pandemic response. The VISN connected with facilities through weekly communications with facility Executive Leadership Teams. 1252 The VISN also appointed a VISN office response coordinator to improve information and problem-solving across VISN 19.1253 To prepare for anticipated surges, the VA Salt Lake City HCS limited operations, and the Fort Harrison VAMC maintained telework arrangements for staff. 1254 Cheyenne added a team to counter staff shortages due to local infections. 1255

As the pandemic progressed, VISN 19 continued to coordinate with VAMCs to request support to send to other VISN facilities, including medical support assistant staffing, PPE supplies, data entry support, cross-funding of supplies and equipment, and organizational assistance to help shift clinical staff. ¹²⁵⁶ For the Oklahoma City VA HCS, VISN 19 coordinated virtual primary care using staff from VA Salt Lake City HCS to fill gaps for teams that had been reassigned to inpatient care. ¹²⁵⁷

Vaccination Planning

As with most VISNs, VISN 19 faced challenges with vaccination planning and distribution. VA Eastern Colorado HCS reported struggles with space allocation to

manage the Veteran population needing vaccinations. As of January 1, 2021, the Eastern Colorado HCS worked to identify alternate sites for distribution. ¹²⁵⁸ The Cheyenne VAMC noted difficulties with varying vaccine distribution quantities week to week. ¹²⁵⁹ The Fort Harrison VAMC also struggled with the uncertainty of vaccine allocation timelines and amounts. ¹²⁶⁰

Despite difficulties, the Cheyenne VAMC found some success in vaccination communications, according to Cheyenne VAMC Incident Command. ¹²⁶¹ The facility used a multi-pronged approach to communicate with Veterans about vaccination and to schedule appointments. ¹²⁶² Cheyenne created virtual events with Veterans, used postcard mailings, and assigned schedulers to conduct additional outreach to Veterans over 70 years old. ¹²⁶³

During this time, VHA, in coordination with the Center for Strategic Partnerships, proposed that VISN 19 become a pilot site for vaccine transport by plane to remote areas in Montana. The VISN prepared for a final decision from VHA. 1265

Fourth Mission

VISN 19 continued its Fourth Mission support from July 2020 to January 2021, as shown in Appendix B, Fourth Mission Table 16.2.

- VISN 19 provided infection control resources to three SVHs. In early July 2020, VISN 19 provided the Oklahoma SVH with 361 tests and an Infection Control consultation. 1266 It also completed a site visit for infection control at the Claremore SVH. 1267 In December, VISN 19 conducted a site visit for infection control at the Ardmore SVH, distributed 250 masks and administered monoclonal antibody doses to 12 residents.
- VISN 19 maintained bed capacity to accommodate additional COVID-19 positive patients from July 2020 to January 2021.¹²⁶⁸ Eastern Oklahoma VA HCS received 66 medical surgery patients from the Claremore SVH, the Ardmore SVH and the Talihina SVH while running a 40-bed floor at the Claremore SVH for six weeks from the beginning of August 2020.¹²⁶⁹ Oklahoma City VA HCS began receiving patients from their SVHs as early as July 18, 2020, in an attempt to alleviate pressure at the SVH facilities.¹²⁷⁰ From July 18, 2020, to December 31, 2020, Oklahoma City VA HCS received over 79 patients from the Norman and Ardmore SVH facilities.¹²⁷¹

- VISN 19 deployed staff support and provided thousands of supplies to IHS and tribal health system facilities and SVHs.¹²⁷² The Ute Mountain Nation IHS facility in Towaoc, Colorado received hundreds of PPE in July and six staff for surveillance testing from VISN 19.¹²⁷³ VISN 19 also conducted surveillance testing, deploying staff and providing supplies at Southern Ute Nation in Ignacio, Colorado, three times from August to December.¹²⁷⁴ The Claremore SVH received thousands of supplies and 108 staff members from the VISN and Eastern Oklahoma HCS.¹²⁷⁵ Charlotte Hall SVH; King, WI SVH; and St. James MO SVH each received one staff member in response to requests to VISN 19 for staff support.¹²⁷⁶
- VISN 19 also worked with community hospitals to provide necessary staff support and supplies. Summit Healthcare Regional Medical Center in Show Low, Arizona, and Yuma Regional Medical Center in Yuma, Arizona, each received one staff member on a two-week deployment. ¹²⁷⁷ VISN 19 also provided 30 COVID testing kits to Sheridan Memorial Hospital in Sheridan, Wyoming. ¹²⁷⁸

Movement of Resources

Intra-VISN 19 movement of patients, staff and supplies continued through this period. For instance, Eastern Colorado VA HCS received six ICU patients from Cheyenne VAMC and Montana VA HCS. Five VISN 19 facilities sent 39 staff members to support 7 other facilities within the VISN. 1279 The Muskogee VAMC received 1,500 N95 masks from the Oklahoma City VA HCS in July 2020, and 380 COVID-19 testing kits from the Sheridan VAMC in August 2020. 1280

VISN 19 also participated in inter-VISN support, providing one respiratory therapist to Asheville VA HCS, and nine staff members across San Antonio, Texas; Jackson, Mississippi; Lake Charles, Louisiana; Martinsburg, West Virginia; and Amarillo, Texas. 1281 Oklahoma City VA HCS received 25 staff members from VISNs 2, 4, 5, 8, 10 and 20; Montana VA HCS received 33 staff members from VISNs 2, 4, 7, 16, 19, 20 and 21. 1282

<u>Other</u>

The Fort Harrison VAMC reported the following lessons learned for this period:

- Limiting scheduling for vaccine distribution, based on allotments
- Using "schedule only" clinics with time blocks to support patient satisfaction
- Using alternate sites for vaccine distribution when CBOCs have space restrictions

Tables and Figures

Table 13.27: VISN 19 Key COVID-19 Statistics (March 1, 2020 – January 1, 2021)

Category	Number
Veterans Using VHA Services	320,111
Veteran COVID-19 Cases	8,075
Veteran COVID-19 Inpatients	992
Veteran Deaths (COVID-19 related)	412
VISN Employees	15,232
Employee COVID-19 Cases	756
Employee Deaths (COVID-19 related)	8

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests, confirmed positives and deaths figures exclude Veteran-Employees. Employee tests, confirmed positives & deaths include Veteran-Employees and Non-Veteran Employees. VHA Employee Deaths (COVID-19 related) were identified from Issue Briefs from the deceased's local VAMC. The deceased may have been tested at a VHA test location or an outside location. Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; Employee Deaths data provided by VHA on 2/3/2021; HR Employee Cube, VSSC, VHA, accessed on 1/25/2021.

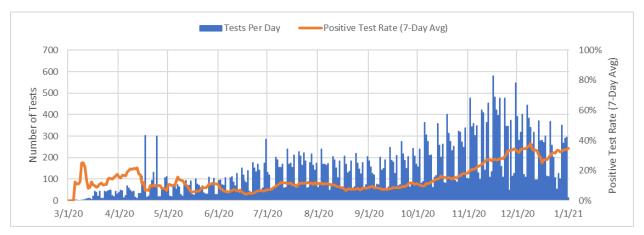
Table 13.28: VISN 19 Veteran Testing (March 1, 2020 – January 1, 2021)

Category		Veterans Using VHA Services		CLC Residents	
Testing	Population Tested	44,312	14%	464	94%
Rate	Population	320,111	1470	493	94 70
Case Rate	Population Positive	8,075	3%	29	5%
Case Rate	Population	320,111		561	

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests and confirmed positives figures exclude Veteran Employees. CLC resident population counts for positive cases were aggregated from March 1, 2020, to January 1, 2021, and CLC resident population counts for testing were aggregated from April 1, 2020, to January 1, 2021 to account for all resident testing after the advent of national universal testing. CLC population tested percentage was calculated using a CLC resident population denominator aggregated from April 1, 2020, through January 1, 2021. CLC population counts as of March 1, 2020, may exclude patients who transferred between VISN CLC locations. COVID-19 case indication is for the period of March 1, 2020 through January 1, 2021 and COVID-19 infection may have occurred prior to (or after) a CLC stay. A portion of CLC patients may be untested due to the following reasons, including but not limited to: CLC patient residence in a CLC facility prior to national universal testing implementation, CLC patient movement between centers, inability to test per decision from the local clinical team, patient discharge or other unique circumstances.

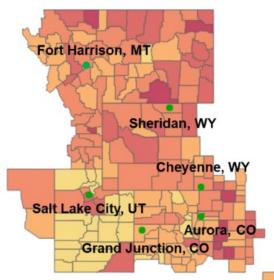
Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; CLC Testing Data provided by HOC, VHA on 2/25/2021; CLC Positivity Data provided by HOC, VHA on 5/4/2021.

Figure 13.27: VISN 19 COVID-19 Tests and Positive Test Rate (Daily, March 1, 2020 – January 1, 2021)



Notes: This chart contains testing data for Veterans Using VHA Services compiled from Case Reviews and VA Lab-certified COVID-19 tests. Case Reviews tests are conducted outside of VHA network. Source: NST Dataset, HOC, VHA, accessed 2/21/2021.

Figure 13.28: VISN 19 Prevalence of Confirmed COVID-19 Cases



Note 1: The cities shown on this graphic refer to VA facility hub locations made up by VA Health Care Systems and/or VA Medical Centers and their accompanying divisions and campuses, where applicable.

Note 2: The counties shown on this graphic are based on the alignment of County FIPS codes to VISN locations as per "Veterans Integrated Services Networks (VISN), Markets, Submarkets, Sectors and Counties by Geographic Location", VA, last updated on January 5, 2021

Muskogee, OK
Oklahoma City, OK

COVID-19 Prevalence Rate (%)
0.00 15.00+

denotes the location of a VA facility hub

Source: John Hopkins University; US Census 2019 Estimate; US Department of Veterans Affairs.

Data as of 1/21/2021

VISN 20, NORTHWEST HEALTH CARE NETWORK

Emergency Events and Responses

From July 1, 2020, to January 1, 2021, VISN 20 faced significant increases in COVID-19 hospitalizations in Idaho and local community surges primarily impacting VAMCs.

VISN 20 prevalence of confirmed COVID-19 among Veterans Using VHA Services reached 1.2%, compared to 3.7% among the general community, as of January 1, 2021 (see Figure 13.30 for more details). As shown in Table 13.29, there were a total of 4,032 Veteran COVID-19 cases with 181 associated deaths. Employee COVID-19 cases totaled 463 with 1 associated death. During that time, the 7-day rolling average of positive test rates among Veterans Using VHA Services varied from 5% to 13% from July to October, increasing to 25% in December (see Figure 13.29 for more detail). For more information about testing, see Table 13.30. 1285

Select VISN 20 facilities were involved in responding to emergency actions described below from July 1, 2020, to January 1, 2021: Alaska VA HCS (Anchorage), Roseburg VAMC, Boise VAMC and Spokane VAMC. 1286

Idaho reported a greater increase in COVID-19 hospitalizations than any other state in VISN 20.¹²⁸⁷ The incidence of COVID among the Boise VAMC med surg or ICU patient population was regularly 25-50%.¹²⁸⁸ Boise VAMC's surge plan allowed the facility to convert unused CLC beds to med surg beds, successfully maintaining enough bed capacity to absorb ICU and med surg patients.¹²⁸⁹

Local community surges and smaller outbreaks at or around Anchorage, Alaska; Roseburg, Oregon; and Spokane, Washington; prompted additional support, including new screening areas, adjusted staffing plans for police officers, and additional staff resources. Poseburg VAMC accepted 10 non-COVID-19 patients to make additional space for COVID-19 patients at Mercy Medical Center, the local community hospital.

These emergency events during the pandemic required:

- Deploying staffing resources to local areas¹²⁹²
- Collaborating between VISN facilities to maintain bed capacity¹²⁹³
- Procuring or distributing equipment and supplies (for example, tents)¹²⁹⁴
- Adjusting staffing coverage plans for police officers¹²⁹⁵

 Planning for possible surges (for example, VISN Emergency Operations continuing to receive daily updates from VAMCs)

Issues and Adjustments

To manage local outbreaks and the corresponding spikes in hospitalizations, VISN 20 adjusted its efforts to match the needs of its population. It focused on helping VAMCs return to pre-COVID operations where possible. 1296 VAMCs increased their screening efforts, becoming more efficient at converting parking garages and tents into expanded care areas. 1297 VA Puget Sound HCS began online screening for its employees to improve safety. With coordination support from the VISN, VA Puget Sound HCS established lab testing for Portland, Oregon; Eugene, Oregon; Walla Walla, Washington; White City, Oregon; Roseburg, Oregon; and Spokane, Washington. 1298 The VISN HR department also adjusted its approach to VAMC staffing issues by approving temporary hire positions. 1299

VISN 20 reported issues with regularly changing data requirements from leadership related to the VISN VSSC platform that gathers and stores data for multi-level analysis. The VSSC requires manual input and its data requirements changed regularly during this timeframe. As the VSSC tool evolved, the VISN updated daily reporting protocols in response. 1301

Vaccine Planning

As with many VISNs, VISN 20 reported challenges with vaccine planning. Inconsistent data collection methods and disparities between vaccination numbers reported from the VSSC and daily HOC meetings proved difficult at first, and the VISN had to build a variety of local reporting methods in order to obtain accurate numbers. The quality of VSSC reporting improved over time and came into alignment with the VISN's local reporting, with small gaps remaining related to accuracy of OHRS inputs. The provided the same planning in the planning related to accuracy of OHRS inputs.

The VISN also faced challenges with its online vaccination appointment booking system. Initially, VISN 20 used LEAF, a program that can be tailored to let patients register for vaccination appointments; however, the program did not work as intended. 1304 VISN 20 changed to Microsoft Booking to fulfill the requirement for the program to enable patients to self-register. 1305

VISN 20 also reported increased staff absenteeism numbers due to vaccine side effects. 1306

Fourth Mission

VISN 20 continued its Fourth Mission support from July 2020 to January 2021, as shown in Appendix B, Fourth Mission Table 16.2. Several of the VISN's Fourth Mission assignments started earlier in the pandemic, many of which are projected to continue through 2021. 1307

In July 2020, VISN 20 provided multiple Oregon Health Administration nursing homes with 19 administration or management support staff, 4 clinical nurse specialists, 8 clinical support staff, 12 LPN/LVNs, 3 NMs, 6 NAs and 22 RNs. 1308

From July to September, VISN 20 sent staff on Fourth Missions to support the IHS and tribal health systems, and worked with local community partners. From July to August 2020, VISN 20 provided 11 RNs and 1 NM to the IHS at Whiteriver Indian Hospital. ¹³⁰⁹ From July to September 2020, VISN 20 sent a total of 21 staff to regional and local community hospitals and donor pavilions in Yuma, Arizona; Tucson, Arizona; Show Low, Arizona; San Antonio, Texas; and New Iberia, Louisiana. ¹³¹⁰

VISN 20 also sent staff resources to numerous SVHs. From August to December 2020, VISN 20 sent LPN/LVNs, RNs, administration and management support, health technicians, NAs and NMs to 11 SVHs. 1311 In October 2020, the Boise VAMC began providing personnel as needed to the Idaho SVH in Boise, Idaho. 1312

Movement of Resources

Intra-VISN 20 movement of patients, staff and supplies continued through this period. For instance, the Walla Walla VAMC provided two police officers to Spokane due to a police COVID-19 outbreak. 1313 VISN 20 also participated in inter-VISN support; 8 of its facilities provided 55 staff assignments to 15 distinct sites throughout this period. 1314

Tables and Figures

Table 13.29: VISN 20 Key COVID-19 Statistics (March 1, 2020 – January 1, 2021)

Category	Number
Veterans Using VHA Services	329,171
Veteran COVID-19 Cases	4,032
Veteran COVID-19 Inpatients	449
Veteran Deaths (COVID-19 related)	181
VISN Employees	15,899
Employee COVID-19 Cases	463
Employee Deaths (COVID-19 related)	1

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests, confirmed positives and deaths figures exclude Veteran-Employees. Employee tests, confirmed positives & deaths include Veteran-Employees and Non-Veteran Employees. VHA Employee Deaths (COVID-19 related) were identified from Issue Briefs from the deceased's local VAMC. The deceased may have been tested at a VHA test location or an outside location. Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; Employee Deaths data provided by VHA on 2/3/2021; HR Employee Cube, VSSC, VHA, accessed on 1/25/2021.

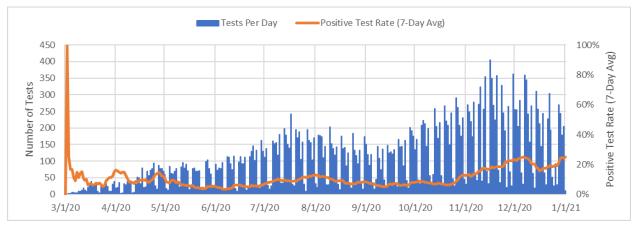
Table 13.30: VISN 20 Veteran Testing (March 1, 2020 – January 1, 2021)

Category		Veterans Using VHA Services		CLC Residents	
Testing	Population Tested	32,550	10%	686	95%
Rate	Population	329,171	10%	719	9J /0
	Population Positive	4,032	10/	47	5%
Case Rate	Population	329,171	1%	856	570

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests and confirmed positives figures exclude Veteran Employees. CLC resident population counts for positive cases were aggregated from March 1, 2020, to January 1, 2021, and CLC resident population counts for testing were aggregated from April 1, 2020, to January 1, 2021 to account for all resident testing after the advent of national universal testing. CLC population tested percentage was calculated using a CLC resident population denominator aggregated from April 1, 2020, through January 1, 2021. CLC population counts as of March 1, 2020, may exclude patients who transferred between VISN CLC locations. COVID-19 case indication is for the period of March 1, 2020 through January 1, 2021 and COVID-19 infection may have occurred prior to (or after) a CLC stay. A portion of CLC patients may be untested due to the following reasons, including but not limited to: CLC patient residence in a CLC facility prior to national universal testing implementation, CLC patient movement between centers, inability to test per decision from the local clinical team, patient discharge or other unique circumstances.

Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; CLC Testing Data provided by HOC, VHA on 2/25/2021; CLC Positivity Data provided by HOC, VHA on 5/4/2021.

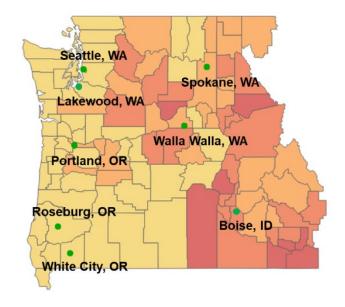
Figure 13.29: VISN 20 COVID-19 Tests and Positive Test Rate (Daily, March 1, 2020 – January 1, 2021)



Notes: This chart contains testing data for Veterans Using VHA Services compiled from Case Reviews and VA Lab-certified COVID-19 tests. Case Reviews tests are conducted outside of VHA network. Source: NST Dataset, HOC, VHA, accessed 2/21/2021.

Figure 13.30: VISN 20 Prevalence of Confirmed COVID-19 Cases





Note 1: The cities shown on this graphic refer to VA facility hub locations made up by VA Health Care Systems and/or VA Medical Centers and their accompanying divisions and campuses, where applicable.

Note 2: The counties shown on this graphic are based on the alignment of County FIPS codes to VISN locations as per "Veterans Integrated Services Networks (VISN), Markets, Submarkets, Sectors and Counties by Geographic Location", VA, last updated on June 10, 2020.



denotes the location of a VA facility hub

Source: John Hopkins University; US Census 2019 Estimate; US Department of Veterans Affairs.

Data as of 1/21/2021

VISN 21, SIERRA PACIFIC HEALTH CARE NETWORK

Emergency Events and Responses

From July 1, 2020, to January 1, 2021, VISN 21 faced some unprecedented challenges from hurricanes to wildfires, compounding the existing challenges with responding to COVID-19.

VISN 21 prevalence of confirmed COVID-19 among Veterans Using VHA Services reached 1.9%, compared to 4.6% among the general community, as of January 1, 2021 (see Figure 13.32 for more details). As shown in Table 13.31, there were a total of 6,405 Veteran COVID-19 cases with 303 associated deaths. Employee COVID-19 cases totaled 773 with 6 associated deaths. Using that time, the 7-day rolling average of positive test rates among Veterans Using VHA Services varied between 3% and 14% from July to October, increasing to 33% in December (see Figure 13.32 for more details). For more information on testing, see Table 13.32 for more information. Table 13.32 for more information.

