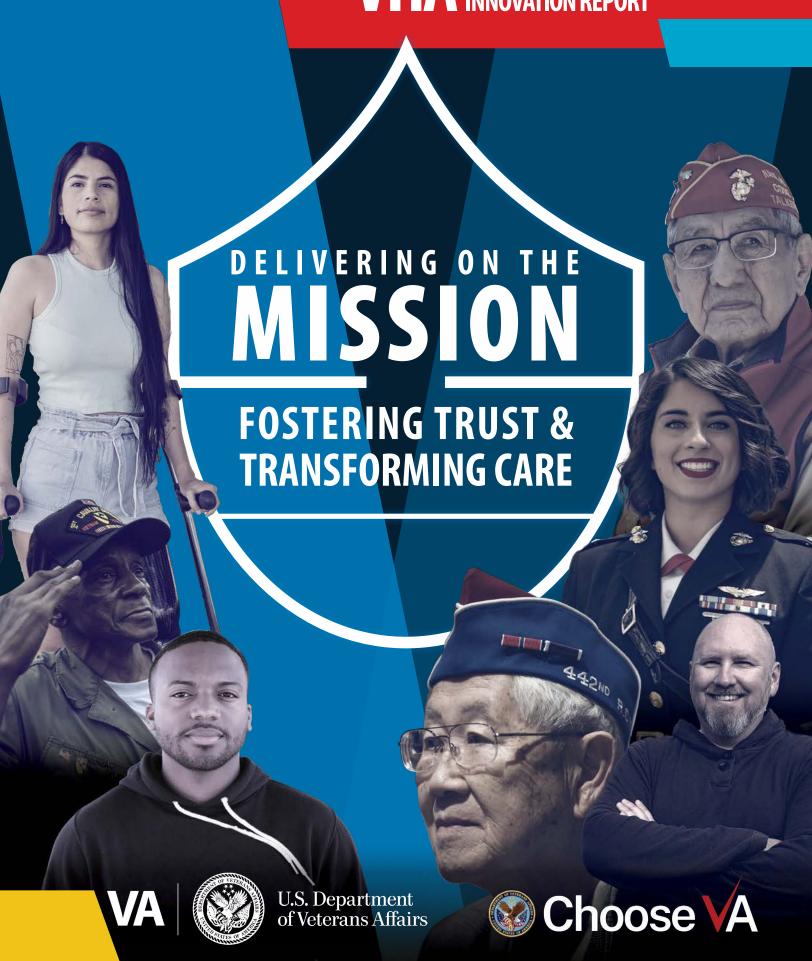
VHA 2023 STATE OF INNOVATION REPORT



"To fulfill President Lincoln's promise to care for those who have served in our nation's military and for their families, caregivers, and survivors."

On March 16, 2023, the U.S. Department of Veterans Affairs (VA) announced an update to its 1959 mission statement to one that is inclusive of all who have borne the battle, including women, Veteran families, caregivers, and survivors. Words carry significance, and the new mission statement signifies that VA is committed to serving all who have served our country, regardless of their race, gender, background, sexual orientation, religion, zip code, or identity. It represents the often-overlooked sacrifices of Veterans' families and caregivers, and recognizes the losses of survivors.



With more than 9 million Veterans eligible for healthcare, Veterans Health Administration (VHA) is the largest integrated healthcare system in the United States. VHA focuses on delivering primary care tailored to the Veteran community's unique needs, such as spinal cord injury, hearing loss, prosthetics and rehabilitation, traumatic brain injury, and posttraumatic stress disorder. VHA's expansive network spans 1,321 healthcare facilities across the United States and its territories. What makes VA so special is our employees, who deliver on the mission of serving Veterans and their families every single day. Of VHA's over 370,000 employees, 33% are Veterans themselves.

Innovation has been a longstanding cornerstone of VHA. From the first implantable cardiac pacemaker in 1960 to the recent advancements in implementing virtual reality into rehabilitative treatment, VHA has proudly been at the forefront of innovative healthcare for decades. We prioritize cultivating environments that let innovation flourish, an essential component for propelling healthcare—both within VHA and more broadly—into the future. We firmly believe in the power of innovation in healthcare and its ability to change lives for the better.

The inventive minds at VHA have enabled us to bridge the gaps between our greatest strengths and the areas where we humbly yet tenaciously seek improvement. To that end, innovation enables frontline VA employees to take calculated and responsible risks, methodically test assumptions, learn from challenges, and reinvent care models that have grown stale over time. Change moves at the speed of trust, and people are the most essential ingredient for the change we hope to make together.

VHA BY THE NUMBERS

9M Enrolled Veterans 371K

3

Employees, 33% of Whom Are Veterans

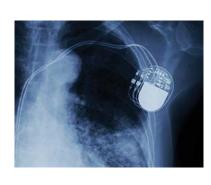
Nobel Prize Winners

1,321

1,138

172

HISTORY OF VHA INNOVATION



•CARDIAC PACEMAKER

Dr. William Chardack of the Buffalo VA Medical Center teams with engineers Wilson Greatbatch and Dr. Andrew Gage to invent the first clinically successful implantable cardiac pacemaker.

1960



• ELECTRONIC HEALTH RECORD

Alongside the Public Health Service, VA begins planning for what would become the Nation's first electronic health record system, drastically disrupting the health landscape for years to come.

1970



DIABETES DRUG

Endocrinologist Dr John
Eng, of the James J. Peters
VA Medical Center, discovers a peptide in venom
from the Gila monster that
would eventually serve as
the basis for a widely used
diabetes drug.

1990



REACH VET

Enables VA staff to identify Veterans with risk factors for mental health crisis, wins the FedHealthIT Innovation Award.

2016



GIOSTENT

U.S. Food and Drug
Administration grants VA's
first ever compassionate
use authorization for a
3D-printed hearing device,
the GioStent. The groundbreaking medical device
is inserted into the ear
canal to improve Veteran
hearing as an alternative
to surgery.

2021



NHA RADIOTHERAPY BOLUS

U.S. Food and Drug Administration clears the VHA Radiotherapy Bolus, a 3D-printed device that helps protect cancer patients' healthy tissue during radiation therapy, and instead, helps focus radiation on cancerous tumors.

2023

1967

FIRST SUCCESSFUL LIVER TRANSPLANT

Dr. Thomas Starzyl of the Denver VA Medical Center performs the world's first successful liver transplant, a groundbreaking success that has paved the way for several medical innovations today.



1984

NICOTINE PATCH

Two decades after the 1964 Surgeon General's Report on Smoking and Health, VA researchers develop the nicotine patch and other therapies to combat cigarette addiction.



2007

ANKLE-FOOT PROSTHETIC

VA unveils the first powered ankle-foot prosthetic, which yields a faster walking pace and ultimately introduces a new era of innovation in prostheses.



2020

•5G

VA Palo Alto Health Care System becomes one of the first U.S. healthcare systems to adopt 5G and test use cases. Known as Project CONVERGENCE, this effort was a collaboration between the National Center for Collaborative Healthcare Innovation, Verizon, Microsoft, and Medivis.



2022

SUICIDE PREVENTION

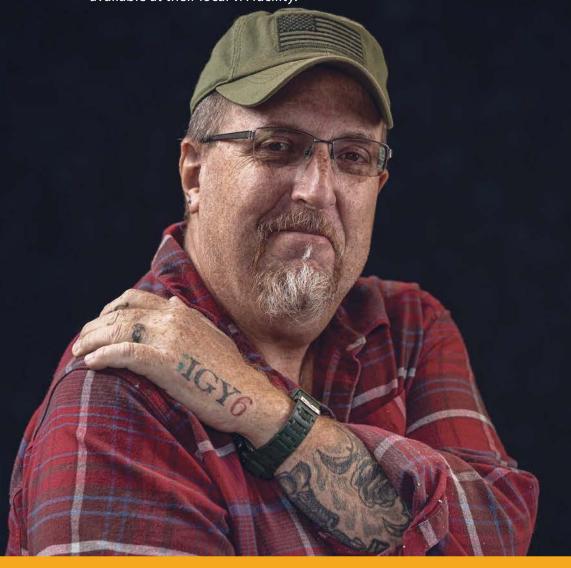
Preventing Veteran suicide is the top priority for VA. VHA IE and VHA Office of Mental Health and Suicide Prevention collaborated on Mission Daybreak, a \$20M grand challenge to reduce Veteran suicides.



Click here to learn more about the History of Innovation at VA

DELIVERING ON THE MISSION: FOSTERING TRUST AND TRANSFORMING CARE

To VHA's Office of Healthcare Innovation and Learning, delivering on the mission includes investing in programs, projects, and products that are designed to transform care delivery, expand access to healthcare services, support whole health, and improve experiences for those who have served. Throughout this report, Veterans can read about efforts that are currently being tested on a small scale, may be available to them soon, or are currently available at their local VA facility.



CONTENTS

- **Expanding Access to Care**Ensuring all eligible Veterans, regardless of location, identity, or ability, can access inclusive and widely available care.
- Transforming Care Delivery

 VHA aims to provide Veterans with the best quality of care through constant improvement, innovation, and prioritizing the unique needs of our nation's heroes.
- Improving Experiences

 Veterans deserve comfort and positive experiences when coming to VA facilities, and our innovative solutions promote more efficient and personalized care for Veterans.
- Fostering Health and Wellness
 Caring for Veterans' well-being goes beyond the physical, and VHA supports the whole health of our Veterans—mind and body.
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- 81 Index of Innovative Care
 Learn how and where you can engage with the programs and products featured in this report.





EXPANDING

ACCESS TO CARE

FOR THOSE WHO SERVED

VHA prioritizes accessibility to all Veterans across its healthcare system. Inclusive and practically accessible care means a stronger healthcare system, safer and healthier Veterans, and greater trust between Veterans and their providers. Ensuring Veterans in every state can access care—whether through virtual appointments, remote monitoring, or the use of digital health platforms—is central to the mission of VHA.

This section highlights strategic and innovative solutions that have helped improve ease of access to care by addressing common barriers to care. Here, you can read about the work of VA innovators whose work has helped cement widely accessible care for Veterans. Increased access to contraception, sponsored rides to medical appointments, and greater opportunity for Veterans in rural areas to engage with prosthetic and orthotic providers are just a few of the innovative efforts featured in this section.

Contraception on Demand Gives Veterans a Choice in Their Contraceptive Options

12-Month Contraception Prescribing Expands Access to Reproductive Health

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 Leveraging Easy-to-Transport Rehabilitation Equipment for Veterans' Physical Therapy Needs

Contraception on Demand Gives Veterans a Choice in Their Contraceptive Options

12-Month Contraception Prescribing Expands Access to Reproductive Health



Women are the fastest growing demographic of Veterans, expected to grow from 4% in 2000 to 18% of the Veteran population by 2040. Today, there are more than 2 million women Veterans in the U.S. Among women Veterans using VA healthcare, 43% are of reproductive age, or 18-44 years old. VA provides a wide array of reproductive health services, including contraception counseling, breastfeeding and lactation support, treatment of menopausal symptoms, and other reproductive, maternity care, post-partum services that support Veterans' family planning goals.