Select VISN 21 HCSs and VAMCs participated in responding to emergency actions described below since July 1, 2020: VA Palo Alto HCS, VA Northern California HCS (Mather), San Francisco VA HCS, Central California HCS (Fresno), Sierra Nevada HCS (Reno), Pacific Islands HCS and the Manilla Clinic. 1318

In July 2020, the Pacific Islands braced for Hurricane Douglas. ¹³¹⁹ The storm disrupted power utilities and caused clinic closures. ¹³²⁰ The Pacific Islands HCS conducted vulnerable patient outreach before and after the hurricane. ¹³²¹

Also in July 2020, a Lassen County wildfire in California necessitated evacuations and outreach to Reno VAMC's vulnerable population, categorized as at-risk-based on the Critical Information Reporting tool provided by the VHA OEM. 1322 Reno's VAMC CBOCs experienced access changes and closures due to loss of power and poor air quality. 1323

Wildfires persisted through August and September 2020 in VISN 21, causing evacuations, clinic closures, challenges with dangerous air quality, personal losses experienced by employees and Veterans, and the need for vulnerable patient outreach. 1324

In November 2020 at the Manilla Clinic in the Philippines, a Super Typhoon ("Goni") produced local flooding that prompted activation of incident response. All employees were accounted for, and the VISN found no damage. 1326

These emergency events during the pandemic required the following:

- Expanding VISN-level incident management 1327
- Expanding facility-level incident management teams already involved with the COVID-19 response¹³²⁸
- Enhancing patient outreach 1329
- Procuring or distributing scarce PPE¹³³⁰
- Managing clinic closures and rescheduling appointments¹³³¹

Issues and Adjustments

VISN 21's response to COVID-19 amidst hurricanes, fires and typhoons differed from its initial response to the pandemic. VISN 21 focused on expanding Incident Command and activated specific annex locations to support vulnerable patient outreach. 1332

Vaccination Planning

Unlike other VISNs, VISN 21 reported that it avoided issues in COVID-19 vaccine distribution and cited multiple reasons, including involving the VISN Scarce Resource Allocation Committee, VISN Vaccination Workgroup and VISN Incident Management Team. ¹³³³ In addition, facility drills supported vaccine distribution readiness. ¹³³⁴ VISN 21 was nationally recognized by VHA and Office of Information Technology Leadership for its "innovative use" of Microsoft Bookings to schedule COVID-19 vaccine appointments. ¹³³⁵

Fourth Mission Support

VISN 21 continued its Fourth Mission support from July 2020 to January 2021, as shown in Appendix B, Fourth Mission Table 16.2. In July 2020, the Reno VAMC provided staff to perform testing at the Northern Nevada SVH. ¹³³⁶ VISN 21 also supported the California Yountville SVH with processing 200 COVID-19 kits on a weekly basis from July to October 2020. ¹³³⁷ When the State of California asked for additional bed capacity in July and December, Palo Alto and Northern California HCS each kept two ICUs and two med surg beds available. ¹³³⁸ Palo Alto ended up supporting CA with a total of six beds, and Northern California supported with two beds for COVID-19 transferred patients. ¹³³⁹

Movement of Resources

Intra-VISN 21 movement of patients, staff and supplies continued from July 1, 2020, to January 1, 2021, in the form of PPE, a portable morgue, freezers and shelters to support expanding care across facilities. 1340 From July 2020 to December 2020,

VISN 21 deployed or detailed 13 staff members to other VISN 21 facilities.¹³⁴¹ In August and September, the Honolulu Pacific Islands HCS received a total of 12 Veterans with critical care needs and 6 escorts from American Samoa as a result of interagency support for Veterans with critical care needs.¹³⁴²

Inter-VISN support included VISN 21 sending 22 staff members to VISNs 5, 17 and 19.¹³⁴³ VISN 21 also sent PPE to VISNs 1 and 22 and sent freezers to VISNs 20 and 22. In return, VISN 21 received critical PPE from VISNs 1, 2, 9, 20 and 22.¹³⁴⁴

Other

VISN 21 leadership noted several lessons learned from this response period:

- The network prepared for successful employee deployment through plans, supplies, equipment and training supported both administratively and technically. 1345
- VISN 21 emphasized the importance of staffing to essential functions to support succession planning.¹³⁴⁶

VISN 21 also made progress towards its Moving Forward Plan goals. Of note, the Northern California HCS facility reported that it met or exceeded its pre-COVID-19 workload volumes across the outpatient clinics by late December 2020. The VISN reported that as of January 1, 2021, it was on track to meet or exceed primary care clinic appointments volume from October 2019 to September 2020. 1348

Tables and Figures

Table 13.31: VISN 21 Key COVID-19 Statistics (March 1, 2020 – January 1, 2021)

Category	Number
Veterans Using VHA Services	336,310
Veteran COVID-19 Cases	6,405
Veteran COVID-19 Inpatients	916
Veteran Deaths (COVID-19 related)	303
VISN Employees	20,659
Employee COVID-19 Cases	773
Employee Deaths (COVID-19 related)	6

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests, confirmed positives & deaths figures exclude Veteran-Employees. Employee tests, confirmed positives and deaths include Veteran-Employees and Non-Veteran Employees. VHA Employee Deaths (COVID-19 related) were identified from Issue Briefs from the deceased's local VAMC. The deceased may have been tested at a VHA test location or an outside location.

Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; Employee Deaths data provided by VHA on 2/3/2021; HR Employee Cube, VSSC, VHA, accessed on 1/25/2021.

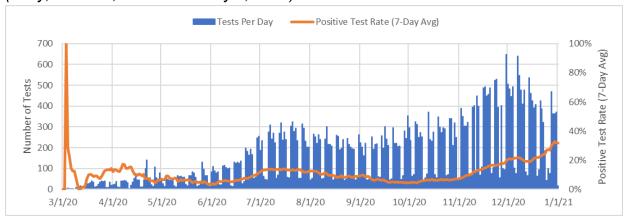
Table 13.32: VISN 21 Veteran Testing (March 1, 2020 – January 1, 2021)

Category		Veterans Using VHA Services		CLC Residents	
Testing	Population Tested	49,660	15%	1,000	90%
Rate	Population	336,310	15%	1,110	90 78
Casa Bata	Population Positive	6,405	20/	135	440/
Case Rate	Population	336,310	2%	1,281	11%

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests and confirmed positives figures exclude Veteran Employees. CLC resident population counts for positive cases were aggregated from March 1, 2020, to January 1, 2021, and CLC resident population counts for testing were aggregated from April 1, 2020, to January 1, 2021 to account for all resident testing after the advent of national universal testing. CLC population tested percentage was calculated using a CLC resident population denominator aggregated from April 1, 2020, through January 1, 2021. CLC population counts as of March 1, 2020, may exclude patients who transferred between VISN CLC locations. COVID-19 case indication is for the period of March 1, 2020 through January 1, 2021 and COVID-19 infection may have occurred prior to (or after) a CLC stay. A portion of CLC patients may be untested due to the following reasons, including but not limited to: CLC patient residence in a CLC facility prior to national universal testing implementation, CLC patient movement between centers, inability to test per decision from the local clinical team, patient discharge or other unique circumstances.

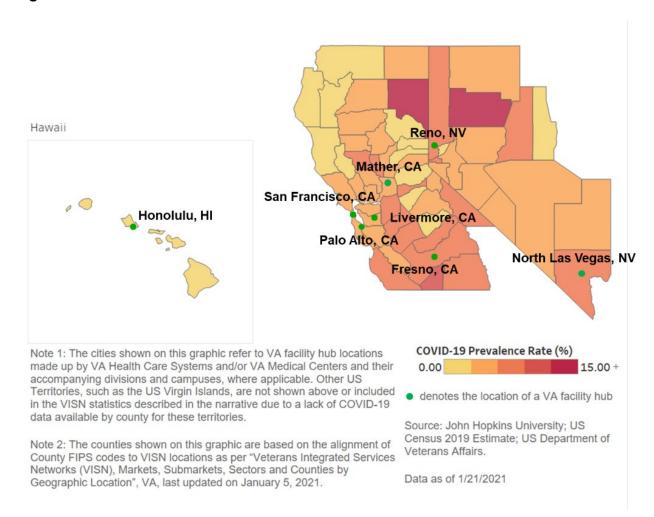
Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; CLC Testing Data provided by HOC, VHA on 2/25/2021; CLC Positivity Data provided by HOC, VHA on 5/4/2021

Figure 13.31: VISN 21 COVID-19 Tests and Positive Test Rate (Daily, March 1, 2020 – January 1, 2021)



Notes: This chart contains testing data for Veterans Using VHA Services compiled from Case Reviews and VA Lab-certified COVID-19 tests. Case Reviews tests are conducted outside of VHA network. Source: NST Dataset, HOC, VHA, accessed 2/21/2021.

Figure 13.32: VISN 21 Prevalence of Confirmed COVID-19 Cases



VISN 22, VA DESERT PACIFIC HEALTH CARE NETWORK

Emergency Events and Responses

From July 1, 2020, to January 1, 2021, VISN 22 faced unprecedented challenges, from managing bed capacity to staffing, primarily due to an increase in COVID-19 infection prevalence rates in the VISN 22 catchment area, and planning for vaccine distribution.

VISN 22 prevalence of confirmed COVID-19 among Veterans Using VHA Services reached 2.5%, compared to 7.0% among the general community, as of January 1, 2021 (see Figure 13.34 for more details). ¹³⁴⁹ As shown in Table 13.33, there were a total of 12,645 Veteran COVID-19 cases with 531 associated deaths. Employee COVID-19 cases totaled 1,251 with 8 associated deaths. ¹³⁵⁰ During that time period, the 7-day rolling average of positive test rates among Veterans Using VHA Services varied from 3% to 18% from August to November, increasing to 40% in December (see Figure 13.27 for more details). For more information on testing, see Table 13.34. ¹³⁵¹

All VISN 22 HCSs participated in responding to emergency actions described below since July 1, 2020: VA Greater Los Angeles HCS, VA Long Beach HCS, VA Loma Linda HCS, VA San Diego HCS, Phoenix VA HCS, Northern Arizona VA HCS, Southern Arizona VA HCS and New Mexico VA HCS. 1352

The sharp rise in COVID-19 infection rates across VISN 22 required all VISN 22 sites to activate surge plans starting in November 2020.¹³⁵³ Surge response actions continued throughout this response period with Greater Los Angeles HCS activating additional plans to increase inpatient bed capacity on January 1, 2021.¹³⁵⁴ Surge plans involved:

- Limiting elective procedures 1355
- Reallocating resources for inpatient operations and increased bed capacity¹³⁵⁶
- Reinstating daily COVID-19 Incident Command calls with field sites¹³⁵⁷
- Coordinating supplies and personnel to most-heavily impacted regions and to support community efforts to respond to surges, including to the Navajo and Phoenix Area IHS sites and Hopi Health Care Center¹³⁵⁸

Issues and Adjustments

VISN 22's response to COVID-19 surges differed from its initial response to the pandemic. When activating resources to combat the surges, VISN 22 focused on activating previously identified surge areas and facilitating the distribution of

supplies, personnel and equipment across sites. ¹³⁵⁹ In late 2020, VISN 22 grew its testing capacity. ¹³⁶⁰ The Pathology and Laboratory Service implemented Abbott Binax COVID-19 antigen testing in addition to its existing testing platforms. ¹³⁶¹ This resulted in VISN 22's testing capacity becoming the largest in VHA. ¹³⁶²

VISN 22 reported issues with the availability of clinical staff, strained due to the late 2020 widespread surge in the Southwestern United States. 1363 VISN 22 relied heavily on its contracting department to assist sites in finding additional staff. 1364 It did this to avoid challenges with an already-stressed VA DEMPS system that VISN 22 reported did not provide a reliable staffing solution due to increased staffing needs across VHA. 1365

Vaccination Planning

As with many VISNs, VISN 22 reported challenges with vaccine planning and vaccine distribution. These included variable allocation of the COVID-19 vaccine, inconsistent vaccination data, and the need to transport COVID-19 vaccine to geographically distant CBOCs to reach rural patients. Since VISN 22 is still working to manage inconsistent vaccine data and variable vaccine allocations.

Fourth Mission

VISN 22 continued its Fourth Mission support from July 2020 to January 2021, as shown in Appendix B, Fourth Mission Table 16.2. In July and August, VISN 22 provided 32 acute care beds to the State of California to increase bed availability for multiple locations within the state. From July through September 2020, VISN 22 provided 4 nurses for 45-day rotations at the Hopi Health Care Center in Palacca, Arizona. 1368

In August, Phoenix provided PPE supplies to White River and Chinle IHS sites. 1369 Following an interagency agreement between VHA and IHS, VISN 22 and certain facilities provided bed support for 17 overflow patients from Navajo and Phoenix area IHS and tribal health system sites, an effort that has continued since November 16, 2020. 1370

In November and December 2020, VISN 22 also resumed acute care bed support for California and Arizona. California's state government requested combined support from VISNs 22 and 21 for a total of up to 38 beds to handle case surges, while Arizona requested up to 5 beds available from VISN 22. 1372

Movement of Resources

Intra-VISN 22 movement of patients, staff and supplies continued from July 1, 2020, to January 1, 2021, in the form of thousands of masks and gowns exchanged between VISN 22 facilities. ¹³⁷³ From July to August 2020, 27 staff members were deployed or detailed to VA Phoenix HCS and Southern Arizona VA HCS. ¹³⁷⁴

Staff and supply movement across VISNs was minimal; VISN 22 received one RN from VISN 15 in July 2020, and VISN 22 provided an ICU ventilator to VISN 20 in November 2020. 1375

<u>Other</u>

As of October 2020, VISN 22 reported achieving 111% of primary care encounters in Southern Arizona HCS and 100% of rehabilitation encounters in the Greater Los Angeles HCS, compared to pre-pandemic encounter levels. Mental health, specialty care, dental and diagnostic encounters were at least 74%, as of October 2020. 1377

Tables and Figures

Table 13.33: VISN 22 Key COVID-19 Statistics (March 1, 2020 – January 1, 2021)

Category	Number
Veterans Using VHA Services	509,653
Veteran COVID-19 Cases	12,645
Veteran COVID-19 Inpatients	1,997
Veteran Deaths (COVID-19 related)	531
VISN Employees	27,264
Employee COVID-19 Cases	1,251
Employee Deaths (COVID-19 related)	8

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests, confirmed positives & deaths figures exclude Veteran-Employees. Employee tests, confirmed positives and deaths include Veteran-Employees and Non-Veteran Employees. VHA Employee Deaths (COVID-19 related) were identified from Issue Briefs from the deceased's local VAMC. The deceased may have been tested at a VHA test location or an outside location. Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on

2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; Employee Deaths data provided by VHA on 2/3/2021; HR Employee Cube, VSSC, VHA, accessed on 1/25/2021.

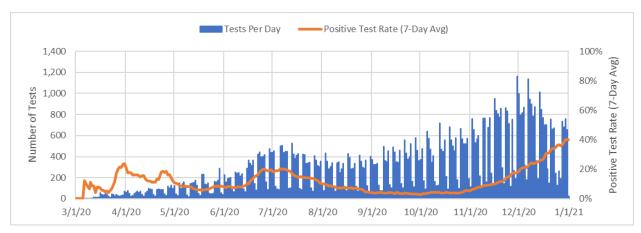
Table 13.34: VISN 22 Veteran Testing (March 1, 2020 – January 1, 2021)

	Category	Veterans Using \	VHA Services	CLC Resid	dents
Testing	Population Tested	90,540	18%	1,686	98%
Rate	Population	509,653	1070	1,726	9070
Case Rate	Population Positive	12,645	2%	250	12%
	Population	509,653		2,158	

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests and confirmed positives figures exclude Veteran Employees. CLC resident population counts for positive cases were aggregated from March 1, 2020, to January 1, 2021, and CLC resident population counts for testing were aggregated from April 1, 2020, to January 1, 2021 to account for all resident testing after the advent of national universal testing. CLC population tested percentage was calculated using a CLC resident population denominator aggregated from April 1, 2020, through January 1, 2021. CLC population counts as of March 1, 2020, may exclude patients who transferred between VISN CLC locations. COVID-19 case indication is for the period of March 1, 2020 through January 1, 2021 and COVID-19 infection may have occurred prior to (or after) a CLC stay. A portion of CLC patients may be untested due to the following reasons, including but not limited to: CLC patient residence in a CLC facility prior to national universal testing implementation, CLC patient movement between centers, inability to test per decision from the local clinical team, patient discharge or other unique circumstances.

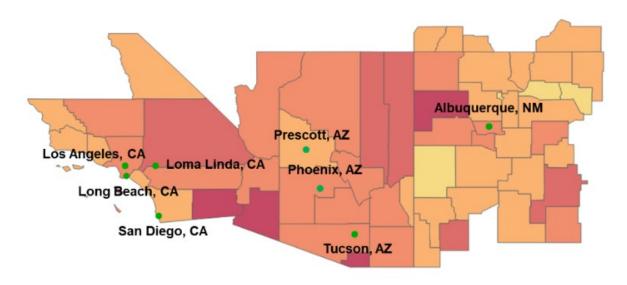
Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; CLC Testing Data provided by HOC, VHA on 2/25/2021; CLC Positivity Data provided by HOC, VHA on 5/4/2021.

Figure 13.33: VISN 22 COVID-19 Tests and Positive Test Rate (Daily, March 1, 2020 – January 1, 2021)



Notes: This chart contains testing data for Veterans Using VHA Services compiled from Case Reviews and VA Lab-certified COVID-19 tests. Case Reviews tests are conducted outside of VHA network. Source: NST Dataset, HOC, VHA, accessed 2/21/2021.

Figure 13.34: VISN 22 Prevalence of Confirmed COVID-19 Cases



Note 1: The cities shown on this graphic refer to VA facility hub locations made up by VA Health Care Systems and/or VA Medical Centers and their accompanying divisions and campuses, where applicable.

Note 2: The counties shown on this graphic are based on the alignment of County FIPS codes to VISN locations as per "Veterans Integrated Services Networks (VISN), Markets, Submarkets, Sectors and Counties by Geographic Location", VA, last updated on January 5, 2021



denotes the location of a VA facility hub

Source: John Hopkins University; US Census 2019 Estimate; US Department of Veterans Affairs.

Data as of 1/21/2021

VISN 23, VA MIDWEST HEALTH CARE NETWORK

Emergency Events and Response

From July 1, 2020, to January 1, 2021, VISN 23 faced some unprecedented challenges—from responding to surges in COVID-19 prevalence rates, to the Sturgis Motorcycle Rally comprised of nearly half a million attendees, to counterfeit masks—all while preparing for vaccine distribution. 1378

VISN 23 prevalence of confirmed COVID-19 among Veterans Using VHA Services reached 3.1%, compared to 8.5% among the general community, as of January 1, 2021 (see Figure 13.36 for more details). ¹³⁷⁹ As shown in Table 13.35, there were a total of 10,015 Veteran COVID-19 cases with 596 associated deaths. Employee COVID-19 cases totaled 563 with 2 associated deaths. ¹³⁸⁰ During that time, the 7-day rolling average of positive test rates among Veterans Using VHA Services varied from 5% to 18% from June to October, increasing to 42% in November (see Figure 13.35). For information about testing, see Table 13.36. ¹³⁸¹

All HCSs in VISN 23 participated in emergency actions described below since June 30, 2020: VA Black Hills HCS, Central Iowa HCS, Fargo VA HCS, Minneapolis VA HCS, VA Nebraska-Iowa HCS, St. Cloud VA HCS, Sioux Falls VA HCS and Iowa City VA HCS. 1382

On June 16, 2020, officials from the Sturgis, South Dakota City Council voted to allow the 80th Annual City of Sturgis Motorcycle Rally to take place, despite the ongoing threat of COVID-19. ¹³⁸³ In August 2020, approximately 462,182 vehicles visited the Sturgis Rally over the 10-day event. ¹³⁸⁴ Following the event, "the Dakotas, along with Wyoming, Minnesota and Montana, were leading the nation in new coronavirus infections per capita." ¹³⁸⁵ According to the CDC, "approximately one third (34%) of 87 counties in Minnesota had at least one primary, secondary, or tertiary case associated with this rally." ¹³⁸⁶

In response to the Sturgis Rally, the Black Hills facility reduced in-person clinical appointments by 50%; only emergency or urgent appointments were allowed to take place in-person. The facility continued to increase its virtual care to accommodate other appointments and in-person encounters increased to 75% in January 2021. 1388

These emergency events during the pandemic required the following:

- Responding to surges in COVID-19 cases by refining facility, staffing and surge plans
- · Reactivating Incident Command

- Making building enhancements to maintain operations and keep staff and patients safe
- Staffing effectively to meet demand
- Preparing for vaccine distribution
- Reducing in-person appointments
- Doubling up beds to meet bed demand

Issues & Adjustments

VISN 23 noted a variety of adjustments made to its network approach to the COVID-19 response compared to the initial months of the pandemic (leading up to July 1, 2020). Facilities reported reevaluating services to balance demand, allocating staff effectively to clinics and adjusting for telework, and eventually shifting to planning for vaccine distribution. ¹³⁸⁹

VISN 23 reported issues working with the VA Office of Community Care OHRS. 1390 VISN leadership described a lack of agility at the national level to respond to requests for additions and a lack of a central source to track completed OHRS actions of training and the assignment of access. 1391

At the facility level, St. Cloud adjusted its approach to protect staff and patients from COVID-19 exposure. St. Cloud's acute mental health patients required the use of specialized masks. Working with the Logistics Department, St. Cloud designed, trialed, approved and acquired a 'No Harm Mask' that excluded any materials contained in medical grade masks that could be used for self-harm by acute mental health patients. The design was shared with and adopted by other VA medical facilities that shared mask requirements for their acute mental health patients.

Vaccination Planning

As with many VISNs, VISN 23 faced challenges with vaccination planning, vaccine distribution and staffing. Vaccine planning activities for VISN 23 began as early as August 2020, with tabletop exercises for vaccination deployment taking place on August 19 and November 6, 2020.

Challenges quickly arose involving vaccine distribution. Vaccines were considered not stable enough to be transported long distances, posing difficulties to get vaccines to rural areas. The VISN's Pharmacy Service shifted vaccines to the HCSs with the highest usage, and the VISN determined that vaccines would be distributed at CBOCs due to location, security, space and storage restrictions. 1396

However, after that determination, VISN 23 noted that by limiting vaccinations to CBOCs, some Veterans were challenged in obtaining vaccinations if they could not travel to the CBOCs. ¹³⁹⁷ This plan required new equipment, and VISN 23 purchased ultra-low temperature freezers, transport freezers and computer-on-wheel carts for new facility clinics created to make space for vaccine deployment. ¹³⁹⁸

To meet staffing requirements at COVID-19 vaccine clinics, VISN 23 created problem-solving teams, regularly evaluated the staffing situation to spot efficiencies, and assigned staff to clinics from other clinical areas. 1399 Newly hired health aids managed outpatient flow, waiting room cleanliness and assistance with CDC compliance requirements. 1400

Fourth Mission

VISN 23 continued its Fourth Mission support from July 2020 to January 2021, as shown in Appendix B, Fourth Mission Table 16.2. In July, VISN 23 sent two RNs to support the Virginia Beach Department of Health. From August to December 2020, VISN 23 provided supplies to: the Meskwaki National Health Clinic in Tama, Iowa; the Iowa SVH in Marshalltown; Standing Rock Reservation in Sioux County; and North Dakota and Corson County, South Dakota; and provided staff support to the White River IHS site in Whiteriver, Arizona. In November 2020, the Minneapolis VA admitted seven community COVID-19 patients to the ICU and one to Medical Surgery.

Movement of Resources

Intra-VISN 23 movement of patients, staff and supplies continued from July 1, 2020, to January 1, 2021, much of which centered on the St. Cloud facility. As of November 2020, St. Cloud was ranked 12th in the nation for cities with the worst COVID-19 outbreaks. Beginning on October 6, 2020, St. Cloud sent 13 Veteran patients to the Minneapolis HCS on COVID-19-related transfers because its facility did not have an inpatient medicine unit. St. Cloud received 13 staff from other VISN 23 facilities. Meanwhile, VISN 23, the VISN 23 Lab and Minneapolis HCS served as the source facilities for supplies sent across the VISN. 1406

Inter-VISN included VISN 23 sending a total of seven staff members via DEMPS deployments to VISNs 5, 6, 9 and 17 and receiving one RN from VISN 4 to St. Cloud. 1407

<u>Other</u>

VISN 23 reported several lessons learned from this response period:

- A multi-disciplinary, VA Nebraska-Iowa HCS-chartered Task Force developed to assess operational impact and mitigation strategies towards organizational resilience has created a synergy with Incident Command, alleviating its burden and allowing Incident Command to focus primarily on its tactical approach to the response, including distribution and administration of the vaccine.¹⁴⁰⁸
- VISN 23 successfully and without shortfall coordinated vaccine shipments and received allocations directly through the VISN coordination instead of facility coordination with Emergency Pharmaceutical Service.¹⁴⁰⁹
- Capitalizing on VISN 23's Integrated Clinical Community structure assisted with COVID testing and vaccination rollout and monitoring.¹⁴¹⁰
- Emergency authority for facility leadership permitted necessary, productive policies.¹⁴¹¹

Tables and Figures

Table 13.35: VISN 23 Key COVID-19 Statistics (March 1, 2020 – January 1, 2021)

Category	Number
Veterans Using VHA Services	324,535
Veteran COVID-19 Cases	10,015
Veteran COVID-19 Inpatients	1,024
Veteran Deaths (COVID-19 related)	596
VISN Employees	16,312
Employee COVID-19 Cases	563
Employee Deaths (COVID-19 related)	2

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests, confirmed positives and deaths figures exclude Veteran-Employees. Employee tests, confirmed positives & deaths include Veteran-Employees and Non-Veteran Employees. VHA Employee Deaths (COVID-19 related) were identified from Issue Briefs from the deceased's local VAMC. The deceased may have been tested at a VHA test location or an outside location.

Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; Employee Deaths data provided by VHA on 2/3/2021; HR Employee Cube, VSSC, VHA, accessed on 1/25/2021.

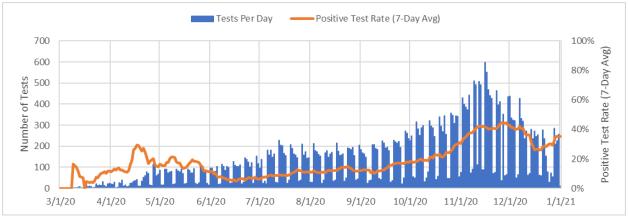
Table 13.36: VISN 23 Veteran Testing (March 1, 2020 – January 1, 2021)

	Category	Veterans Using VI	HA Services	CLC Resid	dents
Testing	Population Tested	41,303	13%	1,129	93%
Rate	Population	324,535	1370	1,212	
Case Rate	Population Positive	10,015	- 3%	171	12%
Case Rate	Population	324,535		1,479	

Note: Veterans Using VHA Services are Veterans who used VHA services from April 1, 2019, to September 30, 2020. Veterans who died prior to February 1, 2020, were excluded from the Veterans Using VHA Services definition. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests and confirmed positives figures exclude Veteran Employees. CLC resident population counts for positive cases were aggregated from March 1, 2020, to January 1, 2021, and CLC resident population counts for testing were aggregated from April 1, 2020, to January 1, 2021 to account for all resident testing after the advent of national universal testing. CLC population tested percentage was calculated using a CLC resident population denominator aggregated from April 1, 2020, through January 1, 2021. CLC population counts as of March 1, 2020, may exclude patients who transferred between VISN CLC locations. COVID-19 case indication is for the period of March 1, 2020 through January 1, 2021 and COVID-19 infection may have occurred prior to (or after) a CLC stay. A portion of CLC patients may be untested due to the following reasons, including but not limited to: CLC patient residence in a CLC facility prior to national universal testing implementation, CLC patient movement between centers, inability to test per decision from the local clinical team, patient discharge or other unique circumstances.

Source: Veterans Using VHA Services data provided by the Allocation Resource Center, VHA, on 2/2/2021; NST Dataset, HOC, VHA, accessed 2/21/2021; CLC Testing Data provided by HOC, VHA on 2/25/2021; CLC Positivity Data provided by HOC, VHA on 5/4/2021.

Figure 13.35: VISN 23 COVID-19 Tests and Positive Test Rate (Daily, March 1, 2020 – January 1, 2021)



Notes: This chart contains testing data for Veterans Using VHA Services compiled from Case Reviews and VA Lab-certified COVID-19 tests. Case Reviews tests are conducted outside of VHA network

Source: NST Dataset, HOC, VHA, accessed 2/21/2021.

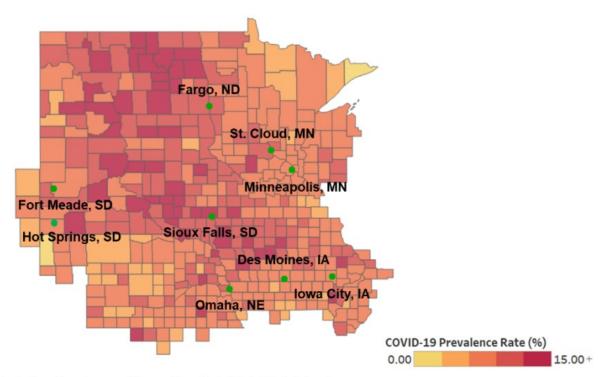


Figure 13.36: VISN 23 Prevalence of Confirmed COVID-19 Cases

Note 1: The cities shown on this graphic refer to VA facility hub locations made up by VA Health Care Systems and/or VA Medical Centers and their accompanying divisions and campuses, where applicable.

Note 2: The counties shown on this graphic are based on the alignment of County FIPS codes to VISN locations as per "Veterans Integrated Services Networks (VISN), Markets, Submarkets, Sectors and Counties by Geographic Location", VA, last updated on January 5, 2021

denotes the location of a VA facility hub

Source: John Hopkins University; US Census 2019 Estimate; US Department of Veterans Affairs.

Data as of 1/21/2021

PREPAREDNESS

This section is focused on strategic considerations to build on the experience of the COVID-19 response to enhance VHA preparedness for future response in support of Veterans and the Nation. VHA plays a strategically significant role in providing a safety net for U.S. medical systems. When emergencies like COVID-19 arise, VHA's ability to mobilize resources and staff is critical to saving lives and preventing further tragedy. Going forward, VHA's strategic capabilities can greatly benefit the U.S. response to emergency medical care situations.

VHA has made sustained organizational improvements that allow it to better serve Veterans and respond to Fourth Mission requests. These improvements have focused on enhancing systems of care, coordinating strategic action and acquiring more capable deployable equipment. By continuing to address issues of preparedness, VHA plans to increase its ability to manage emergency- and disaster-related event impacts.

As outlined in the VHA Modernization Plan, VHA intends to transform its health care delivery systems, technologies and workforce readiness sustainment. These changes will improve VHA's ability to response to emergencies in the future.

VHA is also applying lessons learned during the pandemic response. For instance, VHA is prioritizing:

- Expansion of its current portfolio of partnership coalitions and consortiums (including Federal agencies, academia, private companies and research institutions)
- Improvement and optimization of VHA preparedness as part of a resilient National emergency response model, via implementation of dependable staffing models
- Enhancement of resource preparedness (including equipment, supplies and personnel) in anticipation of future public health emergencies

VHA's ability to move resources, augment capacity and treat large numbers of critically ill or injured patients will depend on the continued advocacy for Enterprise modernization and transformation initiatives that will further strengthen the VHA's ability to mitigate existing preparedness vulnerabilities.

National Resilience and Readiness

Problem Statement: The COVID-19 pandemic was the first public health emergency that required system-wide support to communities and tribal nations from VHA. VHA needed to meet high and widespread demand for infrastructure, staff and resource support. VHA rose to the challenge, mitigating critical issues and responding to a historic number of requests for Federal health services assistance. The sustained VHA response to the extended pandemic demonstrated VHA's capacity and resilience but also imposed considerable stress on VHA's people and systems of care. Strategic decisions about the future of VHA health services have not traditionally weighed preparedness as a priority. The national experience and the experience within the VA Fourth Mission during the pandemic highlight the national imperative for VHA to give priority to its preparedness.

Proposed Solution: Establish VHA preparedness for national response as a strategic priority compatible with VHA's top priority, Veteran support. This will make preparedness for health system emergency support to states and tribal nations a consideration within strategic decisions pertaining to scope of services, infrastructure recapitalization, workforce management, modernization, research capabilities and affiliations. This will bring into focus the strategic synergies between Veteran health services and preparedness for response under the Fourth Mission.

Strategic Drivers of VHA's Role in National Preparedness and Response

The U.S. health care system has been under extreme pressure during this pandemic, which has increased its reliance on Government support in crisis situations. Surges in hospitalization and mortality rates put increased pressure on resource management and bed capacity across the Nation. These are some of the circumstances in U.S. health care posing challenges to pandemic response:

- Significant growth and investment in ambulatory care across U.S. commercial health care systems and adoption of just-in-time supply management models
- A national reduction of critical care capacities
- Shifting health care delivery norms, provider care-setting preferences, reimbursement models and hospital operational management strategies
- Systemic degradation of the U.S. health care network's strategic readiness and overall in-patient care capacity
- Capacity gaps in regional and local hospital systems

VHA Contribution to the National Response

Working alongside Government agencies—including DoD, FEMA, CDC and many others—VHA brought health care operations expertise to the coordinated interagency response as states, tribal nations and IHS requested Federal health service support. This type of support was crucial to providing care to overwhelmed SVHs, community nursing homes, tribal health systems and community hospitals. Response with teams of skilled clinicians and capacity to accept critical care patients from the community proved essential.

VHA's existing portfolio includes 170 regional VAMCs and network of 1,238 ambulatory care facilities. Under VA's Fourth Mission, VHA has supported 47 states, IHS and several tribal nations in response to the COVID-19 pandemic.

VHA worked with Federal, academic, pharmaceutical and institutional research partnerships to increase understanding and treatment of COVID-19. Additionally, VHA research and data continue to support the development of novel therapeutics and the dissemination of knowledge capital with the agility needed to respond to a national health emergency.

Strategies to Enhance VHA's Fourth Mission Response

Problem Statement: The United States does not currently possess a national emergency response model that can identify and deploy health care staff and resources for the duration of an emergency. During the pandemic response, health care systems experienced substantial shortages, which increased difficulties in managing care. VHA's reliance on a volunteer-based system for deployment of staff led to growing difficulty in sourcing available clinical staff for deployment as the pandemic progressed.

Proposed Solution: The COVID-19 Reporting Team proposes the development of rotational deployment teams. Under this model, health care systems will be able to request trained and equipped clinical and non-clinical staff for emergency use. The staff will be prepared to deploy when emergencies are declared.

Proposed Rotational Deployable Teams

Rotational deployment teams would allow VHA to respond rapidly to future public health emergencies and mitigate unknown variables. The idea for these teams was inspired, in part, by the Air Force's continuous deployment model within selected hospitals.

Implementation of rotational deployable teams would facilitate support of VHA's ongoing hospital health care delivery operations, as well as its Fourth Mission. Teams would consist of VAMC staff with a focus on nursing and critical care skill sets. The proposed rotational deployable teams would carry the practices and tools of high reliability into contingency support.

The rotational deployable staffing model aims to inject predictability into emergency response missions that are otherwise unpredictable. Utilization of ready, deployable staffing teams can enhance overall personnel readiness and provide greater stability for VHA leaders when developing long-range plans and budgets.

Success would be determined based on the system's ability to support better understanding of available VHA system capacity through: standardization of VHA Deployment Center team preparedness, dedicated capability resourcing, assured availability of teams and their integration across the Veteran care continuum. The system should also:

- Assure consistent availability and readiness of deployable teams while minimizing impact to hospital operations.
- Focus most complex deployment readiness responsibilities at selected hospitals driven by volume of care, scope of care delivery and operative complexity designation, geographical location in comparison to local and regional patient population densities, and magnitude of established partnerships (academic, local and regional hospitals, research, commercial business entities and others).
- Leverage proximity to Regional Readiness Centers and existing VHA medical supply chain infrastructure.
- Provide predictability of deployment periods for team members.
- Establish predictable schedules driving an organizational battle rhythm.

Model Framework

The COVID-19 Reporting Team proposes a framework with three core elements, designed to ensure the right balance and mix of capabilities for deployment teams. Through this framework, VHA hopes to develop a holistic model that encompasses strategic functions across the continuum of care. The framework should also assist VHA leadership in selecting an appropriate array of existing VAMCs that can be leveraged to serve as sites for sustaining teams of clinically active professionals trained and postured for deployment.

Core Element #1: VHA Deployment Center Evaluation and Selection Methodology

This methodology would be used to select the most appropriate facilities to serve as VHA Deployment Centers for the Fourth Mission. To facilitate future hospital evaluations, the following selection methodology can serve as a basic framework to data-driven evaluations:

- Determine what facilities need to continue to provide current services.
- Evaluate geographical location and network distribution with a peripheral assessment of non-VHA regional hospitals, networks and systems, including proximity to critical access hospitals.
- Evaluate established and pending local partnerships relevant to readiness (including local, regional and academic hospital systems).
- Assess local considerations related to VHA government-civilian workforce densities and availability in the market.
- Determine staffing levels (clinical and non-clinical), focusing on available critical care specialties, followed by non-critical care specialties that could feasibly be leveraged to perform in a critical care function.
- Assess critical-care equipment inventories by hospital; this includes proximity
 to Regional Readiness Centers, which would act as a central source for
 VAMC equipment and supplies' management and reconstitution.
- Evaluate existing hospital patient population trends to determine the feasibility of long-term sustainment of selected in-patient hospital platforms.

Core Element #2: VHA Deployment Center Sustainment Factors

Sustainment factors are activities VHA would conduct to maintain staff and clinical personnel readiness. Critical sustainment fundamentals are as follows:

- Resourcing
 - Establish baseline staffing levels and make sure that deployed staff do not create personnel shortages when removed from everyday assignments.
 - Institute VHA cost-sharing for deployable staff.
 - Establish deployable hospital platform functions, roles and responsibilities to monitor staff, including completions of training, fitness of staff to deploy and serviceability of personal equipment.
 - Monitor capability levels for each deployable hospital platform, including equipment levels and assemblage requirements.

Personnel Incentives

- Prioritize incentives for qualified personnel to enter into contracts for roles on deployment teams, for example:
 - Additional deployment bonuses
 - Clinical/non-clinical specialty pay
 - Access to higher-education opportunities
 - Emergency response specific hazard pay
- Provide deployment specific allowances and hazard-related compensation for personnel actively deployed.

Training

- Establish performance and training plans for deployable platforms, including deployment certifications for both individual staff and platforms.
- Develop and institute specialty-specific knowledge, skills and abilities that should be used to assess the readiness of the deployable platforms.
- Develop and incorporate readiness requirements, which may also include assessments of abilities to function as a cohesive unit.
- Equip each deployable hospital platform with the ability to track and report their teams' readiness (including team and individual readiness). Shortfalls or deficiencies should be reported and remediated.

Core Element #3: Deployment Cycles

A deployment cycle consists of three phases:

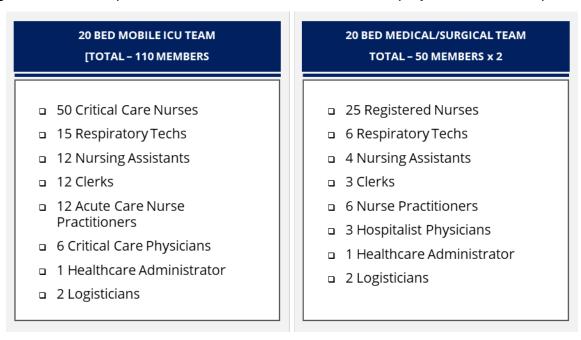
- 1. **Prepare:** Deployable teams train and prepare to either deploy or assume a posture where they are ready to deploy in a contingency operation.
- 2. **Ready to Deploy:** Teams ready and available for deployment in support of a mission assignment or to augment a VHA facility.
- Reconstitute: VMAC Readiness Centers leverage the reconstitution phase to allow teams and individuals to reorganize, take personal leave and prepare for entrance into the prepare phase.

For example, 840 VHA employees within rotational deployment teams distributed among the 4 VISN Consortia could position:

- 1 team at each consortium to staff a 20-bed mobile ICU
- 2 teams to staff two 20-bed medical-surgical inpatient units

The latter teams would be capable of response to augment hospital staff, manage an outbreak in an SVH or staff an alternate site of care. Figure 14.1 shows the composition of the teams for a consortium.

Figure 14.1: Example of a VISN Consortium Rotational Deployable Team Composition



With a mobile ICU team in each consortium (total of four VHA teams) embedded in health care operations at VHA Deployment Centers, the teams could be on coordinated cycles to ensure consistent availability. Figure 14.2 shows an example of the coordination of cycles using four-month blocks such that VHA would always have two 20-bed mobile ICU teams ready and available to deploy.

Figure 14.3 outlines the coordinated cycles with two medical-surgical teams in each consortium. This would provide VHA with consistent availability of 4 teams with each capable of staffing a 20-bed medical-surgical unit.

Figure 14.2: Mobile ICU Teams – 16-Month Cycles

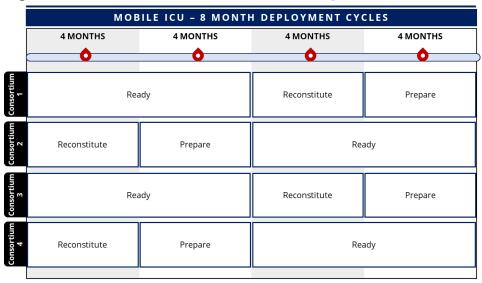
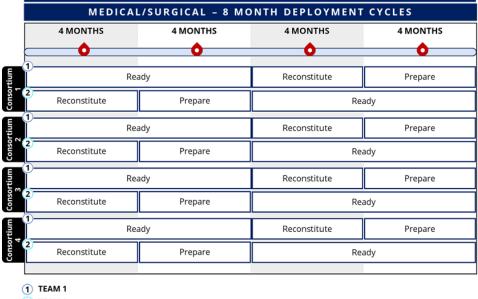


Figure 14.3: Medical/Surgical Teams – 16-Month Cycles



2 TEAM 2

VAMC Staffing Ratios

To address a wide array of response scenarios, VHA should consider adopting a blended staffing approach, mixing volunteer deployers with the rotational deployment team members. This could be beneficial in sustaining volunteer opportunities to deploy and enhance deployable capacity in large-scale contingencies. Table 14.1 provides examples of three scenarios for blended deployments.

Table 14.1: VAMC Rotational Deployable Staffing Ratio Examples

VAMC	VAMC Rotational Deployable Staffing Ratio Examples				
Model	Description	Benefits & Limitations			
1	50% Deployable Team Members + 50% Volunteers	Least cost-intensive when factoring in long-term sustainment and training requirements associated with maintaining readiness for the assigned cadre. However, this model depends on staffing volunteers on the emergence of a public health emergency, which may delay response times due to staff reconstitution in a just-in-time manner.			
2	75% Deployable Team Members + 25% Volunteers	Provides VHA with an optimal ratio of cadre to volunteer staff and can respond to a wide array of scenarios and varying scales.			
3	100% Deployable Team Members + Volunteer Supplement	It is most cost-intensive due to maintaining readiness for the quantity of deployable cadre but allows for rapid response with minimal labor associated with staffing volunteers. Volunteers in this model would be used to augment cadre in a large-scale response effort or a protracted, long-duration scenario.			

Preparedness Considerations in Sizing and Scoping of Health Care Services

Problem Statement: Critical care capacity is essential in response to a public health emergency but also difficult to expand due to facility and skilled staffing requirements. VHA's nationwide networks of Medical Centers have proven important as sources of critical care when community hospitals were at risk of being overwhelmed. Changes to scope of services and potential conversion of VAMCs to ambulatory centers will diminish VHA's capacity to serve as a source of critical care relief for communities.

Proposed Solution: To address current and future VHA critical care capacity demands across VAMCs and ambulatory centers, the COVID-19 Reporting Team proposes incorporating preparedness considerations as options are developed for scope of services, infrastructure enhancement and health facility design. Special considerations should be given to capability for critical care expansion.

When planning for future national public health emergencies, VHA should pay particular attention to its overall preparedness. This should include its ability to respond to contingencies requiring rapid expansion of critical care capacity, as determined and coordinated through the National Response Framework.

When preparing for surges in critically ill patients, VHA must increase the organization's agility to scale in-patient bed capacities. To accomplish this, VHA can assess and evaluate several opportunities to mitigate future critical care capacity-limiting factors associated with both typical surge and mass critical care events, outlined below.

<u>Preparedness in Facility Determination and Design</u>

As VHA develops and assesses options for scope of services at specific locations in support of the Veteran population, decisions with impact to preparedness include scope of services and design features for new VAMC construction. Such decisions will be part of recapitalization determinations for aged infrastructure and for reallocation of resources as the Veteran population shifts geographically.

Preparedness in Recapitalization Considerations

Recapitalization of aged health care infrastructure traditionally involves considerations pertaining to the needs of the Veteran population, efficiency and access to care in the community, partnerships and affiliations. The regional role of a VAMC as a source of response to public health emergencies in support of SVHs, tribal nations, community hospitals and community nursing homes should be carefully considered prior to replacing a VAMC with a facility limited to ambulatory services. This is particularly true if critical care services in the community or region are low in capacity or unable to expand in an emergency. Experience has shown that alternate sites of care are often unsuited for provision of critical care, making expandable hospital facilities important to emergency response.

Preparedness for Design Considerations

Whether the ultimate decision is to build a new VAMC or an ambulatory care facility, design features of new facilities can significantly enhance flexibility in emergency response.

Design of New VAMCs

The COVID-19 pandemic has demonstrated that a public health emergency can dramatically increase demand for critical care, imposing great stress on health facilities and health care personnel.

During its design and construction, VHA VISN 16 incorporated design features into the New Orleans VAMC in anticipation of public health emergency scenarios. During normal operations, the New Orleans VAMC maintains 120 in-patient beds with a mix of critical care, medical-surgical care and other inpatient services. Design features of the New Orleans VAMC facilitated conversion of all inpatient beds to critical care. In response to the COVID-19 crisis, the New Orleans VAMC was able to convert all available in-patient beds to critical care and provided the city of New Orleans with much-needed critical care "safety net" in spring 2020. 1412

Additional design features can facilitate bed expansion such as ventilation systems tailored for creation of additional negative pressure treatment units and inpatient rooms

wired and plumbed for additional beds. Facility design to control the flow of patients and staff to limit exposures during emergency operations also add flexibility.

Ambulatory Specialty Care Facility Conversions

As Veteran populations shift geographically and change numerically, there may be locations where VHA determines a VAMC should transition to an ambulatory care facility. In such a circumstance, preparedness should remain a consideration in design of an ambulatory care VHA facility.

A small VAMC transitioning to an ambulatory care facility will generally be supporting an enrolled Veteran population of sufficient size to drive requirements for VHA specialty care. An ambulatory specialty care facility including ambulatory surgery would be suitable for Veteran support in this circumstance and can include design features for emergency response.

For example, design features for emergency response in an ambulatory specialty care facility with ambulatory surgery could include:

- Flexible space wired and plumbed for use as an emergency medical-surgical unit containing 20 to 30 beds
- Ventilation systems capable of creating negative pressure treatment spaces
- Spaces for staff to put on and take off PPE, rest, maintain treatment supplies, maintain equipment, decontaminate and remotely monitor patients
- Emergency Departments for mass casualty reception, including outdoor spaces for temporary shelters to triage patients
- Telehealth equipment capable of use for remote monitoring and consultation
- Space to accommodate contingency food service (with off-site preparation) for inpatients and staff

As an example of this type of ambulatory specialty care facility with ambulatory surgery, Table 14.2 shows a comparative analysis of an existing U.S. Federal outpatient ambulatory surgical facility with a patient enrollment of approximately 50,000. Specialty staff who provide inpatient services to Veterans at a partner (non-VHA) hospital would sustain continuity of care for Veterans while maintaining clinical currency important to emergency response. Affiliations with academic institutions would enable the staff to conduct clinical research. This facility consists of 681,684 square feet, 4 floors and 8 operatory suites (4 traditional ORs, 2 endoscopies and 2 oral surgery). The FY 2021 cost to construct and staff such a facility is approximately \$467 million, including a parking garage and central energy plant.