"Reducing barriers and improving access to contraception is critical to supporting Veterans' reproductive health and autonomy."

-Dr. Deirdre Quinn, Contraception on Demand Co-founder

Over one-third of Veteran pregnancies are unintended. Consistent contraceptive use is the most effective way to prevent unwanted pregnancy. However, gaps in contraceptive coverage due to access issues or prescription refill delays are major barriers to consistent use. Recently, ensuring contraceptive access for all Veterans has become even more important due to restrictions on safe and legal abortion in many states. Improving contraceptive access and reducing refill gaps or delays is critical to support all Veterans' reproductive health and independence.

In 2019, a team of researchers at VA Pittsburgh Health Care System (VAPHS) and the University of Pittsburgh identified potential financial and reproductive health benefits for Veterans and VA by dispensing oral contraceptive pills in 12-month versus 3-month increments. Drs. Deirdre Quinn and Sonya Borrero at VAPHS and Lisa Callegari at VA Puget Sound Health Care System assembled a team to create VA-specific procedures for pharmacists dispensing hormonal contraception. With local approval to offer Veterans a 12-month option, the team launched a two-site, six-month pilot named **Contraception on Demand (COD)**, in July 2021.

"We focused on patient-centered contraceptive counseling and trained pharmacists to help Veterans decide the best and safest method for them," said Dr. Quinn. "This offers a safe and effective way to expand access to contraception across VA." During the pilot, eligible Veterans with existing prescriptions for hormonal contraception had the option to receive a 12-month supply. Veterans seeking prescriptions for a new method were offered a 3-month supply, with the option to receive an extended supply after a follow-up visit. Among

eligible Veterans, 90% opted to receive a 12-month supply. The pilot received positive feedback from Veterans and VA providers. "The pharmacist asked me very in-depth questions that I usually don't get asked for contraception. This was much better than my prior experiences getting contraception in VA," shared one Veteran.

In August 2022, VA released updated guidance to allow all eligible Veterans the option for 12-month dispensing, an exciting development that enables the COD team to expand their practice across VA. As a 2022 VHA Shark Tank Competition winner, the COD team is currently replicating the innovation at an initial five VA medical centers. Veterans interested in learning more about their contraceptive options can speak to their local primary care providers.



VA Helps Veterans PREPARe for Their Reproductive Journey



VHA covers a range of maternity care and post-partum services for women Veterans to support their family planning goals. However, VA medical facilities do not provide on-site obstetric care, including deliveries, to pregnant Veterans. Pregnant Veterans receive robust maternity care coordination and support services through VA while they receive maternity care through community (non-VA) healthcare providers. However, this can create gaps in care when Veterans have to travel long distances or to multiple facilities to receive care.

Melissa Tran is a licensed marriage and family therapist and military sexual trauma coordinator at the Orlando VA Healthcare System and a 2023 VHA Senior Innovation Fellow. Following her own experiences with perinatal support services, she set out to design a program to increase access and provide personalized VA healthcare experiences to these Veterans.

In 2021, Tran launched the **Perinatal Reproductive Education Planning and Resources (PREPARe)** program, a one-stop shop for perinatal (before and after birth) support services. The program incorporates a team of VA specialists that address the unique needs of perinatal Veterans in-house,

including lactation counselors, mental health therapists and prescribers, whole health coaches, physical therapists, dietician nutritionists, and more. Providing additional support services at VA promotes positive health outcomes for pregnant and postpartum Veterans.

Many Veterans have distinct physical, mental, and emotional health needs, and perinatal Veterans are no exception. One VA study found that female Veterans who experienced military sexual trauma had higher rates of maternal depression and were more likely to struggle with baby bonding. PREPARe providers approach care through a trauma-informed lens to aid Veterans in some of the most difficult points in their reproductive journey, such as when staff helped one Veteran process the loss of her infant twins.

"We got a lot out of participating in the infant loss therapy group and have shared some information with family members. Even though it has been four years since our loss, we are learning how to honor our twins," said one Veteran who participated in PREPARe services.

PREPARe also places a special emphasis on being as inclusive as possible for perinatal Veterans, including fathers, LGBTQ+parents, minority parents, and parents with disabilities. This

"When I was postpartum

with my first, it would have

been so helpful to have

services readily available

that I didn't have to hunt for

myself in my time of need,

PREPARe was born out of a

calling I felt to bridge a gap

in care I personally

experienced."

–Melissa Tran,

PREPARe Founder

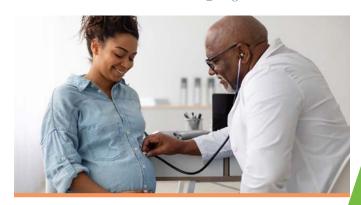
summer, PREPARe hosted a Maternal Health Summit, which brought together reproductive health professionals to discuss numerous topics, including how social and economic factors can impact Veterans' access to healthcare.

Since its inception in 2021, PREPARe has completed approximately 430 consults and offers services in person and virtually, helping Veterans get care where distance or travel issues might be a concern. PREPARe is showing promising results in improved coordination of services and increased availability of infertility and pregnancy loss support.

The PREPARe program is expanding at Orlando VA Medical Center, West Palm Beach VA Medical Center, and Carl T.

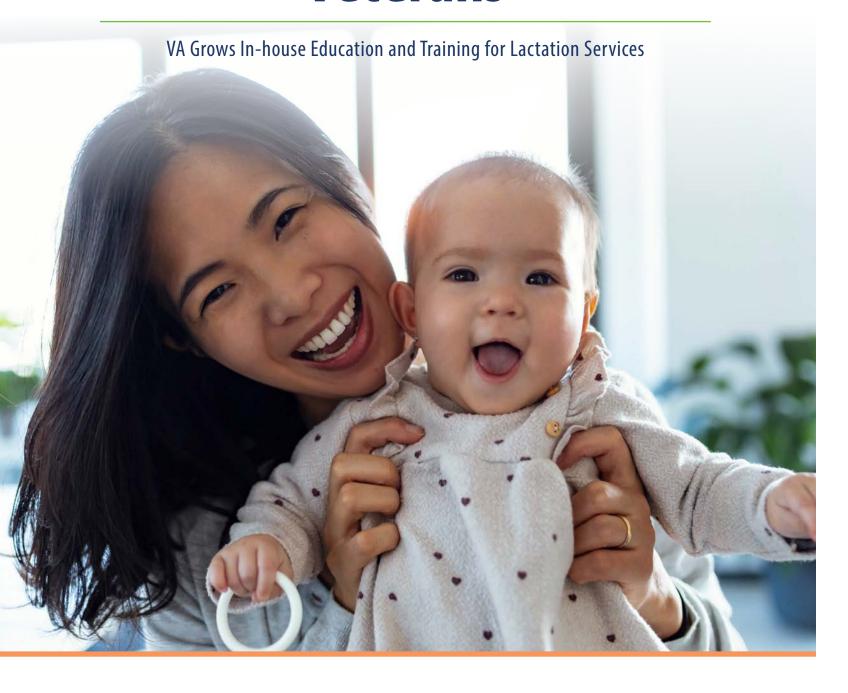
Hayden Veterans' Administration Medical Center (Phoenix, AZ), with the goal to eventually be available to all Veterans.

To learn more about VA's suite of reproductive health services, visit Reproductive Health - Women Veterans Healthcare (va.gov). To learn more about PREPARe, email VHAORLPREPAReConsultation@va.gov.



Learn more about PREPARe here!

VA Lactation Program Expands Support for Veterans



"The program helps bring support to life. I did not get much support when I wanted to nurse my second child, and I knew that Veterans would need support in general, especially those who experienced trauma or who have medical conditions that may make lactation more challenging."

-Ashley M. Lauria, MA, RD, LDN, IBCLC, VALP Co-founder

The VA Lactation Program (VALP) expands and standardizes lactation support services by including them in routine prenatal and postpartum care for Veterans. VALP was co-developed by Ashley Lauria, a lactation consultant at the Erie VA Medical Center who also serves Veterans across Veterans Integrated Service Network (VISN) 4, which covers Pennsylvania, Delaware, and parts of New Jersey, New York, and Ohio. Lauria also serves 15 other VAMCs across the nation and is the lead lactation specialist for VHA Office of Women's Health.

The program offers Veterans in-house lactation services by trained VA staff and includes lactation education at key milestones in the Veteran's pregnancy including each trimester, pre-delivery, and postpartum, with services tailored to the needs of the individual Veteran. The goal of VALP is to improve Veteran access, experience, and satisfaction while increasing trust in VA.

With VALP, Veterans are empowered to make informed decisions about their individual journeys, while receiving professional guidance and support from trained VA providers along the way. The process begins with an initial consultation with a credentialed lactation professional, and support continues through delivery and extends at least one year postpartum. Consultations and follow-up appointments

teach Veterans about the lactation process, norms, and lactation benefits for them and their infant(s).

VALP helps to fill a gap in care that previously left Veterans to find specialists in their local communities due to limited lactation resources within VA. VALP removes the need for Veterans to seek outside lactation support and improves access to vital care. Appointments can be done in-person, via telephone, or on a video call. This is especially helpful for Veterans living in rural areas where long trips to the nearest VAMC may be difficult with an infant in tow. "[The program] not only helped me to get the girls latched on their own, but you encouraged me from the beginning to continue breastfeeding when it was really rather hard," said one Veteran who engaged with VALP.

With the population of women Veterans using VA care steadily increasing, the need for lactation education and support is clear.

VALP was a 2020 VHA Shark Tank Competition winner, which provided training and resources to bring lactation services to more Veterans.

Veterans who receive care from VAMCs that offer lactation services have multiple options for accessing these services, including self-referring or speaking with a member of their care team such as a primary care provider, maternity care coordinator, women Veteran program manager, or behavioral health staff. With questions or to learn more about VA lactation services, email Ashley.Lauria@va.gov.



DELIVERING ON THE MISSION: FOSTERING TRUST & TRANSFORMING CARE

VHA-Uber Health Connect Improves Veterans' Access to Care with Expanded Transportation

Ridesharing Initiative Addresses Transportation Barrier to Healthcare

"Before using the program, there were times when I couldn't make it to my appointment because I didn't have the money to take the bus. Now, I can make it to those appointments because I know the Uber will get me there."