Table 14.2: Example of a Federal Health Ambulatory Specialty Care/Surgical Facility

	•	,	,
Federal Amb	ulatory Specialty	/Surgical Facility Use Case	
Staffing Mix	Approximately 1,700 total personnel. The professional staff is 46% of the total personnel and consists of: physicians, nurses, allied health professionals and medical support technicians (respiratory, surgical and medical).		
Clinical Services	Family Health and Embedded Services	Behavioral HealthCase ManagementDisease Management	NutritionPharmacyUrgent Care
	Internal Medicine	Treatment SupportPatient Education	 Procedure Clinic Services
	Other Services	 Mental Health Urology Orthotics Physical Therapy Allergy/Immunizations Diabetes and Nutrition Laboratory and Specimen Collection Gastroenterology Cardiology GME Ambulance Transport 	 Dermatology Audiology Speech Women's Health and Mammography Radiology Chiropractic Sleep Lab Pulmonary Hyperbaric Treatment Blood Donation Emergency Medicine
	Ambulatory Surgical Services	 Oral Orthopedics Bariatric and Colo-rectal Refractive Post-surgical inpatient care 	GeneralGenitourinaryEar, Nose, and Throat (ENT)

Regional Maintenance of Deployable Equipment and Supplies

Serviceable deployment-ready equipment is a critical component of VHA preparedness. As VHA adds additional capacity to deploy and staff mobile ICUs, maintenance of the deployable equipment and team familiarity with the equipment will become more important to preparedness. As VHA establishes its Regional Ready Centers to gain resilience in its supply chain, consideration of a broader role for the Regional Readiness Centers warrants consideration. The maintenance of deployable equipment at the Regional Readiness Centers could have a number of benefits to VHA preparedness, including the following:

- Consolidate biomedical equipment maintenance,
- Distribute equipment geographically to lessen transport time in response
- Make equipment accessible to the consortium rotational deployment teams for training
- Enable maintenance of supply inventories for response with deployable equipment

CONCLUSIONS

Throughout the Annex period, VHA continued to encounter unique challenges, which required changes and adjustments to its COVID-19 response. Although the findings in the Initial Report remain as described, the Annex time period brought new insight to some of the conclusions.

Overall Response

From July 1, 2020, to January 1, 2021, the United States experienced recurring periods of accelerated spread of COVID-19. This produced surges in demand for hospital care that sometimes pushed community critical care beyond capacity. Nationally, the number of people requiring inpatient care undulated; each peak was higher than the last. Health care systems, the supply chain, the economy and society were under steadily increasing stress.

Overall, the sustained, coordinated response by VHA to the pandemic during the Annex report period reflected remarkable commitment and resilience throughout the organization. After mitigating multiple issues in the early months of the pandemic, VHA stabilized its response during this period.

VHA mounted a sustained, fully effective response that met the needs of its enrolled Veterans in terms of care for COVID-19 and resumption of overall health services. VHA sustained extensive use of virtual care tools to maintain access to care and provide outreach to Veterans with chronic medical conditions. VHA also increased provision of in-person care during this period in accordance with its Moving Forward guidance.

VHA adapted its coordinated national approach to the evolution of the pandemic. The variable regional spread of COVID-19 required a location-specific response, adjusting the scope of services, the status of surge plans and the allocation of resources to meet forecasted demand for inpatient care. Under VA's Fourth Mission, VHA continued to work with states, communities and tribal nations to address emergency requirements.

The pace took its toll on VHA's volunteer process for deploying staff. Due to the high number of requests for VHA support under the Fourth Mission and support to VAMCs experiencing high demand, VHA faced growing difficulty in sourcing available volunteers for mission assignments. Nevertheless, VHA continued to offer assistance to communities and tribal nations in crisis, and VHA fulfilled all mission assignments and taskings.

As the response continued, VHA effectively planned and prepared for COVID-19 vaccine distribution and vaccination of Veterans and staff. VHA initiated vaccination immediately following initial national distribution of vaccine.

National and Interagency Coordination

Finding: VHA employed a highly effective and rapid process for pre-coordination of requests for Federal health services assistance. The process assured detailed requirements were defined within the requests. Pre-coordination enabled rapid dispositions at ESF #8 and FEMA.

Finding: VHA interagency coordination during planning for COVID-19 vaccination and vaccine distribution was highly effective. This coordination led to timely preparation for vaccine administration with functioning data linkages.

<u>Context</u>: During the Annex period, COVID-19 spread to areas of the United States that had experienced little impact from this disease prior to July 1, 2020. In addition, several networks that had experienced surges limited to one or two medical centers now experienced widespread increases in cases and hospitalizations. The accelerated spread of COVID-19 occurred in multiple geographic locations simultaneously, which put increased pressure on the heath care systems, especially hospitals. As a result, several regions of the United States required emergency support at the same time.

<u>Conclusions</u>: State governments, IHS and tribal nations all increased their requests for Federal health services assistance during the Annex period. As Federal agencies worked together to address the challenges, interagency coordination matured and gained efficiency. This was particularly true for VHA. As the senior VHA representative to ESF #8, the Acting DUSH worked with the other agencies to identify requests for Federal assistance to which VHA could respond.

During the Annex period, OEM added a rotating emergency manager liaison to the interagency coordination process. The emergency manager liaison supported the Acting DUSH in accelerating pre-coordination within VHA. This enabled the Acting DUSH to provide dispositions quickly regarding VHA support to ESF #8 and FEMA.

During this period, IHS and selected tribal health systems required support from VHA. The requested support most often consisted of on-site clinical staff to care for patients with COVID-19 and inpatient care for COVID-19 patients transferred to VAMCs. The IHS and tribal health systems who requested support generally lacked

the resources and processes needed to secure additional clinical staff during a surge in demand for health care. VHA networks (most notably VISN 22) with existing collaborative relationships and agreements with tribal nations proved particularly agile in pre-coordination and response.

VHA was highly effective coordinating its planning and actions for COVID-19 vaccination and vaccine distribution. In planning for vaccine distribution, VHA collaborated with the national vaccination planning initiative (then known as Operation Warp Speed), CDC and FDA.

Coordination with this collection of key agencies allowed VHA to create functioning data programs and connections prior to initial vaccine distribution. VHA was also able to identify facilities for receipt of initial vaccine shipments in anticipation of FDA approval of vaccines under EUA.

Emergency Management and Readiness

Finding: VHA successfully deployed staff to multiple national locations during the Annex period despite significant sourcing challenges, including sustained medical-surgical inpatient operations in the VHA mobile ICU.

Finding: VHA struggled to source volunteers via DEMPS as the extended pandemic continued to increase demand for staff deployment.

<u>Context</u>: Critical care services throughout the United States were pushed beyond capacity. Many health care organizations struggled to meet demand for inpatient care. Outbreaks in community nursing homes and SVHs continued, often resulting in high mortality.

<u>Conclusions</u>: VHA fulfilled all mission assignments during this period, deploying volunteer VHA staff for on-site support at multiple locations.

After operational testing in VISN 12, OEM made effective modifications to the mobile ICU assemblage. The operational experience with the mobile ICU equipment as an 18-bed medical-surgical inpatient platform has been successful and indicates it is fully capable for critical care.

During this period, DEMPS proved suboptimal for sourcing the high continuing requirements for deployed staff. This reinforced the need for a future system with staff formally designated for deployment and sustained in a state of preparedness. For recommendations, see the Preparedness Section.

Leadership and Organization

Finding: VHA very effectively sustained and adapted its processes for coordinated response as the pandemic significantly increased demands for inpatient care in multiple regions simultaneously.

<u>Context</u>: In July and August 2020, the United States experienced sustained periods of accelerated spread of COVID-19 in regions across the South, Southwest and Upper West. This pattern of accelerated spread in multiple regions recurred in late November and December 2020, creating the need for emergency response actions at multiple locations simultaneously.

<u>Conclusions</u>: VHA sustained the operational framework for coordinated response that was created in spring 2020. However, the changing character of the pandemic prompted VHA to change its operational model to location-specific actions informed by analytics.

In communities where critical care had reached maximum capacity, network directors activated surge plans that offered up to 20% of inpatient capacity under the Fourth Mission. Network directors and VAMC directors continued to interact and coordinate with local health entities experiencing severe impacts from the pandemic. This adjusted approach was highly effective in meeting the needs of enrolled Veterans and communities in need.

Vaccine Planning and Distribution

Finding: VHA planning was effective and timely for mass vaccination of enrolled Veterans and staff; planning was also effective and timely for distribution and handling of the vaccine.

Finding: The VHA Occupational Health Record-Keeping System lacked capability for enterprise tracking of mass vaccination.

<u>Context</u>: During the Annex period, clinical trials for multiple COVID-19 vaccines were in progress internationally. In December 2020, FDA granted EUA to two vaccines: one manufactured by Pfizer, one by Moderna. Vaccine distribution and administration in the United States began almost immediately.

<u>Conclusions</u>: VHA accomplished comprehensive planning for distribution, handling, documentation and administration of the vaccine, including rapid reporting to the CDC. Through coordination and planning, VHA was able to administer immediately

following FDA emergency use authorization and initial distribution and assure that the vast majority of allocated vaccine doses were in Veterans' arms within two to three days.

Data links to CDC and FDA were established and operational prior to initial vaccine distribution. Storage restrictions for the initial vaccines were anticipated, and appropriate storage devices were in place at the onset of distribution.

Existing information systems were adapted to monitor vaccine inventory and document vaccine administration, in keeping with CDC requirements. The Occupational Health Record-Keeping System was identified for documentation of non-Veteran employee vaccinations.

For more information, see recommendation 1 in the Recommendations section of this Annex.

Health Equity in the Veteran Population

Finding: Rates for COVID-19 infection and death among Black and Hispanic Veterans were higher than those for White Veterans, similar to the disparity in rates among the U.S. population.

Finding: VHA provided data and toolkits to inform outreach during the pandemic to Veterans at risk for health disparities based on race. Published evidence suggests that outcomes for Veterans treated for COVID-19 did not vary by race among Veterans treated by VHA.

Finding: Impact of the pandemic on LGBT Veterans is uncertain because data systems do not enable Veterans to self-identify sexual orientation or gender identity.

<u>Context</u>: As the pandemic progressed, CDC data revealed disproportionately high rates of COVID-19 infection and death among Black, Hispanic and Native American segments of the population. National surveys of the U.S. general population regarding trust in the COVID-19 vaccine revealed lower levels of acceptance among Black Americans.

<u>Conclusions</u>: Evidence suggests that the prevalence of confirmed COVID-19 among enrolled Veterans was lower than community prevalence. However, evidence also suggests that disparities in prevalence of COVID-19 among Black, Hispanic and

White Veterans reflect inequities in the communities with higher prevalence between Hispanic and Black Veterans. Available data does not enable a computation of rates for Native American Veterans.

During this period of the pandemic response, VHA provided the networks with information, data and toolkits for the mitigation of health disparities among Veterans. Published evidence from a VA study suggests that outcomes among Veterans treated in VHA for COVID-19 do not vary by race.¹⁴¹³

VHA incorporated vaccine acceptance factors by race into communications products for vaccination of Veterans and staff. VHA planned to convene focus groups during the vaccination effort to gain specificity on factors influencing vaccine acceptance among Veterans in minority groups to inform the communications planning. However, VHA has not yet developed a process for measuring and monitoring trends in vaccine acceptance as the pandemic and vaccine administration progressed.

For more information, see recommendation 2a and 2b in the Recommendations section of this Annex.

High Reliability

Finding: VHA generated continued progress in its commitment to zero harm through its implementation of High Reliability principles. The sustained emphasis on leadership commitment, safety culture and continuous process improvement proved beneficial. Front line teams and support teams adapted these processes and systems of care during their response to the pandemic.

<u>Context</u>: The pandemic was highly disruptive to health care operations nationwide. Health care professionals in hospitals struggled with the sustained high pace under stressful circumstances. Fatigue coupled with altered systems of care elevated the risk for errors and harm to patients and staff.

Conclusions: VHA continued its implementation of high reliability during the pandemic response. Training was adjusted to include more use of virtual tools to enable training to safely proceed. Virtual learning proved effective, and VHA was able to continue implementing high reliability techniques in line with the plans it had established prior to the pandemic. VHA adapted messaging, tools, leadership engagement and communications into the pandemic response to keep the application of the principles of high reliability visible and relevant. Some of the adjustments via virtual tools have accelerated the outreach to the facilities and may become permanent techniques.

Research with serial measurement over two to three years will need to be conducted in order to fully assess the impact of the pandemic response on safety culture in VHA. However, collateral indications from patient safety reporting and observations from events (such as virtual patient safety forums) suggest that VHA's safety culture has continued to progress during the pandemic response.

Data and Analytics

Finding: VHA has improved its consolidation and presentation of clinical data. These advancements have provided an essential foundation to effective response to public health emergencies.

<u>Context</u>: Regional COVID-19 needs required VHA to create tailored responses to focus resources while managing economic and social impacts. Response authorities at every level found that timely and accurate data with analytics was essential to managing the allocation of strained health resources.

<u>Conclusions</u>: VHA made continuous progress in advancing NST during the Annex period. Significant enhancements to NST went live in November 2020, providing a clinical and epidemiologic common operating picture accessible throughout VHA.

VHA worked to improve its data quality throughout this period. Improving data quality is an activity NST managers regard as critical to continuously advancing the tool. The enhancements to NST include sharing data with CDC and HHS, which will be important to a future bio-surveillance tool.

VHA's data consolidation was valuable as a basis for analytics and research. It will continue to be used for clinical trials and other studies that advance scientific knowledge of the health effects and treatment of Coronavirus infections.

Supply Chain

Finding: VHA effectively balanced central and local procurement to supply the pandemic response while also monitoring pandemic supplies via an interim tool for inventory visibility.

Finding: VHA moved forward with actions to initiate its supply chain resiliency strategy as the pandemic progressed.

<u>Context</u>: During the Annex period, the spread of COVID-19 sustained high demand for medical supplies needed for care of this disease. The United States continued to

struggle to procure needed quantities of supplies such as PPE. The limited manufacturing base for PPE required continued procurement from international sources HHS began the process of rebuilding the Strategic National Stockpile, which contributed to demand for these types of supplies.

<u>Conclusions</u>: VHA utilized PPE under CDC contingency guidelines. Although VHA met PPE needs throughout this period, the procurement of PPE remained difficult due to scarcity in the market. At times, VHA had to make PPE substitutions, using authorized alternatives in accordance with CDC guidelines.

Central procurement remained essential to supplying VHA facilities, especially because vendors could not fulfill orders consistently. Central procurement enabled VHA to consolidate orders so large orders could be submitted directly to manufacturers. This had the added benefit of protecting against counterfeit supplies, which penetrated vendor stocks during the Annex period.

VHA initiated its accelerated modernization and resilience strategies by:

- Establishing interim Regional Readiness Centers
- Accelerating the implementation plans for DMLSS
- Initiating the incremental movement of local supply procurement to DLA

Continued progress on these actions will be coupled with plans to implement changes to standard supply chain management. Together, these improvements will enable efficiencies and enhance VHA resilience for contingency response.

For more information, see recommendations 3a through 3c in the Recommendations section of this Annex.

Clinical Operations

Finding: VHA effectively participated in monitoring and dissemination of evolving evidence-based guidelines for prevention, diagnosis and treatment of COVID-19. Evidence suggests that VHA actions to protect vulnerable populations in CLCs and SCI units were effective.

<u>Context</u>: Evidence-based knowledge of COVID-19 prevention, diagnosis and treatment grew during the Annex period as studies initiated early in the pandemic were published. Therapeutic options expanded with FDA EUA of monoclonal antibodies. Studies to definitively assess efficacy and safety for multiple therapeutics progressed, and some therapeutics with EUA proved ineffective or marginally effective.

<u>Conclusions</u>: During the Annex period, VHA advised its clinicians to follow NIH guidelines for COVID-19 care. Updated guidelines were presented on an NIH website. Representatives of VHA were part of the NIH panel that monitored evidence and established guidelines.

VHA testing capacity expanded during this period. As testing capacity expanded, VHA adjusted testing guidelines to enable surveillance of CLC and SCI unit staff. The primary limitation on testing capacity was access to supplies and reagents for the devices.

As COVID-19 transmission increased, VHA evolved to a locality-specific approach that expanded in-person care as permitted by the rate of COVID-19 spread in each community. At times, sustained acceleration of local spread required rolling back elective procedures and limitations of in-person care as surge plans were activated.

Fourth Mission

Finding: IHS and several tribal health systems required sustained VHA emergency support in some locations due to insufficient resources to respond to outbreaks of COVID-19.

<u>Context</u>: The national spread of COVID-19 generated continued requests for Federal assistance from states, IHS and tribal nations. Multiple community health systems sustained elective surgical procedures despite sustained accelerated spread of COVID-19 in the community, leaving them with diminished capacity when the pandemic-driven surge in demand for inpatient care hit the community. This contributed to requests for VHA assistance from states. Many such requests required response by clinical teams for on-site provision of care and consultation, for which VHA was often the only available source. Surges in hospitalization exceeded community capacity and generated urgent needs that were difficult to provide at alternate sites.

<u>Conclusions</u>: VHA sustained effective responses to SVHs, community hospitals and nursing homes while also opening critical care beds for transfers from multiple locations. VHA's mobile ICU assemblage proved effective as a medical-surgical inpatient platform and appears capable for critical care. However, the stresses of sustained response under Fourth Mission led to difficulty sourcing available staff for deployment, as described in the Emergency Management segment.

IHS and tribal nation requests for assistance highlighted the need for greater resilience and response capacity for those systems of care. Existing local

relationships with periodic communications and coordination between VHA facilities and tribal nations has proven effective in facilitating early consultation.

Existing relationships also streamlined communication so that requests for support were clearly defined and more quickly validated. Improving the resilience of IHS and tribal health systems will improve health equity for Native Americans.

For more information, see recommendations 4a through 4d in the Recommendations section of this Annex.

Research and Innovation

Finding: VHA sustained existing clinical research while adjusting its focus to generating new knowledge regarding the prevention, diagnosis, health effects and treatment of COVID-19. VHA and its Veteran volunteers made significant contributions to clinical trials of newly developed COVID-19 vaccines.

<u>Context</u>: During the Annex period, the international scientific effort focused on clinical trials of COVID-19 vaccines and clinical trials of a variety of therapeutic agents. Additionally, international research was in progress to contribute new knowledge on the spread of COVID-19 and effectiveness of protective measures.

<u>Conclusions</u>: VHA research engaged in the international effort to generate new evidence for efforts to prevent, diagnose and treat COVID-19. During the Annex period, the total number of VHA COVID-19 research projects rose to 292 across 70 VHA sites. VHA participated in clinical trials of five different COVID-19 vaccines.

Research projects included clinical trials of COVID-19 therapy with monoclonal antibodies and studies of immune response to the viral pathogen. VHA sustained organized and rapid synthesis of all research in progress in close collaboration with the World Health Organization in order to avoid duplication of effort. The number of published scientific papers pertaining to COVID-19 by VA authors rose to 301 during this period.

A VHA study for the FDA was designed, approved by the institutional review board and initiated to determine the effectiveness of 3D printed swabs for PCR tests. The 3D printing initiative for pandemic supplies continues work on a sustainable business model scalable for surges in demand.

Future Preparedness

Finding: The national pandemic response demonstrated the importance of Fourth Mission support in assisting community and tribal health systems, particularly in health emergencies. The nationwide capacity and on-site response capability (with an emphasis on the provision of critical care) proved highly beneficial in numerous communities.

<u>Context</u>: The pandemic has placed increased attention on critical issues in health care across the United States. Governments at every level have been forced to grapple with these issues, including:

- · Supply chain shortfalls
- Demands for critical care
- Protection of vulnerable populations
- · Generation of new clinical knowledge
- Stress on the medical workforce
- Alterations to systems of care, including postponement of elective procedures when epidemiologic data forecasted surges in demand for inpatient care
- Management of data
- Vaccine development
- Planning for mass vaccination

<u>Conclusions</u>: The scale and scope of VHA's health care capacity enabled response under VA's Fourth Mission with reach and capacity that no other health system can provide. VHA has made sustained organizational improvements that allow it to better serve Veterans and respond to Fourth Mission requests. These improvements have focused on enhancing systems of care, coordination of strategic action and acquisition of more capable deployable equipment. By continuing to address issues of preparedness, VHA has the opportunity to increase its resilience and enhance its agility in response to public health emergencies.

VHA has the opportunity to consider enhancements to its preparedness in support of national strategies. The experiences and lessons from COVID-19 will provide valuable insight to inform VHA's incorporation of preparedness into strategies. These enhancements should be considered alongside larger interagency emergency response plans, as led by the HHS Assistant Secretary for Preparedness and Response.

Strategic enhancements to preparedness could include creation of VAMC Deployment Centers with embedded rotational deployment teams. Enhancements could also include preparedness considerations in decisions about future scope of services and facility recapitalization. Facility design for flexibility in emergency response and regional management of deployable equipment could be additional enhancements.

For more information, see recommendations 5a through 5c in the Recommendations section of this Annex.

RECOMMENDATIONS

The following recommendations are supplementary to those in the Initial Report.

1. Vaccine Planning and Distribution

Consider using tools such as surveys and focus groups, managed by the Veterans Experience Office, to monitor trends in factors influencing vaccine acceptance among Veterans and staff. This data should inform continuing outreach and communications to improve vaccine acceptance in specific groups of concern, including those defined by race and ethnicity, gender, age and community.

2. Health Equity

- a. Develop rates for confirmed COVID-19 and deaths related to COVID-19 among the Veteran population using VHA services stratified by race and ethnicity, age and gender with appropriate caveats. Conduct trend analysis of rates among this Veteran population to inform outreach strategies for prevention, vaccination and treatment.
- b. Develop a process similar to self-identification of race for Veterans to voluntarily identify sexual orientation and gender identity. This will enable outreach, analytics and research focused on health equity among this population of Veterans.

3. Supply Chain

- a. Complete a strategy that outlines the long-term objectives for Regional Readiness Centers.
- Consider potential roles in supporting consortium preparedness, such as management of deployable equipment sets, training for deployable teams and bed expansion kits.
- c. Determine how the Regional Readiness Centers will integrate with overall supply chain management for daily operations and preparedness beyond the current pandemic.

4. Fourth Mission

 Consider development of a strategy for enhanced collaboration with tribal nations and IHS, with a primary focus on strong local agreements supported by central collaboration with IHS. Working with IHS, jointly

- pursue legislative support and resources for collaboration within VHA modernization initiatives with the goal of enhancing health infrastructure, emergency response and tools for tribal nations.
- Consider development of a partnership engagement toolkit, including centrally developed tools for networks to build and sustain relationships with tribal nations and IHS facilities.
- c. Prioritize establishment of local agreements with tribal nations and IHS facilities, including high reliability, patient safety programs, quality of care measurement and continuing education. Include utilization of the partnership engagement toolkit.
- d. Develop deployable teams of shared VA and IHS/tribal health personnel at select locations to actively engage in daily health care operations.
 This team would facilitate the collaboration within particular systems of care and VHA response under its Fourth Mission to tribal nations.

5. Preparedness

- a. Develop a system maintaining designated clinical staff ready for deployment on rotating schedules at selected VAMCs identified as deployment centers. Build sufficient capability and capacity in the system to serve as VHA's primary source for deployable staff with the volunteer system as augmentation.
 - Deployable teams should engage in daily health care delivery while sustaining readiness for deployment.
 - Distribute VAMC Deployment Centers such that deployable teams are distributed evenly among the four VHA Consortia
 - Synchronize cyclic availability of teams across the four Consortia such that VHA sustains constant availability of two 20-bed ICU teams and four 20-bed medical surgical teams
- b. Develop a strategy for enhancing preparedness of Fourth Mission responses, including considerations for current VHA infrastructure and scope of services across the country.
 - Include assessment of aging infrastructure throughout VHA facilities (as well as IHS and tribal facilities).
 - Use these infrastructure assessments to create preparedness criteria pertaining to research partnerships and capacity.

- Include specific design features for new VHA facilities (whether they
 are VAMCs or ambulatory specialty facilities), providing flexibility for
 contingency operations such as critical care expansion or
 contingency medical-surgical inpatient care.
- c. Build plans for the regional management of deployable equipment and supplies (potentially at the Regional Readiness Centers) in order to gain agility in deployment of equipment, facilitate hands-on training for ready deployment teams and gain efficiencies in biomedical maintenance.

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APPENDICES

Appendix A: Stakeholder Interviews

Table 16.1 below outlines the interviews completed by the VHA COVID-19 Response Report Cell that contributed to the creation of the Annex. Interviewees' roles are as of January 1, 2021.

Table 16.1: Stakeholder Interviews Performed for Annex Report

Date	Interviewee	Interviewee Role
Multiple	Dr. Richard Stone	Executive in Charge, VHA Office of the Under Secretary for Health
January 13, 2021	Dr. Gary Roselle and Dr. Shantini Gamage	Director, VHA National Infectious Disease Service; Epidemiologist, VHA National Infectious Disease Service
January 15, 2021	Dr. Gerry Cox	Assistant Under Secretary for Health for Quality and Patient Safety, VHA
January 15, 2021	Barbara Morton	VA Deputy Chief Veterans Experience Officer – Special Surveys of Veterans on Vaccine Acceptance
January 15, 2021	Dr. Carolyn Clancy	Assistant Under Secretary for Health for Discovery, Education and Affiliate Networks, VHA
January 19, 2021	Dr. Leslie Hausmann	Research Health Scientist – Health Equities Tools for Veterans Affairs Medical Centers
January 20, 2021	Dr. Larry Mole	Executive Director, VHA Office of Public Health
January 20, 2021	Dr. William (Bill) Patterson and Alfred Montoya	VISN 15 Network Director; Director of VA Connecticut Healthcare System
January 20, 2021	Dr. Joe Francis	Executive Director, VHA Office of Analytics and Performance Integration
January 22, 2021	Dr. Jennifer MacDonald	Chief Consultant to the VHA Deputy Under Secretary for Health – IT aspects: Vaccination Planning; Alternate Deployment
January 22, 2021	Dr. Jillian Shipherd	Director, LGBT Health Program, Patient Care Services, VHA National Center for PTSD, Women's Health Sciences Division at VA Boston HCS

Date	Interviewee	Interviewee Role		
January 25, 2021	Dr. Skye McDougall	VISN 16 Network Director – Vaccination Planning/Distribution and Health Equities		
January 25, 2021	Renee Oshinski	Assistant Under Secretary for Health for Operations, VHA		
January 25, 2021	Jessica Bonjorni	Chief, Human Capital Management, VHA		
January 26, 2021	Dr. Paul Kim	Executive Director, Office of Emergency Management, VHA		
January 26, 2021	Dr. Steven Lieberman	Acting Deputy Under Secretary for Health, VHA		
January 26, 2021	Rachel Goffman	Program Specialist – VHA Modernization Readiness Lane of Effort		
January 27, 2021	Dr. Susan Kirsh	Acting Deputy Assistant Under Secretary for Health for Access, VHA		
January 28, 2021	Dr. Grant Huang	Deputy Chief Research and Development Officer, VHA – Enterprise Optimization		
January 28, 2021	Deborah Kramer	Acting Assistant Under Secretary for Health for Support Services, VHA		
February 1, 2021	Dr. William Gunnar and Dr. Gary Sculli	Executive Director, VA National Center for Patient Safety, VHA; Program Analysis Officer, VA National Center for Patient Safety		
February 1, 2021	Dr. Jane Kim	VHA National Center for Health Promotion and Disease Prevention, Chief Consultant for Preventive Medicine – Vaccination Planning and Distribution		
February 4, 2021	Dr. Jessica Wang-Rodriquez	Acting Director, VA National Pathology and Lab Med Program		
February 5, 2021	Dr. Kameron Matthews	Assistant Under Secretary for Health for Clinical Services, VHA		
February 5, 2021	Dr. Ernest Moy	Executive Director, Office of Health Equity, VHA		
February 5, 2021	Dr. Patricia Hayes	Chief Consultant, Women's Health Services, VHA – Women's Health and Health Equities		
February 8, 2021	Tammy Czarnecki	Deputy Assistant Under Secretary for Health for Operations, VHA		

Date	Interviewee	Interviewee Role		
February 9, 2021	Fran Cunningham	Research Coordinator – Vaccine Distribution and Adverse Reactions		
February 9, 2021	Ed Litvin	Deputy Assistant Under Secretary for Health for Health for Administrative Operations, VHA – Supply Chain		
February 9, 2021	Dr. Thomas Klobucar	Executive Director, Office of Rural Health, VHA		
February 19, 2021	Juan Cosme	Director of Operations, Planning, and Readiness, VHA		

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Appendix B: Fourth Mission Activities

Table 16.2 was created using data provided by the VISNs regarding their Fourth Mission activities. Line items that did not appear related to Fourth Mission have been removed from the table (for example, if the location provided was a VAMC). Where relevant, titles have been adjusted for consistency.

Table 16.2: Fourth Mission Activities

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
1	Deer Isle, ME	Maine Community Nursing Home	1	12/15/2020	12/28/2020	Staffing Support	3 RNs, 3 MSAs, Clerk
1	Whiteriver, AZ	IHS	22	7/13/2020	7/26/2020	Staffing Support	4 RNs
1	Summit, AZ	IHS	22	7/16/2020	7/29/2020	Staffing Support	2 RNs
1	St. James, MO	Missouri St. James SVH	15	10/9/2020	10/22/2020	Staffing Support	LPN
1	Manchester, NH	New Hampshire (Catholic Medical Center)	1	10/24/2020	11/10/2020	Staffing Support	3 CNAs, 2 LPNs, RN
1	Manchester, NH	New Hampshire (St. Teresa)	1	10/28/2020	11/11/2020	Staffing Support	7 RNs, 3 Housekeepers
1	Tilton, NH	New Hampshire SVH	1	11/23/2020	12/7/2020	Staffing Support	2 RNs, LPN, 2 CNAs
1	Rocky Hill, Ct	Connecticut SVH	1	12/14/2020	12/28/2020	Staffing Support	5 RNs, 5 CNAs
2	Polacca, AZ	IHS	22	8/25/2020	9/10/2020	Staffing Support	RN

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
2	Polacca, AZ	IHS	22	7/28/2020	8/13/2020	Staffing Support	RN
2	Polacca, AZ	IHS	22	8/14/2020	8/27/2020	Staffing Support	RN
2	Houston, TX	Hurricane Delta	17	10/14/2020	10/27/2020	Staffing Support	Fire/Police
2	Houston, TX	Hurricane Delta	17	9/18/2020	10/1/2020	Staffing Support	Nursing Assistant
2	New Iberia, LA	Iberia Medical Center	16	8/2/2020	8/8/2020	Staffing Support	RN
2	New Iberia, LA	Iberia Medical Center	16	8/2/2020	8/8/2020	Staffing Support	RN
2	New Iberia, LA	Iberia Medical Center	16	8/2/2020	8/8/2020	Staffing Support	RN
2	New Iberia, LA	Iberia Medical Center	16	8/2/2020	8/8/2020	Staffing Support	RN
2	Edison, NJ	Menlo Park SVH	2	10/19/2020	11/1/2020	Staffing Support	Admin/Mgmt
2	Edison, NJ	Menlo Park SVH	2	10/19/2020	11/1/2020	Staffing Support	Admin/Mgmt
2	Edison, NJ	Menlo Park SVH	2	10/19/2020	11/1/2020	Staffing Support	Clinical Nurse Specialist
2	Edison, NJ	Menlo Park SVH	2	10/19/2020	11/1/2020	Infection Control	Infection Control
2	St Louis, MO	Missouri St Louis SVH	15	10/1/2020	10/14/2020	Staffing Support	RN
2	St Louis, MO	Missouri St Louis SVH	15	10/1/2020	10/14/2020	Staffing Support	Nursing Assistant
2	St Louis, MO	Missouri St Louis SVH	15	10/1/2020	10/14/2020	Staffing Support	Nurse, LPN/LVN
2	St Louis, MO	Missouri St Louis SVH	15	10/4/2020	10/17/2020	Staffing Support	Nurse, LPN/LVN

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
2	Tilton, NH	New Hampshire SVH	1	12/1/2020	12/14/2020	Staffing Support	Nursing Assistant
2	Tilton, NH	New Hampshire SVH	1	12/2/2020	12/15/2020	Staffing Support	Nursing Assistant
2	Tilton, NH	New Hampshire SVH	1	11/30/2020	12/13/2020	Staffing Support	Nurse, LPN/LVN
2	Tilton, NH	New Hampshire SVH	1	12/2/2020	12/15/2020	Staffing Support	Nurse, LPN/LVN
2	Tilton, NH	New Hampshire SVH	1	11/29/2020	12/12/2020	Staffing Support	Nurse, LPN/LVN
2	Tilton, NH	New Hampshire SVH	1	11/27/2020	12/16/2020	Staffing Support	Nurse Manager
2	Tilton, NH	New Hampshire SVH	1	12/2/2020	12/15/2020	Staffing Support	Nurse, LPN/LVN
2	Tilton, NH	New Hampshire SVH	1	11/27/2020	12/10/2020	Staffing Support	Nurse, LPN/LVN
2	Tilton, NH	New Hampshire SVH	1	11/27/2020	12/10/2020	Staffing Support	Nurse, LPN/LVN
2	Monroe, LA	Northeast Louisiana War Veterans' Home SVH	16	12/18/2020	12/31/2020	Staffing Support	Nursing Assistant
2	Paramus, NJ	Paramus Veterans Memorial Home SVH	2	7/15/2020	7/29/2020	Staffing Support	RN
2	Honolulu, HI	Queen's Medical Center	21	9/7/2020	9/20/2020	Staffing Support	RN
2	Richmond, VA	Sitter & Barfoot SVH	6	10/21/2020	11/3/2020	Staffing Support	Nurse, LPN/LVN

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
2	Oxford, MS	Mississippi Oxford SVH	16	8/16/2020	8/31/2020	Staffing Support	Nursing Assistant
2	Oxford, MS	Mississippi Oxford SVH	16	8/16/2020	8/31/2020	Staffing Support	RN
2	Show Low, AZ	Summit Healthcare Regional Medical Center	22	7/15/2020	7/28/2020	Staffing Support	RN
2	Wilmore, KY	Thomson-Hood SVH	9	10/16/2020	10/29/2020	Staffing Support	Nurse, LPN/LVN
2	Richmond, VA	Sitter & Barfoot SVH	6	11/1/2020	11/17/2020	Staffing Support	Nurse, LPN/LVN
2	Roanoke, VA	Virginia Veterans Care Center SVH	6	10/24/2020	11/6/2020	Staffing Support	Nursing Assistant
2	Roanoke, VA	Virginia Veterans Care Center SVH	6	10/24/2020	11/6/2020	Staffing Support	RN
2	Whiteriver, AZ	IHS	22	7/24/2020	8/6/2020	Staffing Support	RN
2	Whiteriver, AZ	IHS	22	7/24/2020	8/6/2020	Staffing Support	RN
2	Whiteriver, AZ	IHS	22	7/24/2020	8/6/2020	Staffing Support	RN
2	Hilo, HI	Yukio Okutsu SVH	21	9/17/2020	9/30/2020	Staffing Support	Admin/Support
2	Hilo, HI	Yukio Okutsu SVH	21	9/17/2020	9/30/2020	Staffing Support	Nurse, LPN/LVN
2	Hilo, HI	Yukio Okutsu SVH	21	9/29/2020	10/12/2020	Staffing Support	Nurse, LPN/LVN
2	Yuma, AZ	Yuma Regional Medical Center	22	7/15/2020	7/28/2020	Staffing Support	Case Manager

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
4	Whiteriver, AZ	IHS	22	7/13/2020	9/10/2020	Staffing Support	3 staff
4	Whiteriver, AZ	IHS	23	7/24/2020	8/6/2020	Staffing Support	2 staff
4	Yuma, AZ	Yuma Regional Medical Center	22	7/16/2020	7/29/2020	Staffing Support	2 staff
4	Oxford, MS	Mississippi Oxford SVH	16	8/30/2020	9/10/2020	Staffing Support	1 staff
4	Oxford, MS	Mississippi Oxford SVH	16	12/9/2020	12/22/2020	Staffing Support	1 staff
4	St. James, MO	Missouri St. James SVH	15	9/23/2020	10/6/2020	Staffing Support	1 staff
4	Cape Girardeau, MO	Missouri Veterans Home Cape Girardeau SVH	15	10/1/2020	10/25/2020	Staffing Support	1 staff
4	Warrensburg, MO	Missouri Warrensburg SVH	15	10/12/2020	10/25/2020	Staffing Support	1 staff
4	Multiple Locations	Menlo Park SVH, Paramus Veterans Memorial Home SVH	2	10/29/2020	10/23/2020	Staffing Support	1 staff
4	Multiple Locations	Menlo Park SVH, Paramus Veterans Memorial Home SVH	2	10/19/2020	11/1/2020	Staffing Support	1 staff
4	Multiple Locations	Menlo Park SVH, Paramus Veterans Memorial Home SVH	2	10/19/2020	11/6/2020	Staffing Support	1 staff

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
4	Multiple Locations	Menlo Park SVH, Paramus Veterans Memorial Home SVH	2	11/1/2020	11/7/2020	Staffing Support	1 staff
4	Multiple Locations	Menlo Park SVH, Paramus Veterans Memorial Home SVH	2	11/8/2020	11/13/2020	Staffing Support	1 staff
4	Roanoke, VA	Virginia Veterans Care Center SVH	6	10/21/2020	11/3/2020	Staffing Support	1 staff
4	Roanoke, VA	Virginia Veterans Care Center SVH	6	11/4/2020	11/17/2020	Staffing Support	2 staff
4	Altoona, PA	Hollidaysburg Veterans Home SVH	4	9/21/2020	9/21/2020	PPE, Supplies and/or Equipment	Supplies including gloves, lens cuffs, surgical masks, hand sanitizer, isolation gowns face shields
4	Pittsburgh, PA	Southwest Veterans' Center SVH	4	7/29/2020	8/28/2020	PPE, Supplies and/or Equipment	Supplies including gloves, gowns, masks, hand sanitizer, face shields
4	Roanoke, VA	Virginia Veterans Care Center SVH	6	11/18/2020	12/1/2020	Staffing Support	1 staff
4	Roanoke, VA	Virginia Veterans Care Center SVH	6	11/29/2020	12/12/2020	Staffing Support	2 staff
4	Wilmore, KY	Thomson-Hood SVH	9	10/29/2020	11/13/2020	Staffing Support	1 staff

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
4	Multiple Locations	Missouri St James SVH, Missouri Cape Girardeau SVH, Missouri Warrensburg SVH	15	9/23/2020	10/25/2020	PPE, Supplies and/or Equipment	Supplies including gloves, gowns, blood pressure cuffs, thermometers
4	Pittsburgh, PA	Pittsburgh Support of Community Hospital	4	7/16/2020	7/29/2020	PPE, Supplies and/or Equipment	Supplies including gloves, gowns, masks, hand sanitizer, face shields, hair coverings
4	Spring City, PA	Southwest SVH	4	6/28/2020	8/29/2020	Staffing Support	30 staff
4	Erie, PA	Pennsylvania Soldiers' and Sailors' Home SVH	4	12/29/2020	1/9/2021	Staffing Support	1 staff
5	Oxford, MS	Mississippi Oxford SVH	9	12/9/2020	12/22/2020	Staffing Support	Nursing Assistant
5	Oxford, MS	Mississippi Oxford SVH	9	12/9/2020	12/22/2020	Staffing Support	Nursing Assistant
5	Richmond, VA	Sitter & Barfoot SVH	6	11/1/2020	12/1/2020	Staffing Support	Health Tech
5	Wilmore, KY	Thomson-Hood SVH	9	10/16/2020	10/29/2020	Staffing Support	2 Nursing Assistants
5	Roanoke, VA	Virginia Veterans Care Center SVH	6	10/24/2020	12/7/2020	Staffing Support	Health Tech

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
5	Beckley, WV	Beckley Area Regional Hospital	5	N/A	N/A	PPE, Supplies and/or Equipment	1 Ventilator & 10 Bipap masks
5	Martinsburg, WV	Berkley Medical Center	5	N/A	N/A	Education and/or Training	Training on Portacount
5	Martinsburg, WV	Berkley Medical Center	5	N/A	N/A	PPE, Supplies and/or Equipment	1 TSI Portacount
5	Polacca, AZ	IHS	22	7/28/2020	8/27/2020	Staffing Support	2 RNs
5	Saint Louis, MO	Missouri St Louis SVH	15	10/4/2020	10/17/2020	Staffing Support	Nursing Assistant
5	Tilton, NH	New Hampshire SVH	1	12/3/2020	12/16/2020	Staffing Support	Health Tech
5	Greenville, SC	Pendleton Manor	7	N/A	N/A	PPE, Supplies and/or Equipment	100 gowns
5	Prinston, WV	Princeton Community Hospital	5	N/A	N/A	PPE, Supplies and/or Equipment	2 Bipaps
5	Richmond, VA	Sitter & Barfoot SVH	6	10/21/2020	11/3/2020	Staffing Support	Nurse LPN/LVN
5	Show Low, AZ	Summit Healthcare Regional Medical Center	22	7/16/2020	7/29/2020	Staffing Support	1 Nurse Manager
5	Show Low, AZ	Summit Healthcare Regional Medical Center	22	7/16/2020	7/29/2020	Staffing Support	1 RN

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
5	Tucson, AZ	Tucson Medical Center	22	7/16/2020	7/29/2020	Staffing Support	1 Nurse Practitioner
5	Tucson, AZ	Tucson Medical Center	22	7/16/2020	7/29/2020	Staffing Support	1 RN
5	Tucson, AZ	Tucson Medical Center	22	7/15/2020	7/28/2020	Staffing Support	1 RN
5	Hilo, HI	Yukio Okutsu SVH	21	10/4/2020	10/6/2020	Staffing Support	Trade/Craft
5	Honolulu, HI	Queen's Medical Center	21	9/10/2020	9/23/2020	Staffing Support	1 RN
6	Multiple Locations	Commonwealth of Virginia	6	7/6/2020	7/25/2020	Staffing Support	1 RN
6	Multiple Locations	Commonwealth of Virginia	6	7/6/2020	7/25/2020	Staffing Support	Admin-Time Keeper
6	Multiple Locations	Commonwealth of Virginia	6	7/6/2020	7/19/2020	Staffing Support	RN-ICU/CCU
6	Multiple Locations	Commonwealth of Virginia	6	7/12/2020	7/25/2020	Staffing Support	RN-Acute Care
6	Multiple Locations	Commonwealth of Virginia	6	6/28/2020	7/25/2020	Education and/or Training	4 staff to assess and provide guidance on CDC processes and procedures
6	Multiple Locations	Commonwealth of Virginia	6	6/22/2020	7/25/2020	Education and/or Training	2 RNs, 1 industrial Hygienist; Evaluate, Educate, Train and Fit Test Nursing Home Professionals
6	Multiple Locations	Commonwealth of Virginia	6	7/6/2020	7/19/2020	Staffing Support	1 RN, 1 Safety Staff

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
6	Black Mountain, NC	Black Mountain Neuro Treatment Center	6	7/1/2020	7/1/2020	COVID-19 Testing	4 RNs swabbed 346 staff at the facility
6	Canton, NC	Silver Bluff Long Term Care Facility	6	8/12/2020	8/29/2020	Staffing Support	2 RNs
6	Kenansville, NC	Duplin County, NC Health Department	6	9/27/2020	10/10/2020	Staffing Support	3 RNs
6	Canton, NC	Silver Bluff Long Term Care Facility	6	8/12/2020	8/25/2020	Staffing Support	RN-Ambulance Care
6	Whiteriver, AZ	IHS	22	8/4/2020	8/17/2020	Staffing Support	1 RN
6	Hopi, AZ	IHS	22	8/25/2020	9/10/2020	Staffing Support	2 RNs
6	Hilo, HI	Yukio Okutsu SVH	21	9/29/2020	10/12/2020	Staffing Support	1 LPN
6	Alexandria, LA	Hurricane Laura	16	8/29/2020	9/2/2020	Staffing Support	DO
6	Alexandria, LA	Hurricane Laura	16	8/29/2020	9/11/2020	Staffing Support	Industrial Hygienist
6	Alexandria, LA	Hurricane Laura	16	8/29/2020	9/13/2020	Staffing Support	Med-Surg RN
6	Richmond, VA	Sitter & Barfoot SVH	6	10/21/2020	11/3/2020	Staffing Support	1 RN
6	Richmond, VA	Sitter & Barfoot SVH	6	10/21/2020	11/3/2020	Staffing Support	1 RN
6	Richmond, VA	Sitter & Barfoot SVH	6	10/21/2020	11/17/2020	Staffing Support	1 RN