—Tampa Veteran who uses the VUHC program

The American Hospital Association found that 3.6 million Americans annually do not obtain medical care due to transportation challenges. Transportation is one of the greatest barriers to increasing access to heathcare for Veterans. Within VA, Veterans miss approximately 1.8 million appointments annually due to a lack of access to transportation. These missed appointments reduce Veterans' overall health outcomes and cost VA nearly \$4.4 billion per year. Veterans who do not live near a VA medical center (VAMC), who do not have access or ability to travel on their own, or who do not have a caregiver to assist them are particularly at risk to missing the care they deserve.

To address this challenge and increase Veteran access to care, VHA Innovation Ecosystem, VHA's Veteran Transportation Program (VTP), and Uber Health—a mobile-based ridesharing application—collaborated to create the VHA-Uber Health Connect (VUHC) Initiative. Launched in 2022, the initiative offers rideshare services as a supplemental transportation option for Veterans (and their caregivers) who are eligible for VA travel benefits to get to and from their VA medical appointments.

Uber Health leverages Uber's existing pool of drivers to expand VTP's service area and decrease transportation barriers. The initiative enables clinics and VAMCs to book rides on Veterans' behalf, which Veterans can track through text message or phone call. Transportation is directly reimbursed so Veterans do not have to submit separate claims. "This initiative bridges the transportation gap by ensuring Veterans have reliable transportation for their healthcare needs," said Dr. Indra Sandal, National Lead for VUHC and Chief of Innovation at the James A. Haley Veterans' Hospital in Tampa, FL. "By offering ridesharing as

an additional transportation option, VA is helping Veterans receive access to the soonest and best possible care—while still achieving cost savings."

Phase One of the VUHC Initiative was rolled out across 10 VAMCs in 2 Veteran Integrated Service Networks (VISNs) in January 2022 and made an immediate impact on Veterans' access to care. From January 2022 to August 2023, Phase One sites in the initiative completed more than 49,000 rides while saving VA an estimated \$58 million. "If my VA didn't provide this service, I wouldn't be able to get to my appointments. It's wonderful. I'm so blessed to have this option," said one Veteran in West Palm Beach, FL. Of the 2,300 Veterans surveyed during Phase One of the VUHC Initiative, 83% of Veterans said they would not have been able to access their medical care without the program and 91% of Veterans said they would recommend the program to another Veteran.

Following Phase One's success, Phase Two of the VUHC Initiative began in April 2023, expanding the program to 58 additional VAMCs in 9 additional VISNs, spanning 18 states and Puerto Rico. From April to September 2023, Phase 2 sites in the VUHC Initiative completed over 25,000 rides and saved VA over \$29 million. David Wilson, Mobility Manager for the Gainesville VAMC, shared that his facility, "had a transplant patient come in and needed a long ride. The initial vendor quoted this trip at \$1,800, but we were able to transport the Veteran for only \$111 with the VUHC program."

As the VUHC Initiative expands, more Veterans across the country will have increased access to reliable transportation and fewer barriers to care. Eligible Veterans needing access to and from medical care may contact their local VA travel team to learn more about VHA Uber-Health Connect Initiative at their facility.



Bringing Specialized VA Services to Veterans in Rural Communities

Mobile Prosthetic and Orthotic Care Program Expands Access for Veterans

For Veterans that need an artificial limb or specialized brace due to amputation or other injury or impairment, frequent travel to in-person VA orthotic and prosthetic (O&P) appointments can be challenging. For a Veteran living in a rural area far from the nearest VA medical center, accessing this care can feel nearly impossible.

Prosthetic and Orthotic providers Daniel Abrahamson and Eli Kaufman observed firsthand the harmful effects of delayed O&P care on Veterans' health and quality of life, and they predicted that many barriers to care could be overcome by reducing or eliminating the Veteran's burden of travel. "The field of prosthetics and orthotics requires many visits, both as you prepare a Veteran for their new device, and the care they need after the procedure" Abrahamson said. "Unlike many medical procedures that occur

once, this event never really ends for our patients." Supported by VHA Innovators Network, Mr. Abrahamson and Mr. Kaufman piloted a mobile O&P program in the Seattle, WA area in 2019. The program that resulted from that work, now titled **Mobile Prosthetic and Orthotic Care** (**MoPOC**), was adopted by VHA Office of Rural Health as an enterprise-wide initiative in February 2021 and has been expanding nationally since then. Today, MoPOC is expanding access to VA O&P care for more than 200,000 Veterans across 11 states and Guam.

The MoPOC model incorporates teams of mobile O&P providers that are equipped with specialty vehicles and tools. The program's strategy for increasing access to care for Veterans is simple: move the point of care closer to home. Supported by dedicated staff from their anchor site, MoPOC

Improves access to care
Increases timeliness of care
Increases device utilization
Improves quality of life
Allows Veterans to "stay in VA"



providers drive each day from a large VAMC to smaller VA community-based outpatient clinics (CBOCs) in rural communities and, as needed, to Veterans' homes, rotating to multiple areas per week. "I'm continually impressed by how flexible and agile our facilities have been in adopting a whole new model of care. Every year, more and more VAMCs are requesting to implement MoPOC, demonstrating that demand from providers and Veterans is strong," Kaufman said.

Remarkably, 16% of Veterans stated they would not have received care in the absence of MoPOC. "Before, I was driving to my VA about 2-2.5 hours each way. I had to...stop a lot and sometimes stayed overnight...I can't just push through it because it really hurts me to drive that far. Now it's only 15 minutes down the road," said a Veteran who received MoPOC care.

As they near five years since the program first went live in the Seattle area, Abrahamson and Kaufman are proud of what they accomplished but know there is more to be done. "Have we achieved our dream? No." Abrahamson said. "My dream is to improve access to care for every single Veteran who needs orthotic and prosthetic care."

Kaufman, who was a 2020-2022 Entrepreneur in Residence Fellow with VHA Innovation Ecosystem, says MoPOC has inspired other clinical areas in VA, such as oncology, women's health, and pharmacy, to look at how they might expand access to care using a similar mobile model. "We have moved the needle in a meaningful way, and at the same time, it's highlighted how much more there is to do," he said. MoPOC is now operating at 10 VAMCs, serving 20 of their associated CBOCs. The program will roll out in five new areas in 2024: Memphis, TN; Lexington, KY; Albany, NY; Nashville, TN; and Iowa City, IA.

To learn more about this innovation and find out if MoPOC services are available near you, email MoPOC@va.gov.



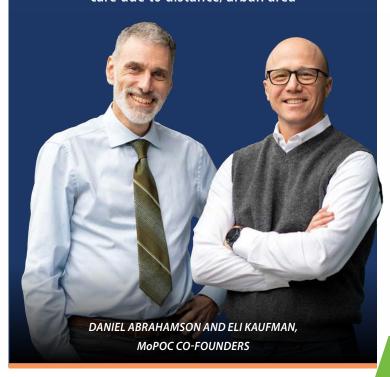
95% of Veterans agreed that they would seek care through MoPOC again

91% were mostly or very satisfied with the ease of traveling to MoPOC

87% said MoPOC's quality of service was excellent or good

86% said MoPOC has met all or most of their needs

23% reported previously delaying 0&P care due to distance/urban area







By the end of 2023, Mailed FIT will be available in many regions of the U.S. Veterans who would like to learn more about colon cancer screening and whether FIT is a good option for them can ask their primary care team.

Colorectal cancer (CRC) is the third most common cancer among men and women and is the second leading cause of cancer death in America. According to Dr. Jason Dominitz, Executive Director of VA's National Gastroenterology and Hepatology Program, most colon cancers are curable if detected early and screening is proven to reduce mortality from CRC. VA recommends that Veterans at average risk for CRC get screened regularly between the ages of 45 and 75 years. However, hundreds of thousands of Veterans are unscreened. The COVID-19 pandemic has heightened this issue, as visits to clinics for routine preventive health visits drastically declined, with an estimated 1.6 million Veterans now due for screening.

Current VA CRC screening practices usually require a clinic visit with a provider and are typically performed through a colonoscopy or fecal immunochemical test (FIT). FIT is the less-invasive approach; instead of the preparation and anesthesia of a colonoscopy, Veterans only need provide a small stool sample for analysis. FIT is a great option for Veterans at average risk for CRC as only about 6% of FIT tests are abnormal, indicating a need for colonoscopy. However, for Veterans with specific CRC risk factors, such as a personal history of pre-cancerous colon polyps or a family history of CRC, colonoscopy is typically recommended instead of FIT.

Mailed FIT is designed to accompany current screening efforts and make screening easier on both providers and Veterans. Eligible Veterans are notified by mail that they are due for a CRC screening, VA will soon be mailing them a FIT kit, and if they have any questions to reach out to their doctors. After the Veteran receives the test and returns the sample, it is analyzed at the lab. Positive samples mean that the Veteran may be at increased risk for CRC and should be seen for a colonoscopy. For Veterans whose samples are negative, rechecks will be done on an annual basis.

When the COVID-19 pandemic hit in March 2020 and VA paused all elective, non-urgent procedures including colonoscopies, Dr. Dominitz, who has been studying the outcomes of FIT and colonoscopies in VA since 2008, recognized an opportunity to start mailing FIT kits directly to Veterans. Shortly thereafter, a regional rollout started at the Fresno and North Las Vegas VA Medical Centers. The innovation then won the 2020 VHA Shark Tank Competition, which helped Dr. Dominitz and his team spread the program.

"Mailed FIT separates colon cancer screening from the inperson visit and meets the needs for Veterans who don't come in on a regular or frequent basis. It also allows us to transition from an opportunistic approach to screening to an organized approach, ensuring more Veterans have access," said Dr. Dominitz. To learn more about Mailed FIT, email MailedFIT@va.gov.



VA Collaborates with Wareologie™ to Bring Portable Parallel Bars to Veterans

Leveraging Easy-to-Transport Rehabilitation Equipment for Veterans' Physical Therapy Needs



VA is one of the single largest employers of physical therapists in the United States, employing over 2,300 across the Nation. These physical therapists provide care to over 750,000 Veterans each year, addressing needs that often require large spaces and specialized equipment, such as parallel bars. Parallel bars play a critical role in the treatment of postsurgery patients and amputees, making easy and broad access essential to patient recovery. They are used extensively for walking rehabilitation, gait training, and for building lower body strength, balance, range of motion, and flexibility. However, traditional parallel bars are large, bulky pieces of stationary equipment that remain in physical therapy gyms, which create a barrier for Veterans with limited access to the gym.