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
6	Richmond, VA	Sitter & Barfoot SVH	6	10/21/2020	11/3/2020	Staffing Support	1 RN
6	Richmond, VA	Sitter & Barfoot SVH	6	10/21/2020	11/17/2020	Staffing Support	1 RN
6	Richmond, VA	Sitter & Barfoot SVH	6	10/21/2020	11/3/2020	Staffing Support	RN/Nurse Manager
6	Richmond, VA	Sitter & Barfoot SVH	6	11/1/2020	11/17/2020	Staffing Support	1 NA
6	Roanoke, VA	Virginia Veterans Care Center SVH	6	11/1/2020	12/15/2020	Staffing Support	1 RN
6	Show Low, AZ	Summit Healthcare Regional Medical Center	22	7/15/2020	7/28/2020	Staffing Support	2 RNs
7	Columbia, SC	E Roy Stone Jr. Veterans Pavilion SVH	7	10/16/2020	10/16/2020	Education and/or Training	N95 Fit Test training for staff from 2 SVHs
7	Walterboro, SC	Veterans' Victory House Nursing Home SVH	7	7/5/2020	7/19/2020	Staffing Support	3 RNs, 1 LPN, 4 NAs
7	Saint Louis, MO	Missouri St. Louis SVH	15	9/22/2020	10/5/2020	Staffing Support	1 NA
7	Saint Louis, MO	Missouri St Louis SVH	15	10/1/2020	10/15/2020	Staffing Support	2 NAs
7	King, WI	Wisconsin King SVH	12	10/15/2020	10/31/2020	Staffing Support	1 RN, 1 LPN

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
7	Wilmore, KY	Thomson-Hood SVH	9	10/16/2020	10/29/2020	Staffing Support	1 LPN, 2 NAs
7	Richmond, VA	Sitter & Barfoot SVH	6	10/24/2020	11/6/2020	Staffing Support	2 RNs
7	Roanoke, VA	Virginia Veterans Care Center SVH	6	10/24/2020	11/6/2020	Staffing Support	1 RN
7	Wilmore, KY	Thomson-Hood SVH	9	10/31/2020	11/13/2020	Staffing Support	1 LPN
7	Roanoke, VA	Virginia Veterans Care Center SVH	6	11/1/2020	11/17/2020	Staffing Support	3 RNs, 1 NA
7	King, WI	Wisconsin King SVH	12	11/9/2020	11/22/2020	Staffing Support	1 LPN
7	Roanoke, VA	Virginia Veterans Care Center SVH	6	11/18/2020	12/1/2020	Staffing Support	2 RN (Nurse manager), 1 NA
7	Roanoke, VA	Virginia Veterans Care Center SVH	6	12/1/2020	12/14/2020	Staffing Support	1 LPN
7	Roanoke, VA	Virginia Veterans Care Center SVH	6	12/2/2020	12/16/2020	Staffing Support	1 NA
7	Oxford, MS	Mississippi Oxford SVH	9	12/9/2020	12/22/2020	Staffing Support	2 LPNs
7	Pell City, AL	Colonel Robert L. Howard SVH	7	12/14/2020	12/28/2020	Staffing Support	6 RNs, 8 LPNs, 6 NAs
7	Pell City, AL	Colonel Robert L. Howard SVH	7	12/28/2020	1/10/2021	Staffing Support	2 RNs, 5 LPNs, 3 NAs
7	Bay Minette, AL	William F. Green SVH	16	12/31/2020	1/13/2021	Staffing Support	2 RNs

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
7	Columbia, SC	State of South Carolina: Department of Health	7	8/5/2020	8/5/2020	PPE, Supplies and/or Equipment	100 shoe covers, 100 hair bonnets
7	Alexander City, AL	Bill Nichols SVH	7	9/4/2020	9/4/2020	PPE, Supplies and/or Equipment	1200 gowns
7	Alexander City, AL	Bill Nichols SVH	7	8/17/2020	8/17/2020	Infection Control, Education and/or Training	Consultative visit to review IC practices and provide feedback on PPE usage, patient assignments and IC practices
7	Alexander City, AL	Bill Nichols SVH	7	8/24/2020	8/24/2020	Infection Control, Education and/or Training	A consultative visit was completed
7	Alexander City, AL	Bill Nichols SVH	7	9/10/2020	9/10/2020	Infection Control, Education and/or Training	A consultative visit to review the care and infection control practices was completed
8	El Paso, TX	William Beaumont Army Medical Center	17	11/17/2020	12/14/2020	Staffing Support	RN, 28 days
8	Winter Haven, FL	Consulate Healthcare Winter Haven	8	7/3/2020	7/16/2020	Infection Control, Education and/or Training	2 RNs, 2 LPNs, 1 Physician
8	Largo, FL	Oak Manor Healthcare & Rehab Center	8	8/16/2020	8/21/2020	Infection Control, Education and/or Training	2 RNs, 2 LPNs, 1 Physician

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
8	Clearwater, FL	Seasons Memory Care Clearwater	8	6/30/2020	7/3/2020	Infection Control, Education and/or Training	1 MD, 2 RNs, 2 LPNs, 1 Specialty Care Provider (RT, PT, OT)
8	Sarasota, FL	Heron East	8	7/3/2020	7/14/2020	Infection Control, Education and/or Training	3 MDs, 6 RNs, 6 LPNs, 3 Respiratory Therapists
8	Naples, FL	Solaris North Naples	8	7/15/2020	7/19/2020	Infection Control, Education and/or Training	1 MD, 2 RNs, 2 LPNs, 1 Specialty Care Provider (RT, PT, OT)
8	Auburndale, FL	Oak Haven Auburndale	8	7/21/2020	7/28/2020	Infection Control, Education and/or Training	1 MD, 7 RNs, 1 ARNP, 2 LPNs, 1 Specialty Care Provider (RT, PT, OT)
8	Inverness, FL	Avante Inverness	8	7/29/2020	8/2/2020	Infection Control, Education and/or Training	1 ARNP, 2 RNs, 2 LPNs, 1 Specialty Care Provider (RT, PT, OT)
8	Naples, FL	Solaris Healthcare Imperial	8	8/5/2020	8/11/2020	Infection Control, Education and/or Training	1 MD, 5 RNs
8	Pensacola, FL	Rehabilitation Center at Park Place	8	8/14/2020	8/19/2020	Infection Control, Education and/or Training	1 ARNP, 1 Specialty Care Provider (RT, PT, OT), 2 RNs, 2 LPNs
8	Inverness, FL	Citrus Health and Rehab	8	9/7/2020	9/19/2020	Infection Control, Education and/or Training	2 MDs, 4 RNs, 4 LPNs

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
8	Saint Augustine, FL	Clyde E. Lassen SVH	8	7/2/2020	7/3/2020	Infection Control, Education and/or Training	1 MD, 4 RNs
8	Lake City, FL	Robert H. Jenkins Jr. Veteran's Domiciliary Home in Lake City SVH	8	7/22/2020	8/6/2020	Bed Capacity	Admitted 1 COVID-positive patient
8	Lake City, FL	Robert H. Jenkins Jr. Veteran's Domiciliary Home in Lake City SVH	8	8/14/2020	8/28/2020	Bed Capacity	Admitted 9 COVID-positive patients
8	Daytona Beach, FL	Emory Bennett SVH	8	8/10/2020	8/10/2020	PPE, Supplies and/or Equipment	Swab collection kit universal, 100 EA
8	Daytona Beach, FL	Emory Bennett SVH	8	9/1/2020	9/1/2020	PPE, Supplies and/or Equipment	Swab, collection kit universal, 350 EA
8	Daytona Beach, FL	Emory Bennett SVH	8	9/10/2020	9/10/2020	PPE, Supplies and/or Equipment	Swab, collection kit universal, 600 EA
8	Gallup, NM	IHS	22	6/21/2020	7/7/2020	Staffing Support	RN, 14 days
8	Tuba City, AZ	IHS	22	6/22/2020	7/5/2020	Staffing Support	RN, 14 days
8	Whiteriver, AZ	IHS	22	7/2/2020	7/15/2020	Staffing Support	RN, 14 days
8	Lake Charles, LA	Hurricane Delta	16	10/27/2020	11/9/2020	Staffing Support	RN, 14 days

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
8	Lake City, FL	Robert H. Jenkins Jr. Veteran's Domiciliary Home in Lake City SVH	8	6/25/2020	10/16/2020	Bed Capacity	Admitted 25 COVID-positive patients
8	Lake City, FL	Robert H. Jenkins Jr. Veteran's Domiciliary Home in Lake City SVH	8	7/7/2020	7/7/2020	COVID-19 Testing	102 Jenkins residents tested
8	Richmond, VA	Sitter & Barfoot Veterans Care Center SVH	6	11/1/2020	11/17/2020	Staffing Support	NA, 14 days
8	Hilo, HI	Yukio Okutsu SVH	21	8/31/2020	9/13/2020	Staffing Support	RN, 14 days
8	Lake Charles, LA	Hurricane Laura	16	9/7/2020	9/20/2020	Staffing Support	Police officer, 14 days
8	Hilo, HI	Yukio Okutsu SVH	21	9/17/2020	9/30/2020	Staffing Support	RN, 14 days
8	Lake Charles, LA	Hurricane Laura	16	9/18/2020	10/1/2020	Staffing Support	Social Worker, 14 days
8	Lake Charles, LA	Hurricane Laura	16	10/14/2020	10/28/2020	Staffing Support	Social Worker, 14 days
8	Lake Charles, LA	Hurricane Laura	16	8/27/2020	9/9/2020	Staffing Support	Police officer, 14 days
8	Lake Charles, LA	Hurricane Laura	16	9/18/2020	10/1/2020	Staffing Support	RN, 14 days
8	Cameron, MO	Missouri Veterans Home Cameron SVH	15	10/29/2020	11/11/2020	Staffing Support	RN, 14 days
8	St. James, MO	Missouri St. James SVH	15	10/9/2020	10/22/2020	Staffing Support	RN, 14 days

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
8	St. James, MO	Missouri St. James SVH	15	9/23/2020	9/28/2020	Staffing Support	LPN, 5 days
8	St. James, MO	Missouri St. James SVH	15	9/23/2020	10/6/2020	Staffing Support	RN, 14 days
8	St. James, MO	Missouri St. James SVH	15	9/23/2020	10/6/2020	Staffing Support	RN, 14 days
8	Lake Charles, LA	Hurricane Laura	16	9/18/2020	10/1/2020	Staffing Support	MSA, 14 days
8	Hilo, HI	Yukio Okutsu SVH	21	9/17/2020	9/30/2020	Staffing Support	LPN, 14 days
8	Saint Petersburg, FL	Apollo Health, St. Petersburg	8	7/1/2020	7/8/2020	Staffing Support	2 MDs, 4 RNs, 2 LPNs, 1 Infection Preventionist
8	Saint Petersburg, FL	Jacaranda Manor, St. Petersburg	8	7/9/2020	7/24/2020	Staffing Support	1 MD, 4 RNs, 1 LPN, 1 Infection Preventionist
8	Avon Park, FL	Oaks at Avon	8	7/9/2020	7/30/2020	Staffing Support	1 MD, 2 RNs, 1 LPN
8	Gainesville, FL	North Florida Rehabilitation and Specialty Care	8	8/24/2020	8/26/2020	Staffing Support	2 MDs, 2 RNs, 2 LPNs, 1 Infection Preventionist
8	Orlando, FL	University of Central Florida Nemours Children's Hospital	8	7/1/2020	1/1/2021	COVID-19 Testing	360 COVID-19 tests completed
8	Daytona Beach, FL	Emory Bennett SVH	8	7/1/2020	1/1/2021	COVID-19 Testing	1425 COVID-19 tests completed

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8	Naples, FL	Naples Green Village	8	6/26/2020	7/3/2020	Staffing Support	1 ARNP, 2 RNs, 1 Nurse Manager, 1 LPN, 1 Health Care Tech
8	Fort Myers, FL	Heritage Park Ft. Myers	8	7/3/2020	7/17/2020	Staffing Support	2 ARNP, 6 RNs, 2 LPNs, 2 NAs
8	Live Oak, FL	Surrey Place Live Oak	8	7/17/2020	7/24/2020	Staffing Support	1 ARNP, 1 Nurse Educator, 1 Nurse Manager, 1 LPN, 1 Health Care Tech, 1 RN
8	Sarasota, FL	Pines of Sarasota	8	7/27/2020	8/1/2020	Staffing Support	1 ARNP, 1 Nurse Mgr, 2 RNs, 1 LPN, 1 NA
8	Miami, FL	Plaza Healthcare	8	8/7/2020	8/18/2020	Staffing Support	1 ARNP, 3 RNs, 2 LPNs
8	Fort Myers, FL	Winkler Court	8	8/19/2020	8/20/2020	Staffing Support	1 ARNP, 1 Nurse Educator, 1 Nurse Mgr, 1 LPN, 1 NA, 1 RN
8	Tampa, FL	Whispering Oaks	8	8/23/2020	8/28/2020	Staffing Support	1 ARNP, 1 Nurse Mgr, 1 Nurse Educator, 1 LPN, 1 NA, 1 RN
8	Bartow, FL	Bartow Center	8	7/21/2020	7/21/2020	Staffing Support, Infection Control	1 MD, 2 RN, 1 NA, 1 LPN, 1 MSN (Infection Control)
8	Palm Harbor, FL	Stratford Court of Palm Harbor	8	8/12/2020	8/21/2020	Staffing Support	1 MD, 1 NA, 1 LPN, 2 RNs
8	Saint Augustine, FL	Clyde E. Lassen SVH	8	12/17/2020	On-Going	Staffing Support	9 RN, 27 LPN/CNA, 3 NA
8	Saint Augustine, FL	Clyde E. Lassen SVH	8	7/20/2020	7/20/2020	COVID-19 Testing	Tested 98 residents
8	Lake City, FL	Robert H. Jenkins Jr. Veteran's Domiciliary Home in Lake City SVH	8	11/18/2020	1/8/2020	Bed Capacity	Admitted 37 COVID-positive patients

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
8	Panama City, FL	Clifford Chester Sims SVH in Panama City	8	11/13/2020	11/21/2020	Bed Capacity	Admitted 2 COVID-positive patients
8	Saint Augustine, FL	Clyde E. Lassen SVH	8	11/21/2020	12/31/2020	Bed Capacity	Admitted 12 COVID-positive patients
8	Multiple Locations	VHA COVID-19 Vaccine Interagency Partnership/Fourth Mission Workgroup	8	12/7/2020	On-Going	COVID-19 Vaccination	Pharmacist dedicated 0.5 FTEE for up to 120 days; 2 MSA leads designated as facility points of contact for coordination of registration and appointment scheduling
8	Winter Haven, FL	Winter Haven Health and Rehab	8	7/8/2020	7/12/2020	Staffing Support	1 MD, 3 RNs, 2 LPNs
8	Marianna, FL	Marianna Health and Rehab	8	7/12/2020	7/18/2020	Staffing Support	1 MD, 3 RNs, 2 LPNs
8	Saint Augustine, FL	Clyde E. Lassen SVH	8	7/20/2020	7/20/2020	Staffing Support	1 MD, 2 RNs, 2 LPNs
8	Avon Park, FL	Oaks at Avon	8	7/23/2020	7/27/2020	Staffing Support	1 ARNP, 3 RNs, 2 LPNs
8	Mayo, FL	Lafayette Nursing and Rehabilitation Center	8	8/9/2020	8/21/2020	Staffing Support	2 MDs, 4 RNs, 3 LPNs, 1 HT, 1 OT
8	Daytona Beach, FL	Emory Bennett SVH	8	7/6/2020	12/8/2020	Bed Capacity	Admitted 35 patients
8	Margate, FL	Northwest Medical Center	8	8/24/2020	N/A	Bed Capacity	Admitted 1 patient

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
8	Pembroke Pines, FL	Alexander Nininger Nursing Home	8	12/22/2020	N/A	Bed Capacity	Admitted 1 patient
9	N/A	Fourth Mission Assignments	N/A	6/21/2020	7/4/2020	Staffing Support	RN Med/Surge
9	N/A	Fourth Mission Assignments	N/A	7/2/2020	7/15/2020	Staffing Support	RN Med/Surge
9	Avon Park, FL	Oaks at Avon	9	7/23/2020	7/27/2020	Education and/or Training	1 ARNP, 3 RNs, 2 LPNs
9	Bristol, RI	Rhode Island Veterans Home SVH	1	6/21/2020	7/4/2020	Staffing Support	RN Med/Surge
9	Clarksville, TN	Tennessee Veterans Home Clarksville SVH	9	7/8/2020	7/8/2020	PPE, Supplies and/or Equipment	120 N95 masks
9	Hazard, KY	Eastern Kentucky Veterans Center SVH	9	8/7/2020	8/7/2020	PPE, Supplies and/or Equipment	3M FT-10 Saccharin Base Solution for Fit Testing
9	Humboldt, TN	Tennessee Humboldt SVH	9	7/8/2020	7/8/2020	PPE, Supplies and/or Equipment	120 N95 masks
9	Humboldt, TN	Tennessee Humboldt SVH	9	7/15/2020	7/15/2020	PPE, Supplies and/or Equipment	240 N95 masks
9	Jellico, TN	Beech Tree Manor	9	N/A	N/A	PPE, Supplies and/or Equipment	Hand sanitizer, face shields, gloves
9	Louisville, KY	Kentucky State Nursing Home SVH	9	8/21/2020	8/21/2020	PPE, Supplies and/or Equipment	25,000 gloves

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9	Marianna, FL	Marianna Health and Rehab	9	7/12/2020	7/18/2020	Education and/or Training	1 MD, 3 RNs, 2 LPNs
9	Mayo, FL	Lafayette Nursing and Rehabilitation Center	9	8/9/2020	8/21/2020	Education and/or Training	2 MD, 4 RNs, 3 LPN, 1 HT, 1 OT
9	Multiple Locations	Carl L. Brashear Radcliff Veterans Center SVH	9	7/13/2020	9/30/2020	COVID-19 Testing	Testing 160 staff and re- testing as needed
9	Murfreesboro, TN	Tennessee Murfreesboro SVH	9	7/8/2020	7/8/2020	PPE, Supplies and/or Equipment	120 N95 masks
9	Oxford, MS	Mississippi Oxford SVH	9	7/23/2020	7/23/2020	PPE, Supplies and/or Equipment	120 N95 masks & 400 isolation gowns
9	Oxford, MS	Mississippi Oxford SVH	9	8/4/2020	8/17/2020	Staffing Support	LPN
9	Oxford, MS	Mississippi Oxford SVH	9	8/16/2020	8/31/2020	Staffing Support	Health Tech
9	Oxford, MS	Mississippi Oxford SVH	9	8/30/2020	9/15/2020	Staffing Support	Health Tech
9	Oxford, MS	Mississippi Oxford SVH	9	7/27/2020	7/28/2020	COVID-19 Testing	25 collection swabs, performed 24 COVID-19 Tests
9	Radcliff, KY	Carl L. Brashear Radcliff Veterans Center SVH	9	7/8/2020	7/8/2020	PPE, Supplies and/or Equipment	120 N95 masks

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9	Radcliff, KY	Carl L. Brashear Radcliff Veterans Center SVH	9	7/13/2020	9/3/2020	COVID-19 Testing	Provided technicians to test samples, sample test kits and reagents, processing, and use specialized equipment; specialized lab testing provided to confirm COVID-19 in suspected patients and staff
9	Radcliff, KY	Carl L. Brashear Radcliff Veterans Center SVH	9	12/1/2020	1/31/2021	Staffing Support	Provided technicians to test samples, sample test kits and reagents, processing, and use specialized equipment; specialized lab testing provided to confirm COVID-19 in suspected patients and staff
9	Saint Augustine, FL	Clyde E. Lassen SVH	9	7/20/2020	7/20/2020	Education and/or Training	1 MD, 2 RN, 2 LPN
9	Saint Louis, MO	Missouri St Louis SVH	15	9/18/2020	10/1/2020	Staffing Support	RN/Med Surg
9	Whiteriver, AZ	IHS	22	6/21/2020	7/4/2020	Staffing Support	RN/Med Surg
9	Wilmore, KY	Thomson-Hood SVH	9	8/6/2020	N/A	PPE, Supplies and/or Equipment	50 Viral Transport Media
9	Wilmore, KY	Thomson-Hood SVH	9	8/5/2020	8/26/2020	COVID-19 Testing	136 COVID-19 tests
9	Wilmore, KY	Thomson-Hood SVH	9	9/15/2020	1/10/2021	COVID-19 Testing	221 COVID-19 tests

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
9	Wilmore, KY	Thomson-Hood SVH	9	10/10/2020	10/29/2020	Staffing Support	Health Tech
9	Wilmore, KY	Thomson-Hood SVH	9	10/10/2020	10/29/2020	Staffing Support	Health Tech
9	Wilmore, KY	Thomson-Hood SVH	9	10/29/2020	11/13/2020	Staffing Support	Health Tech
9	Wilmore, KY	Thomson-Hood SVH	9	10/29/2020	11/13/2020	Staffing Support	Health Tech
9	Wilmore, KY	Thomson-Hood SVH	9	7/8/2020	7/8/2020	PPE, Supplies and/or Equipment	N95 Masks-120 qty
9	Winter Haven, FL	Winter Haven Health and Rehab	9	7/8/2020	7/12/2020	Education and/or Training	1 MD, 3 RN, 2 LPN
10	Georgetown, OH	Ohio Veterans Home Georgetown SVH	10	7/1/2020	On-Going	PPE, Supplies and/or Equipment	11,000 isolation gowns, 200 face shields, 2,800 N95s & 30 testing swabs; Fit Tested 30 staff
10	Hilo, HI	Yukio Okutsu SVH	21	9/1/2020	10/12/2020	Staffing Support	LPN/LVN
10	Commonwealth of Virginia	Commonwealth of Virginia: Department of Health, CNH	N/A	6/23/2020	7/28/2020	Staffing Support	5 RNs
10	Huston, TX	Hurricane Delta	17	9/1/2020	10/5/2020	Staffing Support	3 Resp Therapist, 2 Social Worker, 2 RN, 1 NP
10	Winter Haven, FL	Winter Haven Health and Rehab	10	7/8/2020	7/12/2020	Infection Control	1 MD, 3 RN, 2 LPN
10	Marianna, FL	Marianna Health and Rehab	10	7/12/2020	7/18/2020	Infection Control	1 MD, 3 RN, 2 LPN
10	Saint Augustine, FL	Clyde E. Lassen SVH	10	7/20/2020	7/20/2020	Infection Control	1 MD, 2 RN, 2 LPN