In 2020, VHA Innovation Ecosystem and Challenge America co-sponsored a COVID-19 Maker Challenge to source solutions to challenges posed by the COVID-19 pandemic. One proposed solution was a novel set of portable parallel bars designed to provide access to rehabilitation equipment for Veteran

patients in isolation. This led to a collaboration between VHA Innovators Network (iNET), VA providers, the Central Virginia VA Health Care System (CVHCS), and Wareologie through the iNET Greenhouse Initiative. The goal of the collaboration was to co-design, develop, and test the prototype with VA clinical subject matter experts (SME). Physical and occupational therapists from the Richmond, Cleveland, and Asheville VA medical centers worked with Wareologie to further iterate upon the original design to co-create a clinically useful design considering the physical rehabilitation needs of Veterans.

iNET collaborated with Wareologie to create two prototypes. The first functional prototype was piloted by the physical therapy department at CVHCS in September 2021. Wareologie modified the device directly based on the feedback and design recommendations from Richmond VA providers and created a second prototype which was piloted again by the physical therapy department at CVHCS in



"It's exciting to positively impact Veterans' recovery with a tool that helps treat [them] earlier in the privacy and convenience of their own room."

—Gina Adams, Wareologie™ Founder and CEO February 2022. Wareologie utilized the Richmond team's input to further advance the design and moved forward with commercialization.

Designed with experience and the needs of the Veteran in mind, **Wareologie Portable Parallel Bars** improve accessibility in acute care, inpatient, and rural outpatient settings. With quick folding and rolling capabilities, the parallel bars can be transported from clinic to clinic or room to room easily.

"The ability to safely mobilize complex, acutely deconditioned patients at the bedside is an area that has needed attention for some time. These parallel bars open doors not only in this area, but also for our community-based outpatient clinics vying for square footage, our amputee clinics who provide consultation throughout the hospital and community, and beyond," said Shannon Parker, a physical therapist and Clinical Innovation Specialist at CVHCS.

Today, the Portable Parallel Bars are a Class 1 Food and Drug Administration-

registered device available throughout VA medical centers for Veterans via the VA Intrapreneurial Product Marketplace and <u>Wareologie.com</u>. With VAIPM questions, email <u>VACOVAIPMSupport@va.gov</u>.



Learn more about Wareologie™ Portable Parallel Bars here!



TRANSFORMING

CARE DELIVERY

FOR THOSE WHO SERVED

VHA takes great pride in its unwavering commitment to examine, probe, and reimagine the standards of care delivered to our Veteran patients. By harnessing the power of artificial intelligence, 3-D printing, and other advanced methods, healthcare providers are now more empowered than ever to deliver tailored, efficient, and effective services. The innovators and game-changers at VHA understand how high-caliber care can and should translate to enhanced quality of life. Through the relentless pursuit of innovation, we can honor Veterans by ensuring they receive the highest standard of care that honors their sacrifice and dedication.

This section showcases projects and innovative processes that are advancing Veterans' quality of life and comfort, including medication deprescribing, remote patient monitoring programs, 3D printing, simulation, and more.

VIONE Deprescribing Approach Puts a Stop to Potentially Inappropriate Medications

Proper Medication Management Improves Veteran Care

27 Opioid Overdose Education and Naloxone Distribution Program Saves Veteran Lives

Increasing Accessibility and Awareness of Lifesaving Medication for Veterans

- Remote Temperature Monitoring of Diabetic Foot Ulcers Empowers Veterans to Lead Their Health Journey
- Advanced Assistive Technology Offers Life-changing Services for Veterans
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VIONE Deprescribing Approach Puts a Stop to Potentially Inappropriate Medications

Proper Medication Management Improves Veteran Care





"Our goal is to improve healthcare outcomes for our Veterans. We once worked with a Veteran with heart disease who was experiencing nightmares and vivid and disturbing hallucinations after being started on a new medication. We worked closely with his cardiologist to carefully cut down and eventually stop this medication. We saw a dramatic improvement almost immediately. The Veteran was getting a full night's rest, his hallucinations stopped, he was able to move around, speak full sentences, and felt happier."

-Dr. Saraswathy Battar, VIONE Co-founder

Over prescription of harmful medications is a root cause for hospital readmission among elderly patients. In 2021, 45% of Veterans enrolled in VA care were over the age of 65. Medication safety efforts are critical, identifying possible shortand long-term impacts of taking multiple medications at once.

In 2016, Dr. Saraswathy Battar at the Little Rock VA Medical Center noticed a pattern with her Veteran patients. She saw the same Veterans being admitted to her unit repeatedly, so she decided to investigate. Dr. Battar and her team suspected that the high rate of readmissions and adverse health effects among patients were a result of the prescription drugs and over-the-counter drugs they were taking. This marked the start for **VIONE**—a methodology designed to improve quality of life and patient safety by making medications work for Veterans and not against them.

VIONE has a track record of improving Veteran safety and overall quality of life through the reduction or deprescribing of potentially inappropriate medications (PIM). VIONE stands for the five categories used to evaluate medications:

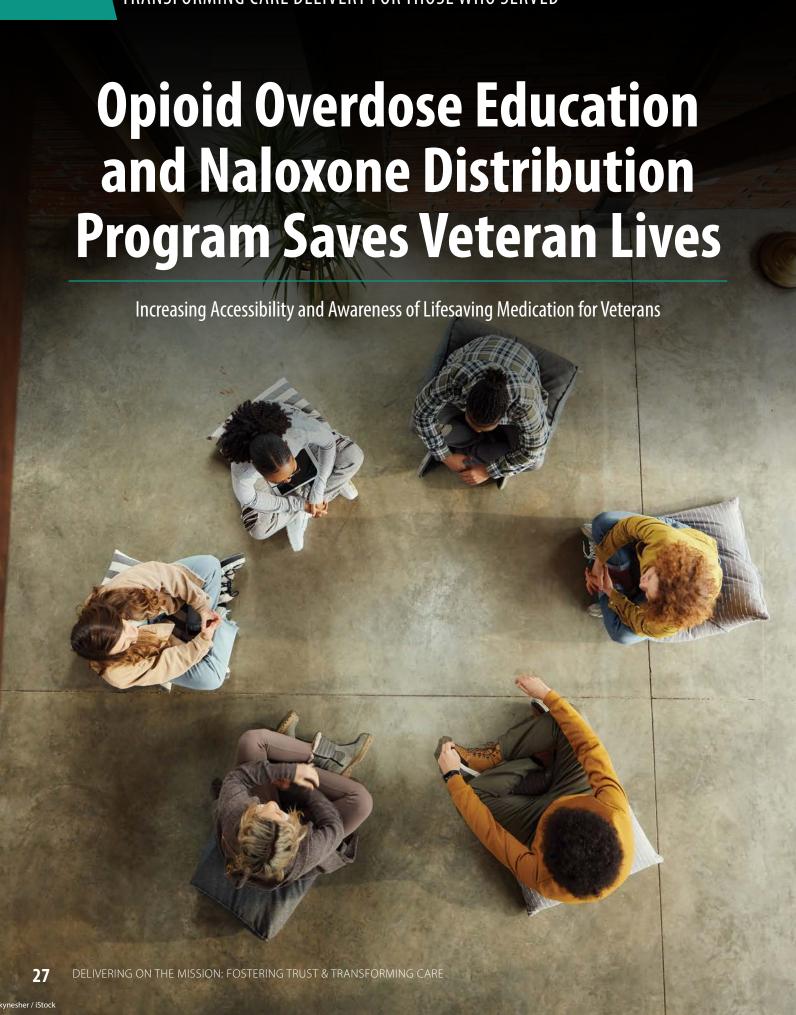
Vital, Important, Optional, Not needed, and Every medication has an indication. The VIONE community works closely with VA care teams to evaluate medications prescribed to Veterans. "Our job is to work with our fellow VA providers to identify which medications could potentially be having negative impacts on the Veteran's health. This is increasingly common in our elderly or geriatric populations, who often take multiple medications at once to manage symptoms of various conditions," described Dr. Battar.

Veterans receiving care in any clinical setting, cared for by any provider, are eligible to benefit from the VIONE deprescribing approach. For example, if a Veteran reports frequent falls, and is found to have dangerously low blood pressure, their list of medications could be reviewed. If they are on blood pressure lowering medications, their VA providers could discuss with them the deprescribing or lowering the dose of their blood pressure medications. Similarly, if a Veteran is on high doses of medications to control diabetes and is suffering from repeated low blood sugar levels that are causing fainting spells, weakness, and poor quality of life, their VA providers could review and adjust the dose, timing, and type of diabetes medications.

Having found success across multiple VA facilities, the VIONE team submitted their practice to the 2016 VHA Shark Tank Competition and was selected as a Promising Practice. The Diffusion of Excellence program continued to support VIONE as a National Diffusion practice in 2018. This created a new level of support to expand the program to new facilities and into other clinical settings. Since 2016, VIONE has had over 16,000 users in 133 VA facilities. As of July 2023, VIONE has discontinued over 1.7 million unique PIM prescription orders for more than 700,000 Veterans, with an estimated annual cost avoidance of \$153 million. VIONE demonstrates VA's commitment to a culture of Veteran safety and continuous improvement. To learn more about VIONE, email Saraswathy.Battar@VA.GOV.



Dr. Shereef Elnahal (R), VA Under Secretary for Health, stands beside Dr. Sarawathy Battar (L), VIONE co-founder.





To date, VA's OEND program has distributed over **1 million** free naloxone prescriptions to over 480,000 Veterans while equipping over 3,500 VA police officers and stocking over 1,000 VA **Automated External** Defibrillator (AED) cabinets with naloxone, reversing more than 4,300 reported opioid overdoses. VA Boston alone has reversed **154** opioid overdoses through naloxone prescribed to Veterans, administered by police, or retrieved from AED cabinets.

The United States is in the midst of an opioid crisis with almost 110,000 Americans dying from overdose every year (~300 per day), and Veterans are twice as likely to die from accidental overdose compared to non-Veterans. Opioid overdose mortality is preventable with timely and sufficient administration of naloxone, a safe and effective opioid overdose reversal medication that has recently been approved as an overthe-counter formulation. However, to realize the promise of naloxone to save lives, it is critical that naloxone is rapidly available.

Recognizing the need to prevent overdose among Veterans and understanding that every second counts, Pamela Bellino and Dr. Michael Charness began working to make naloxone rapidly accessible, regardless of location. Starting in 2018, Bellino, patient safety manager at VA Boston Healthcare System (VA Boston HCS), and Dr. Charness, chief of staff at VA Boston, aimed to build a series of concentric circles for naloxone deployment. Importantly, they identified that even though they could administer naloxone if Veterans overdosed in their hospital rooms, they needed coverage if Veterans overdosed in the cafeteria, bathrooms, or elsewhere on campus.

To achieve this, Bellino worked with VA police, who were often the ones to find those experiencing an overdose, to ensure naloxone was part of their everyday equipment and taught them how to administer the lifesaving medication. Working with the pharmacy department, Dr. Charness and Bellino investigated if they could store naloxone in automated external defibrillator (AED) cabinets throughout the facility. AED cabinets are often the first place people go when someone is in medical distress. Getting naloxone deployed in AED cabinets required a strict set of policies to ensure the naloxone would not expire, would not be stolen, and was checked regularly. When installing safety seals for the medication at VA Boston, one

engineer was particularly moved, noting, "I had an overdose 10 years ago. You're saving lives," and personally installed every safety seal.

The effects of overdoses extend beyond those experiencing it; families, friends, and caregivers are impacted as well. Just weeks after naloxone was added to the AED cabinet in the Substance Abuse Residential Treatment Program at VA Boston HCS, the naloxone was used to save the life of a Veteran who was in the program. "If it wasn't for this naloxone, we would have had a Veteran die in the program. Our staff found a Veteran who was unresponsive due to a fentanyl overdose. It was the ready availability of naloxone that empowered staff and protected Veterans from experiencing a fellow Veteran's death in a place that should be safe for their recovery. The naloxone was literally a life saver," said Dr. Monica Roy, the substance abuse residential treatment program manager.

designated as a VHA Diffusion of Excellence Gold Status Practice comprised of 3 elements: (1) providing **Opioid Overdose Education** and Naloxone Distribution (OEND) to VHA patients at-risk for opioid overdose; (2) equipping VA police with naloxone; and (3) equipping select AED cabinets with naloxone. In 2018, VA Boston HCS' Gold Status Practice was selected to spread nationally. A September 2018 VA memorandum "Rapid Naloxone Availability to Prevent Opioid-Related Death" stated that the goal was to implement the practice at all VA facilities no later than December 2, 2018.

In 2016, VA Boston HCS' efforts were

Extensive implementation resources are available, including implementation guides for OEND, VA Police, and AED Cabinet Naloxone. For more information, please contact VA's National Opioid Overdose Education and Naloxone Distribution Coordinator at <u>VHARapidNaloxone@va.gov</u>

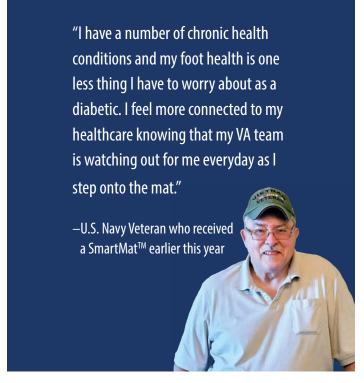
Raising the Standard of Care Through Remote Technology

Remote Temperature Monitoring of Diabetic Foot Ulcers Empowers Veterans to Lead Their Health Journey

With more than 2 million Veterans with diabetes under its care, VA is leading the fight to prevent diabetic amputations. Diabetic foot ulcers (DFU) are a serious complication of diabetes in which ulcers, or open wounds, develop on the Veteran's feet. This condition can lead to bone infections and minor and major amputations and has a 5-year mortality rate of 50-70%.

Hot spots, or warm areas on the foot, can be detected on the feet of Veterans with diabetes before ulcers present. Foot temperature monitoring can be an effective clinical tool in reducing minor and major amputations. Remote foot temperature monitoring tools can enable Veterans to monitor their symptoms at home, without the burden of regular trips to their closest VAMC.





Before **remote temperature monitoring of diabetic foot ulcers** (**RTM of DFU**), the standard of care was largely to treat the wounds, not prevent them. A Veteran would come into a medical facility with a DFU, and providers did what was necessary to heal the condition. "Our goal is to also be able to hit rural areas where Veterans have a harder time getting to their local VA," says Dr. Suhail Masadeh, a podiatrist at the Cincinnati VA Medical Center (VAMC) and national coordinator for VA's RTM of DFU program. "This gives us a remote option to monitor high-risk Veterans, because early intervention is the key to preventing limb loss."

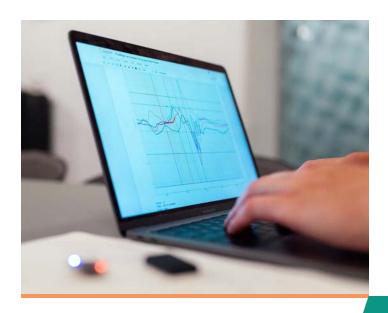
In 2017, VA began collaborating with Podimetrics to test a new care model at select VA facilities for at-risk patients using their SmartMatTM, an RTM medical device. Veterans sit and place their bare feet on the mat for just 20 seconds each day from the comfort of their home while it scans to detect temperature variations on the underside of the foot, which can signal preulcerations or active ulcerations. If temperature spikes are detected, the Veteran's care provider is notified. The provider then follows up with the Veteran to ask questions and determine if medical attention is needed. Sometimes the resolution is as simple as the Veteran wearing their orthotics more regularly, but sometimes the resolution requires surgery to prevent an impending ulcer.

Early prevention can also help reduce hospital admissions and trips to the emergency department. "This work represents a paradigm shift from reactive care to preventative care, and from a provider fixing the Veteran's symptoms to the provider empowering and guiding the Veteran through their health journey. This work is laying the foundation for the future of preventative care across VA, which will improve quality of care for our Veterans," said Dr. Kyle Nordrum, a physical therapist and an RTM of DFU lead at the Cincinnati VAMC.

The RTM of DFU program was selected as a Promising Practice at the 2020 VHA Shark Tank Competition, which accelerated their journey to provide care to more Veterans. As this technology has scaled, it has demonstrated consistent positive impacts on quality, access, and experience for Veterans.

To date, more than 10,000 SmartMats have been distributed to Veterans and the program has been adopted at nearly 100 VA facilities. Veterans who have a history of ulcerations, minor or major amputations, vascular disease, or other complications that cause them to be at risk for ulcers are enrolled in the RTM of DFU program and mailed a SmartMat. As one of the first RTM solutions in VA, RTM of DFU has laid the foundation for the future of technology-enabled remote patient monitoring across VA. Providers are also investigating additional solutions to meet Veteran needs, including smart socks, smart insoles, and other technologies that generate images of the foot.

Veterans with diabetes who are interested in this program should contact the specialty foot care provider at their local VAMC. To learn more about how VA is using remote technology to provide care to more Veterans than ever before, visit connectedcare.va.gov.





"To be able to still have dignity and a sense of control and autonomy makes a huge difference to someone who has a spinal cord injury or who's been diagnosed with ALS. To give [Veterans] their independence means the world to them."

—Melissa Oliver, AT Program Director for the Richmond VA Medical Center

VHA's Office of Advanced Manufacturing (OAM) has changed the way VA approaches healthcare with the introduction of 3D printing—the process of making physical objects through specialized printing technology—and other advanced methods that create tailored solutions for Veterans in need. Many Veterans require the use of assistive technology (AT) to perform a variety of tasks, from complex movements like driving and playing sports to everyday tasks like using a phone or turning on a light. The goal of AT is to maintain, increase, or improve the functional capabilities of individuals with disabilities. From 3D-printed makeup brush holders that aid in cosmetics application to 3D-printed stylus palm grips that help Veterans write with ease, OAM's AT has proven to be lifechanging for many.

Clinical rehabilitation engineers at OAM's AT labs have served Veterans across the Nation for years through a process called an interfacility consult. After receiving a provider consultation, OAM engineers create tailored products that make an individual Veteran's life easier and more accessible in some way. Unfortunately, this process had limited reach and was only available to a few dozen VA facilities near OAM's five AT labs, which led OAM to create the **National AT Interfacility**

Consult. Rehabilitation engineers also realized that while some devices they created could only be used for a single Veteran, other devices were more generalizable and had universal applications, which led them to the idea for the **AT Design Library.**

The National AT Interfacility Consult program enables Veterans anywhere in the country to connect with OAM engineers to develop tailored products for the Veteran's individual use. One Veteran who wanted to play boccia ball, but found it difficult to do in his wheelchair, came to OAM for assistance. His provider worked with the engineers, and they created a boccia ball holder so the Veteran could more easily participate in the sport. Similarly, another Veteran had difficulty bowling in his wheelchair, and the team 3D-printed a bowling ball holder that could be mounted to the Veteran's wheelchair. "I feel like I have hope, like I can do things I never thought I would be able to do again," one Veteran said.

To give more Veterans access to OAM's solutions, the AT Design Library features design templates and guides for broad-use AT products. This gives more VA facilities with the right 3D-printing capabilities a blueprint for recreating some of the most helpful products for Veterans. OAM has worked with the National Institutes of Health (NIH) to host the AT Design Library on the NIH 3D-printing website where anyone can view the available products and their designs. The library offers the opportunity for providers to view products that may fit their Veteran patients' needs. While OAM's AT Design Library currently features about two dozen items, the team has plans for more products to be included in the future.

The AT Design Library and National AT Interfacility Consult are rolling out this year and will soon be available at your VA. Veterans who wish to connect with OAM engineers can ask their primary care or rehabilitation provider for a referral. With the launch of the AT Design Library and National AT Interfacility Consult, OAM is furthering its mission of providing safe, personalized, and equitable healthcare for Veterans. To learn more about the OAM Assistive Technology Designs, email Melissa.Oliver@va.gov.





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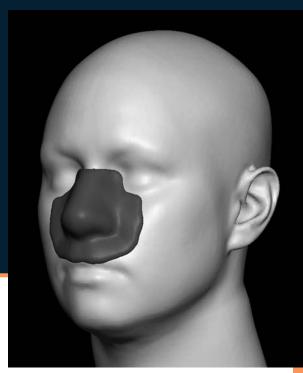
MOUNTING BAL



VHA Radiotherapy Bolus Advances Personalized Veteran Cancer Treatment

3D Printing Enhances Care and Empowers Providers

External Beam Radiation Therapy (EBRT) delivers high-dose radiation to destroy cancerous cells or shrink tumors in superficial areas of the body, such as the nose. As a part of their treatment, Veterans typically receive an average of 30 to 40 treatments of EBRT. Oncologists may use a radiotherapy bolus, a device placed on the skin surface with the intention of limiting the radiation dose received by healthy tissue and focusing it on the tumor.







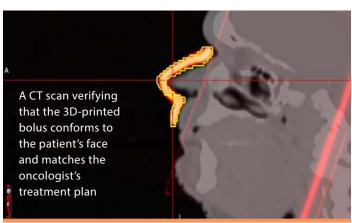
Within VA, there are approximately 350,000 EBRT sessions each year, a number that is likely to expand in the future due to the passage of the Sergeant First Class Heath Robinson Honoring our Promise to Address Comprehensive Toxics (PACT) Act. The PACT Act expands VA cancer care by adding to the list of conditions assumed to be caused by exposure to toxins during service. For Gulf War and post-9/11 Veterans, this includes expanding care for various cancer types and consequently increases the need for personalized cancer treatment within VA. It is estimated that more than 250 Veterans a year may benefit from the use of a Veteran-specific radiotherapy bolus.

Typically, providers hand-fabricate similar radiation doselimiting tools that may need to be recreated from scratch at each radiotherapy treatment appointment. This process often results in uncomfortable and lengthy set-up times for Veterans. Driven by feedback from providers on the need for Veteran-specific cancer treatment tools, VHA's Office of Advanced Manufacturing (OAM) began development of the

"The Radiotherapy Bolus is an example of how VA is at the intersection of point-of-care manufacturing in healthcare settings and precision medicine. We are empowering our providers who are trained in this cutting-edge technology to provide the highest quality of care possible for our Veterans."