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10	Avon Park, FL	Oaks at Avon	10	7/23/2020	7/27/2020	Infection Control	1 ARNP, 3 RN, 2 LPN
10	Mayo, FL	Lafayette Nursing and Rehabilitation Center	10	8/9/2020	8/21/2020	Infection Control	2-MDs, 4-RNs, 3-LPNs, 1-HT, 1-OT
10	Battle Creek, MI	Grand Rapids Home for Veterans SVH	10	7/1/2020	On-Going	PPE, Supplies and/or Equipment	200 Isolation Gowns & 4,000 N95s, provided staff w N95 Train the Trainer
10	Ann Arbor, MI	Grand Rapids Home for Veterans SVH	10	7/1/2020	On-Going	PPE, Supplies and/or Equipment	500 isolation gowns
12	Union Grove, WI	Wisconsin Veterans Home Union Grove SVH	12	8/8/2020	9/8/2020	Staffing Support	14 RN, 18 LPN, 9 Nursing Assts or equivalent, 1 other
12	King, WI	Wisconsin Veterans Home King SVH	12	10/7/2020	12/6/2020	Staffing Support	3 RNs, 3 LPN, 2 Nursing Assts or equivalents
12	Multiple Locations	State of Illinois	12, 15, 23	11/11/2020	1/22/2021	Infection Control	1 Infection Preventionist
12	Union Grove, WI	Wisconsin Union Grove SVH	12	8/11/2020	8/21/2020	Infection Control	1 Infection Preventionist
12	King, WI	Wisconsin King SVH	12	10/14/2020	10/15/2020	Infection Control	1 Infection Preventionist
12	West Allis, WI	Milwaukee Alternate Care Facility	12	10/13/2020	12/29/2020	Staffing Support	2 pharmacists, 1 Respiratory Therapist (2nd segment only)
12	LaSalle, IL	Illinois LaSalle SVH	12	11/6/2020	11/6/2020	PPE, Supplies and/or Equipment	N95 Masks
15	Kayenta, AZ	IHS	22	6/5/2020	7/8/2020	Staffing Support	4 RNs Emergency Department
15	Chinle, AZ	IHS	22	6/5/2020	7/7/2020	Staffing Support	4 RNs ICU/CCU

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
15	Gallup, NM	IHS	22	6/19/2020	7/7/2020	Staffing Support	1 RN Emergency Department, 1 RN Med/Surg
15	Whiteriver, AZ	IHS	22	6/22/2020	7/6/2020	Staffing Support	3 RNs Emergency Department, 2 RN ICU/CCU, 3 RN Med/Surg
15	Commonwealth of Virginia	Commonwealth of Virginia: Department of Health, Community Health System	6	6/23/2020	7/7/2020	Staffing Support	1 Nurse Manager - Med/Surg
15	Whiteriver, AZ	IHS	22	7/6/2020	7/26/2020	Staffing Support	2 RNs Emergency Department, 2 RN ICU/CCU
15	Yuma, AZ	Yuma Regional Medical Center	22	7/15/2020	7/29/2020	Staffing Support	1 RN ICU/Cu, 1 RN (ER), 1 RN (AC)
15	Show Low, AZ	Summit Healthcare Regional Medical Center	22	7/16/2020	7/29/2020	Staffing Support	1 RN (Nurse Manager)
15	Whiteriver, AZ	IHS	22	7/19/2020	8/5/2020	Staffing Support	2 RNs Emergency Department
15	Whiteriver, AZ	IHS	22	7/24/2020	8/6/2020	Staffing Support	1 RN ICU/CCU
15	Canton, NC	Silver Bluff Long Term Care Facility	6	8/17/2020	8/25/2020	Staffing Support	1 CNA Extended Care
15	Cape Girardeau, MO	Missouri Veterans Home Cape Girardeau SVH	15	9/18/2020	10/1/2020	Staffing Support	4 RNs, 1 RN Nurse Manager, 2 CNAs, 1 LPN, 1 Admin Manager

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
15	St. James, MO	Missouri St. James SVH	15	9/23/2020	10/8/2020	Staffing Support	1 RN Emergency Department, 1 RN Nurse Manager, 1 Emergency Manager DEMPS POC, 1 CAN, 1 Med Tech - Emergency Department, 1 LPN, 1 LPN Extended Care
15	Cape Girardeau, MO	Missouri Cape Girardeau SVH	15	10/1/2020	10/15/2020	Staffing Support	1 RN Emergency Department, 1 RN Nurse Manager, 1 Admin Manager, 1 LPN, 1 RN
15	Hilo, HI	Yukio Okutsu SVH	21	10/3/2020	10/6/2020	Staffing Support	1 RN ICU/CCU
15	St. James, MO	Missouri St. James SVH	15	10/4/2020	10/22/2020	Staffing Support	1 RN Nurse Manager, 3 CANs, 1 Emergency Manager DEMPS POC, 1 RN ICU/CCU, 1 RN Extended Care, 1 LPN Extended Care
15	Warrensburg, MO	Missouri Veterans Home Warrensburg SVH	15	10/10/2020	10/25/2020	Staffing Support	1 CNA Extended Care, 1 LPN Extended Care, 1 LPN Community Care, 1 Nursing Assistant, 1 RN Case Manager, 1 RN Cath Lab, 1 RN Extended Care, 2 RNs ICU/CCU, 2 RNs Med/Surg, 2 RNs Nurse Manager
15	Cameron, MO	Missouri Veterans Home Cameron SVH	15	10/17/2020	11/3/2020	Staffing Support	4 Nursing Assistants, 5 RNs, 1 RN Nurse Manager, 2 LPNs
15	St. James, MO	Missouri St. James SVH	15	10/21/2020	10/22/2020	Staffing Support	1 RN Nurse Manager, 1 Emergency Manager DEMPS POC
15	King, WI	Wisconsin King SVH	12	10/24/2020	11/6/2020	Staffing Support	1 RN Primary Care, 1 RN

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
15	Cameron, MO	Missouri Cameron SVH	15	10/29/2020	11/12/2020	Staffing Support	1 CAN, 3 LPNs, 1 Nursing Assistant, 1 RN, 1 RN CLC, 1 RN Extended Care, 2 RN Nurse Managers
16	Oxford, MS	Mississippi Oxford SVH	16	8/4/2020	9/9/2020	Education and/or Training	2 Chaplains, 1 RN
16	Monroe, LA	Northeast Louisiana War Veterans' Home SVH	16	12/11/2020	12/24/2020	Staffing Support	2 RNs, 3 LPNs, 3 Nursing Assistants for staff support
16	Jackson, MS	Mississippi Jackson SVH	16	12/10/2020	12/10/2020	Education and/or Training	Training event for SVH nursing leadership and administrators
16	Jackson, MS	Mississippi Jackson SVH	16	12/4/2020	12/18/2020	Staffing Support	2 RNs, 2 LPNs, 4 nursing assistants
16	Jackson, MS	Mississippi Jackson SVH	16	12/4/2020	12/18/2020	Staffing Support	2 RNs, 2 LPNs, 4 nursing assistants
16	Jackson, MS	Mississippi Jackson SVH	16	12/4/2020	12/18/2020	Education and/or Training	2 RNs, 2 LPNs, 4 nursing assistants
16	Jackson, MS	Mississippi Jackson SVH	16	12/4/2020	12/18/2020	Education and/or Training	2 RNs, 2 LPNs, 4 nursing assistants
16	Bossier City, LA	Northwest Louisiana SVH	16	8/10/2020	8/31/2020	Staffing Support, Infection Control	5 EMS staff for terminal cleaning
16	Collins, MS	Mississippi Collins SVH	16	9/23/2020	10/23/2020	Staffing Support	4 RNs
16	Collins, MS	Mississippi Collins SVH	16	9/23/2020	9/27/2020	Education and/or Training	4 RNs
16	Jackson, MS	Mississippi Jackson SVH	16	11/30/2020	12/31/2020	Staffing Support	2 RNs, 2 LPNs, 4 nursing assistants

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
16	Jackson, MS	Mississippi Jackson SVH	16	11/30/2020	12/31/2020	Education and/or Training	2 RNs
16	Jennings, LA	South West Louisiana War Veterans' Home SVH	16	7/6/2020	8/2/2020	Staffing Support, PPE, Supplies and/or Equipment	3 RNs, 2 LPNs, 2 Nursing Assistants; 4000 isolation gowns, 150 boxes of gloves, 6000 surgical masks, 420 N95 masks, 1,000 face shields, 1,000 shoe covers, 4 thermometers, 200 hand sanitizer bottles, 70 disposable stethoscopes
16	Jennings, LA	South West Louisiana War Veterans' Home SVH	16	7/6/2020	7/19/2020	Staffing Support, PPE, Supplies and/or Equipment	4 CNA, 3 LPN, 3 RNs
16	New Iberia, LA	Louisiana Community Nursing Home CNH	16	8/9/2020	8/22/2020	Staffing Support, PPE, Supplies and/or Equipment	2 CNA, 3 LPN, 4 RNs
16	New Iberia, LA	Louisiana Community Nursing Home CNH	16	8/9/2020	8/22/2020	Staffing Support	2 CNA, 3 LPN, 4 RNs
16	Choctaw, MS	IHS	16	7/6/2020	7/19/2020	Staffing Support	1 MD, 2 RNs, 1 LPN
16	Choctaw, MS	IHS	16	7/20/2020	8/23//2020	Staffing Support	1 MD, 2 RNs, 1 LPN
16	Koscuisko, MS	Mississippi Veterans Home Kosciusko SVH	16	7/6/2020	7/19/2020	Staffing Support, PPE, Supplies and/or Equipment	10 RNs, 3 LPNs, 3 NAs, 660 N95 masks
16	Charlotte Hall, MD	Charlotte Hall SVH	5	6/10/2020	6/23/2020	Staffing Support	5 RNs, 2 LPNs 4 NAs

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16	Alexandria, LA	Christus Cabrini Hospital	16	7/6/2020	7/19/2020	PPE, Supplies and/or Equipment	Loaned 20 ventilator circuits
16	Fayetteville, AR	State of Arkansas	16	12/17/2020	1/31/2020	Bed Capacity	16 med/surg beds and 2 ICU beds 24 hour medical/admin/support staff, medical/ nonmedical equipment, sustenance, pharmaceuticals, supplies and beds
16	Little Rock, AR	State of Arkansas	16	12/3/2020	1/31/2020	Bed Capacity	16 med/surg beds and 2 ICU beds; 24 hour medical/admin/ support staff, medical/ nonmedical equipment, sustenance, pharmaceuticals, supplies and beds
16	Little Rock, AR	State of Arkansas: Department of Health	16	4/19/2020	On-Going	COVID-19 Testing	7563 tests
16	North Little Rock, AR	Arkansas SVH at North Little Rock	16	4/19/2020	On-Going	COVID-19 Testing	507 tests
16	North Little Rock, AR	Arkansas SVH at North Little Rock	16	4/19/2020	On-Going	COVID-19 Testing	Screened all employees entering campus
16	Fayetteville, AR	Arkansas SVH at Fayetteville	16	11/20/2020	12/3/2020	Infection Control	COVID-19/ Infection control training
16	Fayetteville, AR	Arkansas SVH at Fayetteville	16	4/19/2020	On-Going	Infection Control	COVID-19/ Infection control training

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
16	Mount Vernon, MO	Missouri Mt. Vernon SVH	16	10/9/2020	11/11/2020	Staffing Support	2 RNs, 1 LPN, 4 Naps
16	Mount Vernon, MO	Missouri Mt. Vernon SVH	16	10/9/2020	11/11/2020	Education and/or Training	2 RNs
16	Kosciusko, MS	Mississippi Kosciusko SVH	16	06/01/20	7/15/2020	PPE, Supplies and/or Equipment	1 Work-n-Play trailer for supplies storage
16	Panama City, FL	Clifford Chester Sims State Veterans' Nursing Home in Panama City SVH	16	7/9/2020	On-Going	Infection Control	4 clinical staff offering education for Infection Control and Prevention Measures
16	Panama City, FL	Clifford Chester Sims State Veterans' Nursing Home in Panama City SVH	16	7/9/2020	On-Going	COVID-19 Testing	1371 COVID-19 tests performed
17	Multiple Locations	West Texas SVH and William R. Courtney Texas SVH	17	N/A	N/A	COVID-19 Vaccination	8 staff sent to administer approximately 350 vaccines to residents and staff
17	Multiple Locations	State of Texas	17	7/10/2020	2/4/2021	Bed Capacity	60 patients to date, 1,100 admission days of care
19	N/A	SVH Support	N/A	10/12/2020	10/12/2020	PPE, Supplies and/or Equipment	2 boxes of N95 masks
19	N/A	SVH Support	N/A	9/29/2020	10/13/2020	Staffing Support	LPN
19	Ardmore, OK	Oklahoma Veterans Center Ardmore SVH	19	12/1/2020	12/1/2020	Infection Control, PPE	250 N95 masks distributed; 12 antibody treatments

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19	Claremore, OK	Oklahoma Veterans Center Claremore SVH	19	8/1/2020	9/12/2020	Staffing Support, PPE, Supplies and/or Equipment, Bed Capacity	Cross-leveled staff, 53 med/surg patients, supplies including caps, gloves, masks, dressings, disinfectant wipes, under-pads, catheters & needles
19	Clinton, OK	Oklahoma Veterans Center Clinton SVH	19	7/1/2020	7/1/2020	Staffing Support, Infection Control	PPE Support Testing: 361 tests, and consultation on Infection Control
19	Ignacio, CO	IHS	19	8/12/2020	8/13/2020	COVID-19 Testing, PPE, Supplies and/or Equipment	Surveillance swabbing, 6 staff, 1 TCT tech, 3 RNs, 1 VISN 19 MVPC Coordinator and 1 WCHCS MVPC/ Outreach Coordinator; supplies including gowns, face shields, masks, shoe covers, gloves

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
19	Ignacio, CO	IHS	19	12/7/2020	12/8/2020	COVID-19 Testing, PPE, Supplies and/or Equipment	Surveillance swabbing; 3 staff, VISN 19 MVPC Coordinator; supplies including gloves, face shields, masks
19	Towaoc, CO	IHS	19	7/14/2020	7/15/2020	COVID-19 Testing, PPE, Supplies and/or Equipment	Staffing swabbing station and PPE support; 6 staff, 1-TCT tech, 3 RNs, 1 VISN 19 MVPC Coordinator and 1 WCHCS MVPC/ Outreach Coordinator; supplies including face shields, masks, bleach wipes, shoe covers, trash bags
19	Ardmore, OK	Oklahoma Ardmore SVH	19	7/1/2020	1/1/2021	Bed Capacity	8 Med/Surg patients
19	Charlotte Hall, MD	Charlotte Hall SVH	5	6/7/2020	6/20/2020	Staffing Support	LPNs
19	Claremore, OK	Oklahoma Claremore SVH	19	8/2/2020	9/12/2020	Staffing Support	RNs, LPNs, NAs, trade craft
19	Claremore, OK	Oklahoma Claremore SVH	19	7/1/2020	9/1/2020	Bed Capacity	40 admissions
19	Show Low, AZ	Summit Healthcare Regional Medical Center	22	7/16/2020	7/29/2020	Staffing Support	1 RN
19	Yuma, AZ	Yuma Regional Medical Center	22	7/17/2020	7/29/2020	Staffing Support	1 Resp Therapist

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
19	Ignacio, CO	IHS	19	10/14/2020	10/15/2020	COVID-19 Testing	Surveillance swabbing; 5 Staff, 1 TCT Tech, 1 PAO, 3 RNs; supplies including surgical caps, gowns, face shields, masks, gloves, shoe covers
19	King, WI	Wisconsin King SVH	12	10/8/2020	10/24/2020	Staffing Support	Primary Care LPN
19	St. James, MO	Missouri St. James SVH	15	9/23/2020	10/12/2020	Staffing Support	RNs, LPNs
19	Talihina, OK	Oklahoma Talihina SVH	19	7/1/2020	1/1/2021	Bed Capacity	5 Med/Surg patients
19	Whiteriver, AZ	IHS	22	6/21/2020	8/6/2020	Staffing Support	RNs
19	Sheridan, WY	Sheridan Memorial Hospital	N/A	10/12/2020	N/A	PPE, Supplies and/or Equipment	30 Cepheid COVID-19 Testing Kits
19	Multiple Locations	Oklahoma Admore SVH & Oklahoma Norman SVH	19	7/18/2020	12/31/2020	Bed Capacity	79 patients
20	Boise, ID	Boise VAMC: Lab Testing	20	3/29/2020	5/30/2021	COVID-19 Testing	Staff, necessary medical equipment and supplies
20	Roseburg, OR	Mercy Medical Center, Roseburg	20	4/8/2020	10/21/2020	Infection Control	PPE de-contamination of masks and other items

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20	Roseburg, OR	Roseburg VAMC	20	4/14/2020	3/13/2021	Bed Capacity	25 Acute Care beds for immediate and short-term medical treatment
20	Portland, OR	Roseburg VAMC	20	4/20/2020	2/28/2021	Bed Capacity	25 short-term med/surg and 5 ICU beds for non-COVID-19 and COVID-19-positive patients
20	Multiple Locations	Washington SVHs	20	4/20/2020	5/23/2021	COVID-19 Testing	Collection and processing of COVID-19 tests and analysis for patients and staff
20	Spokane, WA	State of Washington	20	4/22/2020	9/23/2020	Bed Capacity	Accepted patients from SVH during an SVH outbreak
20	Multiple Locations	Oregon Long Term Care Facilities	20	6/8/2020	9/5/2020	Staffing Support	1 July - Aug: 19 admin, 55 clinical/RN deployments
20	Whiteriver, AZ	IHS	22	7/2/2020	7/15/2020	Staffing Support	RN
20	Whiteriver, AZ	IHS	22	7/2/2020	7/15/2020	Staffing Support	RN
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	7/12/2020	7/25/2020	Staffing Support	Nurse Manager
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	7/12/2020	7/25/2020	Staffing Support	RN
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	7/12/2020	7/25/2020	Staffing Support	RN

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	7/12/2020	7/25/2020	Staffing Support	RN
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	7/12/2020	7/25/2020	Staffing Support	RN
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	7/12/2020	7/25/2020	Staffing Support	Nursing Assistant
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	7/12/2020	7/25/2020	Staffing Support	Admin/mgmt
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	7/12/2020	7/25/2020	Staffing Support	Nurse LPN/LVN
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	7/12/2020	7/25/2020	Staffing Support	Nurse LPN/LVN
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	7/12/2020	7/25/2020	Staffing Support	Admin/Support
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	7/12/2020	7/25/2020	Staffing Support	Admin/Support

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	7/12/2020	7/25/2020	Staffing Support	Nurse LPN/LVN
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	7/12/2020	7/25/2020	Staffing Support	RN
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	7/12/2020	7/25/2020	Staffing Support	RN
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	7/12/2020	7/25/2020	Staffing Support	Admin/Support
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	7/12/2020	7/25/2020	Staffing Support	Admin/Support
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	7/12/2020	7/25/2020	Staffing Support	Clinical Support
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	7/12/2020	7/25/2020	Staffing Support	RN
20	Whiteriver, AZ	IHS	22	7/13/2020	7/26/2020	Staffing Support	RN
20	Whiteriver, AZ	IHS	22	7/13/2020	7/26/2020	Staffing Support	RN
20	Tucson, AZ	Tucson Medical Center	22	7/15/2020	7/28/2020	Staffing Support	RN

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20	Yuma, AZ	Yuma Regional Medical Center	22	7/15/2020	7/28/2020	Staffing Support	Nurse Manager
20	Yuma, AZ	Yuma Regional Medical Center	22	7/15/2020	7/28/2020	Staffing Support	Nurse Manager
20	Yuma, AZ	Yuma Regional Medical Center	22	7/15/2020	7/28/2020	Staffing Support	RN
20	Yuma, AZ	Yuma Regional Medical Center	22	7/15/2020	7/28/2020	Staffing Support	RN
20	Yuma, AZ	Yuma Regional Medical Center	22	7/15/2020	7/28/2020	Staffing Support	RN
20	Tucson, AZ	Northwest Regional Medical Center - Tucson	22	7/16/2020	7/29/2020	Staffing Support	RN
20	Show Low, AZ	Summit Healthcare Regional Medical Center	22	7/16/2020	7/29/2020	Staffing Support	RN
20	Tucson, AZ	Tucson Medical Center	22	7/16/2020	7/29/2020	Staffing Support	RN
20	Tucson, AZ	Tucson Medical Center	22	7/16/2020	7/29/2020	Staffing Support	Nurse Practitioner
20	Whiteriver, AZ	IHS	22	7/24/2020	8/6/2020	Staffing Support	RN
20	Whiteriver, AZ	IHS	22	7/24/2020	8/6/2020	Staffing Support	Nurse Manager
20	Whiteriver, AZ	IHS	22	7/24/2020	8/6/2020	Staffing Support	RN
20	Whiteriver, AZ	IHS	22	7/24/2020	8/6/2020	Staffing Support	RN
20	Whiteriver, AZ	IHS	22	7/24/2020	8/6/2020	Staffing Support	RN

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	7/26/2020	8/8/2020	Staffing Support	Nursing Assistant
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	7/26/2020	8/8/2020	Staffing Support	Admin/Support
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	7/26/2020	8/8/2020	Staffing Support	Clinical Nurse Specialist
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	7/26/2020	8/8/2020	Staffing Support	RN
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	7/26/2020	8/8/2020	Staffing Support	RN
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	7/26/2020	8/8/2020	Staffing Support	Nursing Assistant
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	7/26/2020	8/8/2020	Staffing Support	Admin/Mgmt
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	7/26/2020	8/8/2020	Staffing Support	Nursing Assistant

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	7/26/2020	8/8/2020	Staffing Support	Nurse Manager
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	7/26/2020	8/8/2020	Staffing Support	Nurse LPN/LVN
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	7/26/2020	8/8/2020	Staffing Support	Nurse LPN/LVN
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	7/26/2020	8/8/2020	Staffing Support	Nurse LPN/LVN
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	7/26/2020	8/8/2020	Staffing Support	RN
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	7/26/2020	8/8/2020	Staffing Support	Nurse LPN/LVN
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	7/26/2020	8/8/2020	Staffing Support	Clinical Support
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	7/26/2020	8/8/2020	Staffing Support	RN

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	7/26/2020	8/8/2020	Staffing Support	Admin/Mgmt
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	7/26/2020	8/8/2020	Staffing Support	Admin/Support
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	7/26/2020	8/8/2020	Staffing Support	Clinical Support
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	7/26/2020	8/8/2020	Staffing Support	RN
20	San Antonio, TX	South Texas Blood & Tissue Donor Pavilion	17	7/26/2020	8/8/2020	Staffing Support	Clinical Support
20	San Antonio, TX	South Texas Blood & Tissue Donor Pavilion	17	7/26/2020	8/8/2020	Staffing Support	Clinical Support
20	New Iberia, LA	Iberia Medical Center	16	8/2/2020	8/8/2020	Staffing Support	RN
20	New Iberia, LA	Iberia Medical Center	16	8/2/2020	8/8/2020	Staffing Support	RN
20	Oxford, MS	Mississippi Veterans Home Oxford SVH	16	8/4/2020	8/17/2020	Staffing Support	Nurse LPN/LVN
20	Oxford, MS	Mississippi Oxford SVH	16	8/4/2020	8/17/2020	Staffing Support	Nurse LPN/LVN
20	Whiteriver, AZ	IHS	22	8/4/2020	8/17/2020	Staffing Support	RN

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20	Whiteriver, AZ	IHS	22	8/4/2020	8/17/2020	Staffing Support	RN
20	Whiteriver, AZ	IHS	22	8/7/2020	8/17/2020	Staffing Support	RN
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	8/9/2020	8/22/2020	Staffing Support	Clinical Nurse Specialist
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	8/9/2020	8/22/2020	Staffing Support	RN
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	8/9/2020	8/22/2020	Staffing Support	RN
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	8/9/2020	8/22/2020	Staffing Support	RN
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	8/9/2020	8/22/2020	Staffing Support	Admin/Mgmt
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	8/9/2020	8/22/2020	Staffing Support	RN
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	8/9/2020	8/22/2020	Staffing Support	Nursing Assistant