—Brian Strzelecki, Deputy
Director of Production for OAM

VHA Radiotherapy Bolus in 2021. VHA Radiotherapy Bolus uses the digital design created by an oncology professional as part of their regular treatment planning to match each Veteran's anatomy. The bolus is manufactured at the Seattle VA Medical Center (VAMC) and sent directly to the radiotherapy provider, where it can be reused for up to 40 sessions. The physical bolus replaces the need to hand-fabricate devices, giving providers more time to focus on caring for Veterans.



This service supports VA's ongoing effort to modernize radiation therapy and provide a service that may not be readily accessible elsewhere. "By intimately engaging VHA clinicians during the development and testing of this product, we have ensured that we are providing a clinically useful device that fits into their current treatment process," said Joseph Iaquinto, development team lead for the VHA Radiotherapy Bolus. "This is a key feature of developing devices within VHA—we can design them from prototypes to Food and Drug Administration (FDA)-cleared devices to meet the needs of our [providers] and the Veterans they serve."

The VHA Radiotherapy Bolus, cleared by the FDA, was initially made available for the Cleveland, Seattle, and Richmond VAMCs in March of 2023.

Dr. Timothy Ritter, a medical physicist for the Richmond VA, worked closely with the OAM development team and gave the following feedback on a recent case: "The CT scan of the piece fit nicely to the patient's external contour, and it matched the planned structure almost perfectly. I look forward to the future opportunities that this capability opens up!"

OAM is currently in the process of making the VHA Radiotherapy Bolus available to all 41 radiation oncology programs across VA with the goal of providing access to any eligible Veteran in the country. Reach out to your local VA care team for all questions about this product and any treatment options.

Improving Breast Cancer Screening and Care Navigation for Veterans

Using Veteran Feedback to Personalize Care



"When I think about the standard of care, I think about quality, expectations, consistency, and trust. A standard of care that lets providers and Veterans know we're focused on them is the best possible way forward and improves the strength of the Veteran-provider relationship."

-Dr. David Au, CCPI Acting Executive Director

Over 700 women Veterans enrolled in VA healthcare are diagnosed with breast cancer annually. Women are the fastest-growing Veteran population, but they still experience several unique barriers to care. To address some of these challenges, VHA's Center for Care and Payment Innovation (CCPI) developed a breast cancer pilot to support efforts to improve Veteran access to care, support providers, and help Veterans better navigate breast cancer screening and treatment.

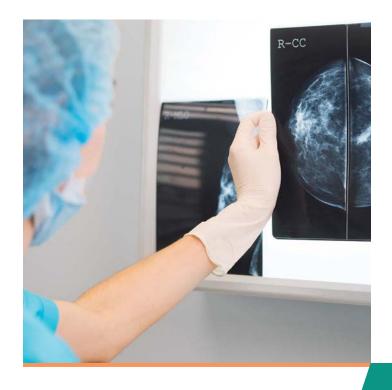
Authorized by Section 152 of the MISSION Act of 2018, CCPI develops and tests innovative approaches to Veteran care. CCPI collaborated with VA facilities to understand care delivery for Veterans who are screened for and/or diagnosed with breast cancer within the VA healthcare system. CCPI also spent time with the care teams to understand their current care delivery and coordination processes. This helped CCPI understand the potential opportunities to improve the Veteran experience and health outcomes for women Veterans. This engagement with providers led CCPI to identify two major focus areas for the pilot: mammography and patient-reported outcomes (PROs).

Prevention and early disease detection are key factors in the fight against breast cancer—and that often starts with mammograms. One aspect of CCPI's pilot focuses on ensuring VA providers have a standard workflow to order mammograms. The pilot will support a consistent standard of care and Veteran experience across VA facilities.

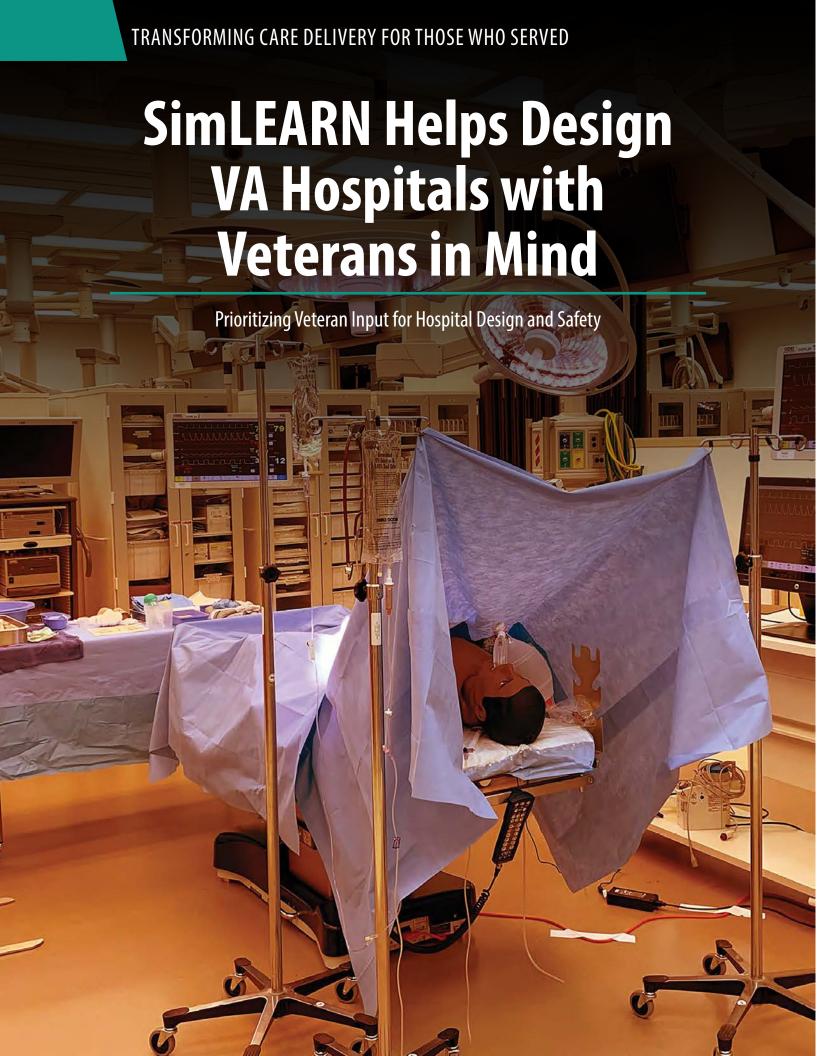
CCPI's collaboration with VA facilties revealed opportunities to capture PROs in a more proactive, timely, and consistent manner. PROs are a set of standard self-reported health measures used to understand a patient's health status, which can include reporting on symptoms, experience, and overall well-being. These outcomes improve the Veteran experience and provide an opportunity for the Veteran to become more involved in their care plan. Collecting and leveraging PROs is aligned with the White House's Cancer Moonshot effort.

Currently, PROs are collected via paper forms. In fall 2023, CCPI's breast cancer pilot will move the collection of PROs to an electronic system called the VA Symptom Assessment System (VSAS) at VA facilty pilot sites. VSAS will provide a method for documenting outcomes related to cancer symptoms and experience. Collecting these outcomes on VSAS will provide VA providers with holistic information about the Veteran cancer journey and help providers appropriately adjust and personalize the Veteran's care plan.

"Our goal is prioritizing Veteran needs and wants by collecting this information. The avenue for a Veteran to be honest about their experience builds a stronger relationship with their provider. This also lets the provider know information a patient may not be comfortable verbalizing in person," shares Dr. David Au, acting executive director for CCPI.



Learn more about CCPI here!



VA is a premier learning health organization with more than 70% of all practicing U.S. physicians spending time training at a VAMC. The Simulation Learning, Evaluation, Assessment, and Research Network (SimLEARN) is VHA's program for simulation in healthcare training. Serving the largest integrated healthcare system in the United States, SimLEARN provides an ever-growing body of curricula and best practices that improve healthcare for Veterans. The use of innovative technologies in a safe learning environment enhances diagnostic, procedural, and communication skills to support quality care and the best possible outcomes. From simulation-based pre-construction planning to training providers in simulated operating rooms, SimLEARN provides services that improve the efficiency and quality of care for Veterans.

The PACT Act is investing in VA's infrastructure by providing \$5.5 billion in funding for 31 new facilities in 19 states. This strengthened VA's ability to test and evaluate the safety and complex interactions of people, technology, and equipment within VA facilities. From facility design through construction completion and the start of normal hospital operations, SimLEARN's services improve the flow, efficiency, and safety of Veteran healthcare facilities.





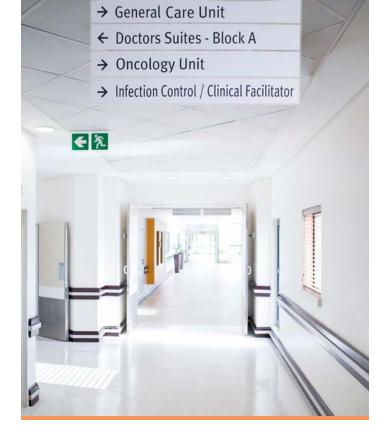
This year, SimLEARN Assessment Collaboration and Outreach (ACO) reached new heights after partnering with the VA Office of Construction and Facilities Management (CFM) to conduct Simulation-based Healthcare Design Testing (SbHDT). SimLEARN and CFM are developing new technology that benefits the VA by improving operational efficiency and enhancing patient care. SimLEARN's artificial intelligence-powered digital twin technology enhances the hospital design process to maximize functionality and safety of VA spaces. This process pulls in the experience and input of multiple stakeholders to orient current designs to the future needs of optimal patient care. Getting enduser feedback—including physicians, nurses, architects, and Veterans—early in the design process mitigates the need to re-work and fix problems once construction is complete, providing high-potential construction cost savings.

"Humanizing the experience through the eyes of the Veteran provides staff with a clearer perspective of Veterans' perceptions regarding space. Design testing creates a Veteran-centric experience, significantly enhancing its value," said Charles Tubbs, a Veteran experience representative who participated in previous testing.

This November, the SbHDT team will be holding its second testing session for the Medical/Surgical Inpatient Units and Intensive Care Nursing Units (Med Surg) Design Guide. The testing will again include Veteran participants who will roleplay as patients in scenarios that will help the SbHDT team identify the most efficient ways to design some of the most crucial wings of VA hospitals. "Anything we do is geared toward the Veteran. The Veteran is the one who is going to be in the space. They should be involved in the process as early as possible," said Devin Harrison, ACO Associate Director.







The SHA team works alongside the Veterans Experience Office to ensure the Veteran perspective is prioritized during simulation testing. All identified concerns are rated for urgency and severity for the potential harm they could cause to Veterans and others and are prioritized for resolution. One of the most common findings includes ineffective wayfinding (navigating large VA facilities), which impacts Veteran satisfaction.



To help address this issue, the Orlando VA Medical Center and SimLEARN served as a pilot site for the VA Wayfinding **app,** which is available for Apple and Android devices. The app provides turn-by-turn directions and is designed for Veterans to help improve navigation, save time, reduce stress, provide access to important information, and enhance the overall patient experience within the healthcare facility. VA facilities can be large and complex, with numerous departments, clinics, and buildings. Navigating through such facilities can be challenging, especially for Veterans and their caregivers who are visiting for the first time or have mobility issues.

With the VA Wayfinding app, Veteran patients can easily locate restrooms, cafeterias, pharmacies, or waiting areas, ensuring their comfort and convenience during their visit. The app can be integrated with other systems, such as appointment scheduling or electronic health records, to create a seamless experience for Veterans, their families, and caregivers.

The VA Wayfinding app is currently available at 14 VA facilities across Alabama, Florida, Georgia, Nevada, South Carolina, and Virginia, with plans to map to additional sites in the future.







IMPROVING

EXPERIENCES

FOR THOSE WHO SERVED

Embracing innovative solutions allows VHA to revolutionize how Veterans engage with and navigate the healthcare system. VHA's goal is to make Veterans safer and healthier by giving them the positive experiences that instill trust in the system and encourage them to return to VA medical facilities. Promoting favorable experiences for Veterans is the reason behind investments like virtual and extended reality software, which immerse Veterans in alternate digital experiences and help reduce stress and anxiety.

This section is about healthcare innovations that create meaningful experiences for Veterans. Here, you can read more about how virtual reality is used for physical rehabilitative therapy, how advanced speech processing technology is assisting Veterans with hearing impairments, and VA employee developed devices are making eyedrop application and knee procedures more comfortable experiences for Veterans.

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In 2013, staff in the mental health service at the VA medical center in Madison, WI, wondered, "Wouldn't it be nice if we could know more about the Veterans we work with? If we could somehow know their stories?" From there came the idea

of a program now called "My Life, My Story" (MLMS), designed with the goal of having VA writers work with Veterans to capture their life stories to help medical providers better understand their patients. The program started thanks to a grant from the VHA Office of Patient Centered Care. "The idea was to know a little bit more about the Veterans and improve their care experience by providing VA care teams with the story of each Veteran's life," said Thor Ringler, a writer-editor for the national MLMS program.

Ringler's background was in poetry and teaching, but he decided to pursue a master's degree in marriage and family therapy. In his internship year, Ringler worked at a Vet Center (a VA counseling center for Veterans

with trauma). "I decided to work with a population I knew nothing about, and it ended up being a great thing for me. I really connected with the Vets I worked with, and I really loved the VA and wanted to work with them." Ringler heard about MLMS and was hired as one of the initial writers for the project. To craft the stories, Veterans are interviewed for about an hour. Then, the interview is written into a 1,000-word first-person narrative, reviewed with the Veteran and, with their permission, entered into the healthcare record as a resource for care teams to learn more about the Veteran and provide more personalized care.

MLMS has grown now to where staff, volunteers, and even medical students help the Veterans tell their stories. Finding the stories is a mixture of writers going into patients' hospital rooms asking if they would like to tell their tale and some referrals from medical providers. Ringler says that, ideally, the final versions will end up in the patients' records, but a few Veterans decide they want to just keep the stories for themselves. "The Veteran is always in charge of the process," Ringler says. "If they like the final story, but don't want it in their medical chart, that's still a win for us. Because we are getting them a story, and that's what the program is all about."

Ringler says that the medical information in a Veteran's record is most important in making clinical decisions, but the narratives provide valuable clinical data that plays a key role in care. "When we ask providers if these stories are helpful

clinically, they say yes, overwhelmingly. And for the Veteran, it's very powerful when they hear someone has read their story." Many providers have said the stories can help inform patient aftercare plans. Ringler says they take on even greater importance in the end-of-life, palliative care setting. And many families want to have the stories so they can be read at the Veteran's funeral.

Since 2013, MLMS has expanded to more than 70 VA facilities, thanks in part to support from other VA program offices and Ringler's success as a 2016 VHA Shark Tank competition winner. MLMS has also spread to other healthcare systems, including over 20 civilian teaching hospitals. MLMS continues to spread with the goal of someday enabling Veterans to walk

into any VA facility and work with a provider to capture their story. In addition to telling their story in a medical setting, Veterans can self-refer to My Life, My Story by emailing mystory@va.gov. For Veterans near a VA facility that does not yet have the program, interviews can be conducted by phone or video.



"We get a lot of tears when we read these stories back. It moves people to hear their lives reflected back to them. They say, 'I didn't know I did that much in my life. I didn't know I meant that much to other people.'

The stories honor the voices and lived experiences of the Veterans we care for."

-Thor Ringler,

Editor

MLMS Writer and

Click here to listen to the My Life My Story Podcast!



VA Center for Development and Civic Engagement (CDCE) established the Volunteer In-Home Visitor Program (VIVP) over 10 years ago. VIVP provides caregiver respite and addresses social isolation through Veteran in-home visits by trained volunteers who are matched based on geographic location. When in-home visits through VIVP were put on hold in March 2020, the start of the pandemic, Lori Murphy, a social worker at the Chalmers P. Wylie Veterans Outpatient Clinic in Columbus, OH, started thinking about not only how the same services addressing loneliness and social isolation could be provided virtually, but how VA could continue engaging volunteers virtually. That same month, Murphy and a dedicated group of VA social workers and voluntary service specialists launched what is now known as the Compassionate Contact **Corps (CCC)** at eight VA facilities across the nation.

"VA volunteers are the heart of our facilities, lending helping hands and a compassionate and familiar presence to our employees, Veterans, their caregivers, and families. Compassionate Contact Corps provided our volunteers the opportunity to safely support our Veterans throughout the pandemic. That level of support continues to offer meaning and friendship to our Veterans every day," said Mr. Prince Taylor, Deputy Director for VA's CDCE and CCC Executive Champion.

CCC was designed as a social prescription program, matching trained volunteers with Veterans for 15–60-minute weekly phone or video calls. Volunteers undergo training on essential topics such as confidentiality, privacy, customer service, empathy, compassion, support, and boundaries. The volunteers are connected to Veterans that had reported feelings of loneliness to their providers. Both volunteers and Veterans

responded to this new program with enthusiasm and the team saw a dramatic improvement in reported feelings of loneliness and isolation. 83% of Veterans said the program helped them feel less lonely, and 82% of volunteers said the program has even increased their own overall well-being.

Murphy was selected as a 2021 VHA Shark Tank winner, providing her the platform and resources to expand to additional VA facilities. CCC has since been named a National Diffusion practice with VHA Diffusion of Excellence, receiving continued support. As of August 2023, CCC has reached 70 VA facilities across the nation, impacting over 1,000 Veterans, and engaging almost 600 trained volunteers in its mission to reduce Veteran loneliness.

Feedback from Veterans, volunteers, and providers has been overwhelmingly positive. "I have been talking on the telephone with my Veteran, Louis, for two and a half years and my other Veteran, Bobby, for one and a half years. These two gentlemen have become a part of my life, and I have become a part of theirs. We never run out of things to talk about. I feel so blessed to know these Veterans and am thankful for the opportunity," said one CCC volunteer.

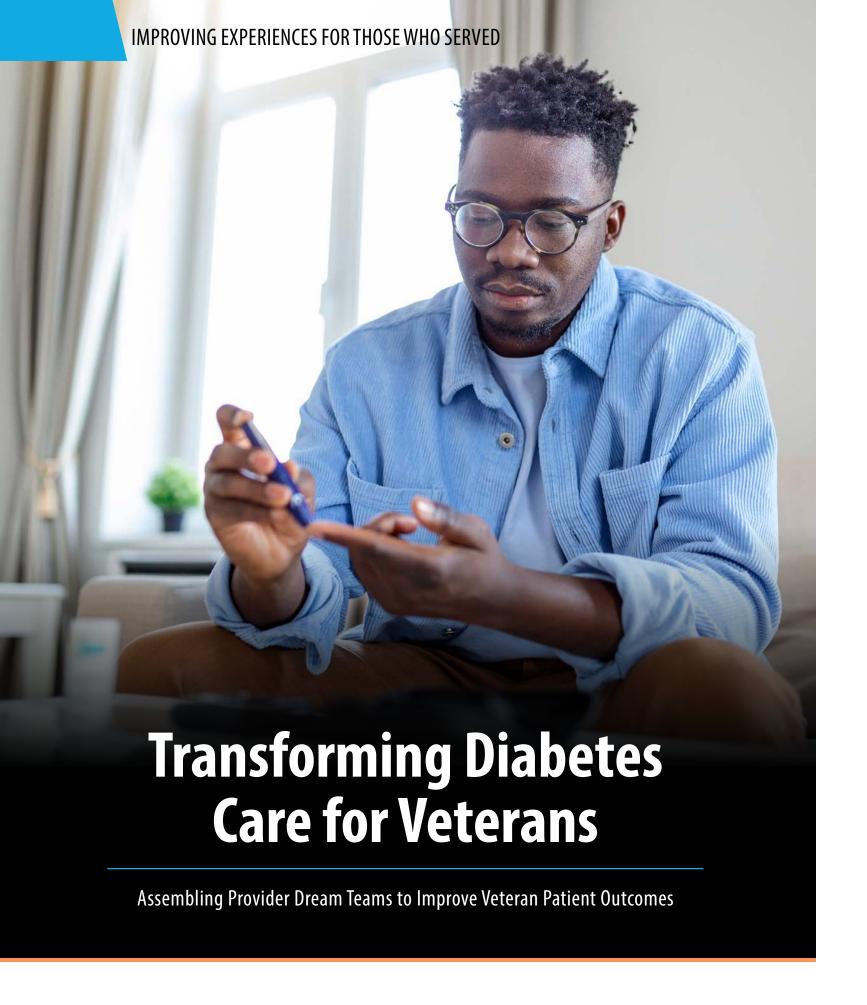
Those interested in volunteering for CCC should reach out to their local VA voluntary service specialist by visiting volunteer.va.gov. Veterans and caregivers with an interest in being matched with a trained volunteer should speak with their VA primary care provider or social worker. To keep up with the spread of CCC, visit their Diffusion Marketplace page. To learn more about CCC, email Lori.Murphy@va.gov.



CHRONIC LONELINESS

has been linked to higher risk of a variety of physical and mental health conditions, including a 30% higher risk for stroke and heart disease, 40% higher risk for developing dementia, 26% higher likelihood for early mortality, and 3x more likely to experience suicidal thoughts.