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	8/9/2020	8/22/2020	Staffing Support	Clinical Nurse Specialist
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	8/9/2020	8/22/2020	Staffing Support	Nurse Manager
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	8/9/2020	8/22/2020	Staffing Support	Nurse LPN/LVN
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	8/9/2020	8/22/2020	Staffing Support	Admin/Support
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	8/9/2020	8/22/2020	Staffing Support	Clinical Support
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	8/9/2020	8/22/2020	Staffing Support	Admin/Mgmt
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	8/9/2020	8/22/2020	Staffing Support	Clinical Support
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	8/9/2020	8/22/2020	Staffing Support	Nurse LPN/LVN

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	8/9/2020	8/22/2020	Staffing Support	Admin/Support
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	8/9/2020	8/22/2020	Staffing Support	Clinical Support
20	Multiple Locations	Oregon Health Administration HQ, Multiple Nursing Homes	20	8/9/2020	8/22/2020	Staffing Support	RN
20	San Antonio, TX	South Texas Blood & Tissue Donor Pavilion	17	8/9/2020	8/22/2020	Staffing Support	Clinical Support
20	San Antonio, TX	South Texas Blood & Tissue Donor Pavilion	17	8/9/2020	8/22/2020	Staffing Support	Clinical Support
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	8/23/2020	9/5/2020	Staffing Support	Admin/Mgmt
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	8/23/2020	9/5/2020	Staffing Support	Admin/Support
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	8/23/2020	9/5/2020	Staffing Support	RN
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	8/23/2020	9/5/2020	Staffing Support	Nurse LPN/LVN

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	8/23/2020	9/5/2020	Staffing Support	Admin/Mgmt
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	8/23/2020	9/5/2020	Staffing Support	RN
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	8/23/2020	9/5/2020	Staffing Support	Nursing Assistant
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	8/23/2020	9/5/2020	Staffing Support	Clinical Nurse Specialist
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	8/23/2020	9/5/2020	Staffing Support	RN
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	8/23/2020	9/5/2020	Staffing Support	Nurse LPN/LVN
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	8/23/2020	9/5/2020	Staffing Support	RN
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	8/23/2020	9/5/2020	Staffing Support	Admin/Support

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	8/23/2020	9/5/2020	Staffing Support	Admin/Mgmt
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	8/23/2020	9/5/2020	Staffing Support	Clinical Support
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	8/23/2020	9/5/2020	Staffing Support	Admin/Support
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	8/23/2020	9/5/2020	Staffing Support	Clinical Support
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	8/23/2020	9/5/2020	Staffing Support	RN
20	San Antonio, TX	South Texas Blood & Tissue Donor Pavilion	17	8/23/2020	8/24/2020	Staffing Support	Clinical Support
20	San Antonio, TX	South Texas Blood & Tissue Donor Pavilion	17	8/23/2020	8/24/2020	Staffing Support	Clinical Support
20	San Antonio, TX	South Texas Blood & Tissue Donor Pavilion	17	8/25/2020	9/7/2020	Staffing Support	Clinical Support
20	Multiple Locations	Oregon Health Administration Hq, Multiple Nursing Homes	20	8/30/2020	9/5/2020	Staffing Support	Nurse LPN/LVN

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
20	San Antonio, TX	South Texas Blood & Tissue Donor Pavilion	17	9/8/2020	9/21/2020	Staffing Support	Clinical Support
20	Hilo, HI	Yukio Okutsu SVH	21	9/17/2020	9/30/2020	Staffing Support	RN
20	Hilo, HI	Yukio Okutsu SVH	21	9/17/2020	9/30/2020	Staffing Support	Nurse LPN/LVN
20	Hilo, HI	Yukio Okutsu SVH	21	9/17/2020	9/30/2020	Staffing Support	Nurse LPN/LVN
20	Hilo, HI	Yukio Okutsu SVH	21	9/17/2020	9/30/2020	Staffing Support	Admin/Mgmt
20	San Antonio, TX	South Texas Blood & Tissue Donor Pavilion	17	9/22/2020	9/23/2020	Staffing Support	Clinical Support
20	Hilo, Hi	Yukio Okutsu SVH	21	9/29/2020	10/12/2020	Staffing Support	RN
20	Hilo, Hi	Yukio Okutsu SVH	21	9/29/2020	10/12/2020	Staffing Support	Admin/Support
20	Cape Girardeau, MO	Missouri Veterans Home Cape Girardeau SVH	15	10/1/2020	10/14/2020	Staffing Support	Health Tech
20	St. James, MO	Missouri St. James SVH	15	10/10/2020	10/23/2020	Staffing Support	RN
20	Wilmore, KY	Thomson-Hood SVH	9	10/16/2020	10/29/2020	Staffing Support	Nurse LPN/LVN
20	Wilmore, KY	Thomson-Hood SVH	9	10/16/2020	10/29/2020	Staffing Support	Nursing Assistant
20	Wilmore, KY	Thomson-Hood SVH	9	10/16/2020	10/29/2020	Staffing Support	Nursing Assistant

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
20	Wilmore, KY	Thomson-Hood SVH	9	10/16/2020	10/29/2020	Staffing Support	Nurse LPN/LVN
20	Boise, ID	Idaho Boise SVH	20	10/28/2020	1/30/2021	Staffing Support	Personnel to support nursing home operations in Idaho
20	Multiple Locations	State of Idaho	20	10/28/2020	5/5/2021	PPE, Supplies and/or Equipment	2 ventilators to ID Falls, 1 to Lewiston
20	Richmond, VA	Sitter & Barfoot Center SVH	6	11/1/2020	11/17/2020	Staffing Support	Nurse LPN/LVN
20	Cameron, MO	Missouri Cameron SVH	15	11/6/2020	11/11/2020	Staffing Support	Nurse Manager
20	Roanoke, VA	Virginia Veterans Care Center SVH	6	11/8/2020	11/24/2020	Staffing Support	Nurse LPN/LVN
20	Roanoke, VA	Virginia Veterans Care Center SVH	6	11/8/2020	11/24/2020	Staffing Support	Nurse LPN/LVN
20	King, WI	Wisconsin King SVH	12	11/9/2020	11/22/2020	Staffing Support	Nurse LPN/LVN
20	King, WI	Wisconsin King SVH	12	11/9/2020	11/22/2020	Staffing Support	Nurse LPN/LVN
20	Tilton, NH	New Hampshire SVH	1	11/27/2020	12/10/2020	Staffing Support	Nurse LPN/LVN
20	Bossier City, LA	Northwest Louisiana SVH	16	12/17/2020	12/30/2020	Staffing Support	Nurse Manager
21	Yountville, CA	Veterans Home of California Yountville SVH	21	7/26/2020	10/31/2020	COVID-19 Testing	200 COVID-19 kits processed per week

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
21	Sparks, NV	Northern Nevada SVH	21	7/13/2020	7/31/2020	Staffing Support, COVID-19 Testing, PPE	3 trained staff to perform (swabbing only) approximately 150-200 tests; also provided 3 staff members with N95s and face shields
21	Multiple Locations	State of California	21	7/16/2020	8/19/2020	Bed Capacity	2 Med/Surge and 2 ICU beds (Palo Alto and NorCal)
21	Multiple Locations	State of California	21	12/2/2020	1/31/2021	Bed Capacity	2 Med/Surge and 2 ICU beds (Palo Alto and NorCal)
22	Whiteriver, AZ	IHS	22	8/8/2020	N/A	PPE, Supplies and/or Equipment	CAPR Supplies
22	Chinle, AZ	IHS	22	8/4/2020	N/A	PPE, Supplies and/or Equipment	N95s, gloves, ISO gowns, hair covers, shoe covers, sanitary wipes, face shields
22	Multiple Locations	IHS	22	5/4/2020	7/7/2020 8/19/2020	Staffing Support	15 nurses to 4 locations every 2 weeks for 60 days; an additional 3 nurses deployed to support public health functions
22	Gallup, NM	IHS	22	5/29/2020	8/6/2020	Bed Capacity	Up to 8 beds for non-Veteran IHS patients
22	Multiple Locations	State of Arizona	22	6/27/2020	8/14/2020	Bed Capacity	Acute Care Beds for decompression support; 10 beds in Tucson and 10 beds in Phoenix at respective VAMCs
22	Multiple Locations	State of California	22	7/15/2020	19-Aug-20	Bed Capacity	32 Acute Care beds for decompression support

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
22	Multiple Locations	State of California	21 and 22	12/1/2020	On-Going	Bed Capacity	Inpatient beds at 8 VAMCs; up to 38 beds covered by the MA; up to 24 med/surg; up to 14 ICU beds
22	Whiteriver, AZ	IHS	22	6/20/2020	8/17/2020	Staffing Support	20 nursing staff every 2 weeks for 60 days
22	Polacca, AZ	IHS	22	7/24/2020	9/10/2020	Staffing Support	4 nurses for 45 days
22	Multiple Locations	IHS	22	11/16/2020	On-Going	Bed Capacity	Inpatient beds: Gallup Indian Medical Center can transfer up to 8 non-Vets to Albuquerque VAMC; Chinle can transfer up to 5 patients to Phoenix VAMC, and up to 4 patients to Tucson VAMC
22	Multiple Locations	State of Arizona	22	11/25/2020	On-Going	Bed Capacity	Acute Care Beds: Up to 3 beds in Tucson, up to 4 beds in Phoenix; MA amended to include up to 3 non-COVID-19 m/s beds in Prescott; MA amended to extend bed offer: 3 beds in Tucson and now up to 2 beds in Phoenix
23	Commonwealth of Virginia	Virginia Beach Department of Health	6	7/12/2020	7/25/2020	Staffing Support	2 RNs
23	Whiteriver, AZ	IHS	22	7/2/2020	7/15/2020	Staffing Support	1 RN
23	Tama, IA	Meskwaki National Health Clinic	23	12/16/2020	12/16/2020	PPE, Supplies and/or Equipment	600 pairs of gloves

VISN Conducting Mission	Mission Location	Entity Supported	VISN Where Mission was Completed	Start Date	End Date	Standardized Mission Goals	Support Provided
23	Marshalltown, IA	Iowa SVH	23	8/1/2020	8/1/2020	PPE, Supplies and/or Equipment	100,000 masks
23	Multiple locations	IHS	23	11/1/2020	11/1/2020	PPE, Supplies and/or Equipment	1,000 masks

Appendix C: Vaccines Administered by VHA, by VISN and Priority Group

Table 16.3: Vaccines Administered by VHA, by VISN and Priority Group

		Employ	ees			V	eterans l	Jsing VI	IA Services			
VISN		loyee nations	% of Total Employees		teran inations	% of Total Veterans	Vete Vaccin with	ations	% of Vaccinated Veteran with SCI	Vaccin Vetera CL	ns in	% of Vaccinated Veterans in CLC
	Vacc.:	6,007		Vacc.:	952		Vacc.:	34		Vacc.:	268	
1	Base Pop.:	15,913	38%	Base Pop.:	249,544	0.38%	Base Pop.:	757	4.49%	Base Pop.:	366	73%
	Vacc.:	5,105		Vacc.:	1,056		Vacc.:	25		Vacc.:	552	
2	Base Pop.:	18,758	27%	Base Pop.:	281,563	0.38%	Base Pop.:	702	3.56%	Base Pop.:	796	69%
	Vacc.:	7,321		Vacc.:	1,454		Vacc.:	30		Vacc.:	405	
4	Base Pop.:	15,116	48%	Base Pop.:	284,268	0.51%	Base Pop.:	458	6.55%	Base Pop.:	593	68%
	Vacc.:	5,063		Vacc.:	676		Vacc.:	6		Vacc.:	256	
5	Base Pop.:	12,296	41%	Base Pop.:	203,880	0.33%	Base Pop.:	348	1.72%	Base Pop.:	332	77%
	Vacc.:	7,027		Vacc.:	720		Vacc.:	42		Vacc.:	192	
6	Base Pop.:	20,269	35%	Base Pop.:	402,481	0.18%	Base Pop.:	1,308	3.21%	Base Pop.:	266	72%
	Vacc.:	4,141		Vacc.:	924		Vacc.:	34		Vacc.:	254	
7	Base Pop.:	22,230	19%	Base Pop.:	465,357	0.20%	Base Pop.:	1,230	2.76%	Base Pop.:	377	67%
	Vacc.:	12,626		Vacc.:	3,643		Vacc.:	88		Vacc.:	348	
8	Base Pop.:	32,066	39%	Base Pop.:	588,591	0.62%	Base Pop.:	1,840	4.78%	Base Pop.:	644	54%
	Vacc.:	5,153	0.534	Vacc.:	459	0.4504	Vacc.:	17	0.504	Vacc.:	125	0.507
9	Base Pop.:	14,434	36%	Base Pop.:	280,841	0.16%	Base Pop.:	660	2.58%	Base Pop.:	191	65%

		Employ	ees			V	eterans l	Jsing VI	IA Services			
VISN		loyee nations	% of Total Employees		teran nations	% of Total Veterans	Vete Vaccin with	ations	% of Vaccinated Veteran with SCI	Vaccir Vetera CL	ns in	% of Vaccinated Veterans in CLC
	Vacc.:	10,044		Vacc.:	1,052		Vacc.:	25		Vacc.:	331	,
10	Base Pop.:	26,099	38%	Base Pop.:	498,448	0.21%	Base Pop.:	1,106	2.26%	Base Pop.:	578	57%
	Vacc.:	7,480		Vacc.:	598		Vacc.:	40		Vacc.:	327	
12	Base Pop.:	19,534	38%	Base Pop.:	271,792	0.22%	Base Pop.:	826	4.84%	Base Pop.:	453	72%
	Vacc.:	4,672		Vacc.:	1,073		Vacc.:	13		Vacc.:	64	
15	Base Pop.:	13,512	34%	Base Pop.:	245,783	0.44%	Base Pop.:	694	1.87%	Base Pop.:	151	42%
	Vacc.:	6,061		Vacc.:	2,143		Vacc.:	45		Vacc.:	187	
16	Base Pop.:	21,607	28%	Base Pop.:	429,386	0.50%	Base Pop.:	1,078	4.17%	Base Pop.:	403	46%
	Vacc.:	5,309		Vacc.:	953		Vacc.:	25		Vacc.:	306	
17	Base Pop.:	20,120	26%	Base Pop.:	436,458	0.22%	Base Pop.:	1,117	2.24%	Base Pop.:	457	67%
	Vacc.:	5,627		Vacc.:	590		Vacc.:	17		Vacc.:	103	
19	Base Pop.:	15,232	37%	Base Pop.:	320,111	0.18%	Base Pop.:	772	2.20%	Base Pop.:	165	62%
	Vacc.:	6,040		Vacc.:	596		Vacc.:	19		Vacc.:	124	
20	Base Pop.:	15,899	38%	Base Pop.:	329,171	0.18%	Base Pop.:	811	2.34%	Base Pop.:	203	61%
	Vacc.:	9,834		Vacc.:	810		Vacc.:	31		Vacc.:	384	
21	Base Pop.:	20,659	47%	Base Pop.:	336,310	0.24%	Base Pop.:	883	3.51%	Base Pop.:	514	75%
	Vacc.:	13,067		Vacc.:	772		Vacc.:	70		Vacc.:	331	
22	Base Pop.:	27,264	48%	Base Pop.:	509,653	0.15%	Base Pop.:	1,390	5.04%	Base Pop.:	459	58%

		Employ	ees			V	eterans	Using VF	lA Services			
VISN	vaccinations		% of Total Employees	Veteran Vaccinations		% of Total Veterans	Veteran Vaccinations with SCI		% of Vaccinated Veteran with SCI	Vaccinated Veterans in CLC		% of Vaccinated Veterans in CLC
	Vacc.:	6,339		Vacc.:	992		Vacc.:	24		Vacc.:	262	
23	Base Pop.:	16,312	39%	Base Pop.:	324,535	0.31%	Base Pop.:	806	2.98%	Base Pop.:	413	63%
VISN	Vacc.:	126,916	∃ 36%	Vacc.:	19,463		Vacc.:	585		Vacc.:	4,755	
Total	Dana	347,320		Base Pop.:	6,458,171	0.30%	Base Pop.:	16,786	3.49%	Base Pop.:	7,360	65%

Note: Veterans Using VHA Services are Veterans who used VHA services between April 1, 2019, and September 30, 2020. Veterans who died prior to February 1, 2020 were excluded from the Veterans Using VHA Services definition for this report in order to quantify Veterans at risk for COVID-19. Counts by location are based on a pro-rated method proportional to the cost of care. Veteran tests, confirmed positives and deaths figures exclude Veteran-Employees. CLC resident counts were aggregated between December 15, 2020, and January 1, 2021, to account for all residents during the period of COVID-19 vaccine administration. CLC population counts as of December 30, 2020 may include patients who resided in more than facility during the time period stated above. A majority of Veterans with SCI are not VA inpatients, and those that are inpatients have been offered vaccination per the VA vaccination priority guidelines. Total Veterans vaccinated, Veterans vaccinated with SCI, and CLC Veteran vaccinated populations are not mutually exclusive.

Note: Totals may not add due to rounding.

Source: Veterans Using VHA Services Data, ARC, VHA, 2/2/2021; HR Employee Cube, VSSC, VHA, accessed 4/12/2021; CDW Database - VSSC Out Tables, HOC, VHA, accessed 2/21/2021; CLC Vaccination and Population Data provided by HOC, VHA on 3/24/2021.

Table 16.4: Vaccine Doses Received and Administered by VISN and Brand, as of January 4, 2021

	Moderna			ŀ	Pfizer-BioN	Tech		Total	
VISN	Estimated	Doses	% Administered	Estimated	Doses	% Administered	Estimated	l Doses	% Administered
1	Doses admin.:	8,890	84%	Doses admin.:	2,780	29%	Doses admin.:	11,670	57%
'	Doses received:	10,600	04 /0	Doses received:	9,750	2970	Doses received:	20,350	37 76
2	Doses admin.:	4,580	39%	Doses admin.:	2,395	20%	Doses admin.:	6,975	30%
2	Doses received:	11,600	39%	Doses received:	11,700	20%	Doses received:	23,300	30%
4	Doses admin.:	5,180	62%	Doses admin.:	3,270	200/	Doses admin.:	8,450	42%
4	Doses received:	8,300	02%	Doses received:	11,700	28%	Doses received:	20,000	72 /0
5	Doses admin.:	2,440	44%	Doses admin.:	3,100	26%	Doses admin.:	5,540	32%
5	Doses received:	5,600	4470	Doses received:	11,700	20%	Doses received:	17,300	32%
6	Doses admin.:	3,650	32%	Doses admin.:	4,690	28%	Doses admin.:	8,340	30%
6	Doses received:	11,400	32%	Doses received:	16,575	28%	Doses received:	27,975	30%
	Doses admin.:	4,780	37%	Doses admin.:	2,095	20%	Doses admin.:	6,875	20%
7	Doses received:	13,000	31%	Doses received:	10,725	20%	Doses received:	23,725	29%

		Modern	na	F	Pfizer-BioN	Tech		Total	
VISN	Estimated	Doses	% Administered	Estimated	l Doses	% Administered	Estimated	Doses	% Administered
8	Doses admin.:	2,210	10%	Doses admin.:	14,565	41%	Doses admin.:	16,775	29%
0	Doses received:	22,200	1076	Doses received:	35,100	4170	Doses received:	57,300	2970
9	Doses admin.:	3,940	45%	Doses admin.:	1,750	20%	Doses admin.:	5,690	32%
9	Doses received:	8,800	4376	Doses received:	8,775	2076	Doses received:	17,575	32 76
10	Doses admin.:	7,260	430/	Doses admin.:	4,010	240/	Doses admin.:	11,270	34%
10	Doses received:	16,900	Doses 16,575 received:	Doses received:	33,475	34 76			
12	Doses admin.:	4,710	45%	Doses admin.:	2,305	14%	Doses admin.:	7,015	26%
12	Doses received:	10,500	4376	Doses received:	16,575	14 70	Doses received:	27,075	2070
15	Doses admin.:	4,330	52%	Doses admin.:	2,470	19%	Doses admin.:	6,800	32%
13	Doses received:	8,400	32 70	Doses received:	12,675	1970	Doses received:	21,075	3276
16	Doses admin.:	5,970	49%	Doses admin.:	4,730	37%	Doses admin.:	10,700	43%
10	Doses received:	12,100	49 /0	Doses received:	12,675	31 70	Doses received:	24,775	43 /0
17	Doses admin.:	3,500	39%	Doses admin.:	4,185	25%	Doses admin.:	7,685	30%

		Modern	าล		Pfizer-BioN	Tech		Total	
VISN	Estimated	d Doses	% Administered	Estimated	Doses	% Administered	Estimated	Doses	% Administered
	Doses received:	8,900		Doses received:	16,575		Doses received:	25,475	
19	Doses admin.:	3,670	42%	Doses admin.:	2,675	34%	Doses admin.:	6,345	38%
19	Doses received:	8,700	42 70	Doses received:	7,800	3470	Doses received:	16,500	36 76
20	Doses admin.:	2,510	37%	Doses admin.:	4,427	25%	Doses admin.:	6,937	28%
20	Doses received:	6,800	3770	Doses received:	17,550	25%	Doses received:	24,350	20%
21	Doses admin.:	6,810	59%	Doses admin.:	4,615	34%	Doses admin.:	11,425	45%
21	Doses received:	11,600	59%	Doses received:	13,650	3476	Doses received:	25,250	45%
22	Doses admin.:	7,950	53%	Doses admin.:	6,240	34%	Doses admin.:	14,190	42%
22	Doses received:	15,000	33%	Doses received:	18,525	3470	Doses received:	33,525	42 70
23	Doses admin.:	3,360	32%	Doses admin.:	3,720	24%	Doses admin.:	7,080	27%
23	Doses received:	10,600	3270	Doses received:	15,600	2470	Doses received:	26,200	2170
VISN	Doses admin.:	85,740	43%	Doses admin.:	74,022	28%	Doses admin.:	159,762	34%
Total	Doses received:	201,000	4376	Doses received:	264,225	2076	Doses received:	465,225	3470

Note: Counts of vaccine doses received and estimated doses administered are based on data through 1/4/2021. Counts of estimated doses administered may include personnel or parties outside of designated priority vaccination guidelines. Counts of estimated doses administered are also based on the total vaccine doses shipped to a facility minus the daily self-reported facility inventory count. Source: Vaccine Supply Data from HOC, VHA, received 3/17/2021.

8 Ibid.

deaths/?itid=sf coronavirus.

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- ¹⁸ VHA Leadership Interview 5, timestamp 03:43, 2/5/2021
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