One in four Veterans live with Type II diabetes, more than double the rate for the general population. To support Veterans, **VHA Center for Care and Payment Innovation** (**CCPI**) collaborated with Iowa City Veterans Affairs Medical Center (VAMC) to pioneer a pilot program to address this life-changing diagnosis. This collaboration improves care coordination for Veterans with Type II diabetes and improves Veterans' care experience and clinical outcomes.

Authorized by Section 152 of the MISSION Act of 2018, CCPI develops and tests innovative approaches to Veteran care. CCPI, in collaboration with VA resources and subject matter experts in VHA's Innovation Ecosystem (IE), uses a comprehensive care team approach to manage the progression of Type II diabetes, shifting the focus from self-management to collaborative care. These interdisciplinary teams include registered nurses, clinical pharmacists, endocrinologists, mental health professionals, and dietitians who share information to provide higher quality care, streamline Veterans' appointment scheduling, and create a holistic and Veteran-focused environment.

The pilot program also empowers Veterans to manage their diabetes by providing education, encouraging engagement, and prioritizing preventative follow-up care. Regular telehealth calls with Veterans provide education, medication management, and overall support, empowering them to be an active participant in their care journey.

The care team collaborates behind the scenes to ensure Veterans' well-being. Home health nurses communicate directly with pharmacists, who consult with endocrinologists for further guidance. Weekly huddles facilitate the exchange of information and insights, allowing the team to make informed decisions regarding each Veteran's care plan. "This level of coordination and collaboration reduces the need for multiple separate consultations, resulting in a more efficient and patient-centered approach," shares CCPI Acting Executive Director Dr. David Au.

The pilot program builds upon two successful VA initiatives—telehealth and interdisciplinary care teams—combining innovative care delivery and clinical best practices to improve the Veteran experience. These established best practices are seamlessly integrated into the diabetes pilot, ensuring a comprehensive and practical approach.

The Type II Diabetes Pilot will launch at Iowa City VAMC this fall.



Learn more about CCPI here!

A New Vision for Veteran Rehabilitation

VA Immersive Transforms Engagement and Veteran Patient Outcomes Using Virtual Reality

Rehabilitation, including physical and occupational therapy and other disciplines, is an integral phase in Veterans' recovery process but can be physically, mentally, and emotionally taxing. As a result, Veterans may be less inclined to travel to VA facilities for rehabilitation appointments or complete their home exercise programs, potentially impacting and even lengthening the recovery process. Additionally, pain can be a limiting factor, and fear of movement due to pain can distract and prevent Veteran patients from making progress toward their health goals.

VA Immersive, a core program of VHA's Office of Healthcare Innovation and Learning, is focused on transforming care delivery and experience through immersive technologies like virtual reality (VR) and augmented reality (AR). They recognized the problem and saw an opportunity to leverage VR to improve Veterans' physical and overall functional rehabilitation.



Immersive technology is uniquely suited for rehabilitation with its ability to gamify the experience while also providing the VA care team with objective measures to evaluate the Veteran's progress. "Immersive technology complements the evidence-based care Veterans are receiving at VA, and regarding rehabilitation therapies, increases engagement

and the clinician's ability to provide objective assessments over time," said Dr. Anne Lord Bailey, Director of Clinical Tech Innovation and VA Immersive Lead.

Both Veterans and VA providers benefit from immersive technology use in rehabilitation. Veterans may experience anticipatory pain or muscle guarding during sessions, limiting their progress. When therapists incorporate the secure VR environment, introducing attentiongrabbing visuals and reducing awareness of external sensory stimuli, Veterans focus less on their fears and work more effectivelyoften without realizing their increased effort. Roger Miller, a U.S. Army Veteran, has a new view of his PT thanks to immersive technology. "In your regular physical therapy you're working on balance issues, it's enjoyable, but it's work. VR is not work. It's more like playing a game. You don't really think about it as working on your balance issues. I would really tell Veterans to get into this program."

told me this immersive technology has helped decrease their pain. It's like playing a game and not work. They actually look forward to doing the exercises and it makes it fun."

Across four quality improvement projects, VA Immersive has engaged 32 sites to **pilot VR for rehabilitation**

while also planning for long-term implementation and integration into at-home use. "Use of this technology in VA facilities provides an engaging approach to in-person care delivery, but also has the potential to expand the reach of the healthcare system and improve therapy access by providing this technology for use at home before or after surgeries, for injuries, or for chronic conditions," says Caitlin Rawlins, Deputy Director of Clinical Tech Innovation and VA Immersive Co-Lead. Additionally, VA subject matter experts are working with developers to create new, Veteran-focused rehabilitation VR experiences. Without a doubt, VA's rehabilitation therapists are at the forefront of defining a new reality for healthcare delivery and experience.

Veterans or providers interested in VA Immersive programs should email <u>VAimmersive@va.gov</u> and visit the <u>VA Immersive website</u> to learn more.

"What's impressed me the most about immersive technology is the fact that it gets the Veterans out of the traditional rehab setting...It's like playing a game

–Dr. Nathan Crosby,U.S. Army Veteran, Physical Therapist

and not work. They actually look

exercises, and it makes it fun."

forward to doing the

VA providers using immersive technology are excited by the opportunities to try new exercises and demonstrate other exercises. Dr. Nathan Crosby, U.S. Army Veteran and physical therapist providing care within the Western North Carolina VA Health Care System in Asheville, NC, saw this value while using VR with Veterans, noting, "What's impressed me the most about immersive technology is the fact that it gets the Veterans out of the traditional rehab setting so they're not just sitting on a table." Dr. Crosby continued, "Veterans have





XanderGlasses™ Help Veterans with Hearing Loss

Innovation Collaboration Gives Hope to Veterans with Impaired Hearing



at home, at work, or in a noisy public venue. Noise canceling microphones capture speech and the audio goes through a speech-to-text processor that formulates sentences in the right context and with proper grammar and punctuation, so it makes sense to the user. Those captions are projected into the lenses for the user to read with only a one second speech-to-text delay.

XanderGlasses are lightweight and comfortable and can hold prescription lens inserts. "We want these people who may be socially withdrawing or not able to talk to feel included," says Marilyn Westner, co-founder and content strategist at Xander. "We want to give them that independence to communicate back, instead of relying on a spouse, a daughter, a piece of paper, or an app on their phone where they're looking down."

In 2021, Xander started the discovery processes to gain solution insights from Veterans and frontline staff on usability of prototype, maintenance of prototype, and technology consideration. These discovery sessions were very informative and made a significant contribution to moving the innovation forward. Through the VHA Innovator's Network Greenhouse Initiative, they began testing their first product design with VA Pittsburgh Healthcare System and expanded testing to VA Palo Alto Health Care System, Charlie Norwood VA Medical Center in Augusta, GA, Orlando VA Medical Center, and VA New Jersey Healthcare System. Members of the Veterans' families, their caregivers, and VA care teams were included as a part of the design testing process. "It's been inspiring to see how engaged both frontline VA staff and Xander are in pursuing this innovative solution through human-centered design," says Katie Braun, Employee Engagement Center chief and innovation specialist at VA Pittsburgh. "This experience confirmed how important innovation is to our facility, our employees, and our Veterans."

The feedback from Veterans on the XanderGlasses was overwhelmingly positive,

with many Veterans saying the glasses give them their confidence back. "I think these glasses are amazing because you don't have to ask anybody to do anything, you can just put them on and you'll be able to see what they say," said a Veteran who tested the prototype. "You don't have to ask anybody to connect to the internet, and you can look at them while they're talking to you ... that's pretty amazing."

Another Veteran appreciated the privacy XanderGlasses gave him during doctor's appointments, because he no longer had to rely on his caregiver to communicate with his provider. One Veteran with cochlear implants tested the prototype. In his feedback, he stated, "I loved the demonstration at the VA today. I appreciated the opportunity to test drive the glasses. I can see how they would be extremely beneficial to me with my hearing loss." One spouse expressed feeling like she "got her husband back" after years of hearing loss took away his ability to tell jokes and be as charismatic while engaging in conversation. Moments after trying on XanderGlasses, he was telling jokes and making everyone laugh as smiles lit up the room.

"The XanderGlasses are restoring a level of human connection otherwise lost for these Veterans," says Kelsey Shull, Human-Centered Design Lead for VHA Innovators Network. "Seeing a Veteran have a conversation with another Veteran, their spouse, or their child when they haven't done so in decades was awe-inspiring and a privilege. Making use of the feedback gathered from Veterans, Xander is currently working to develop their second prototype, which will also be tested across select VA facilities. While XanderGlassesTM are not yet widely available to Veterans, the Veteran-centric design process ensures that the final product will be one that improves the Veteran experience and restores their ability to communicate in real-time.

If you are interested in learning more about XanderGlassesTM and how they help people listen, understand, and connect, visit <u>Xander.tech</u>.

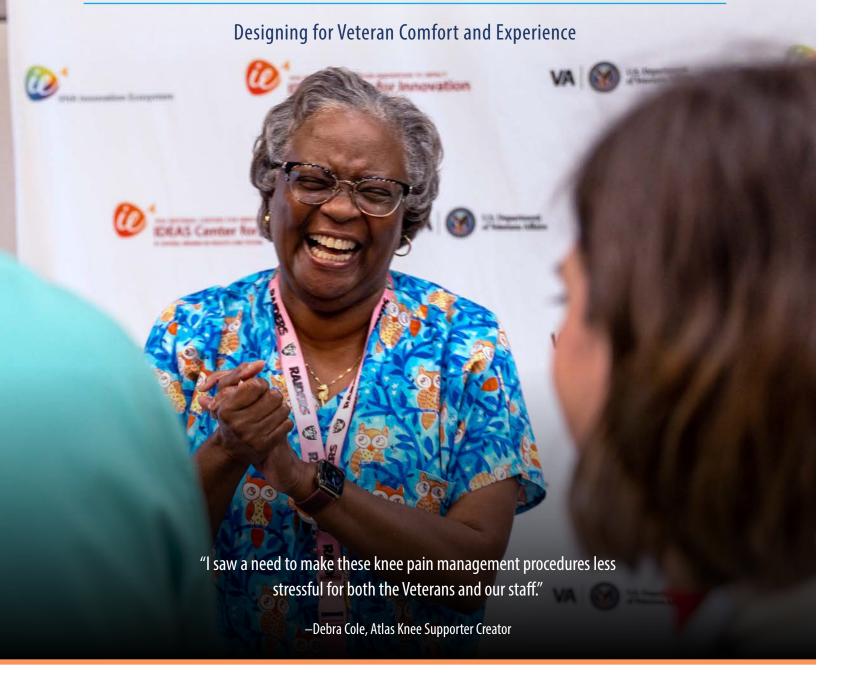


Veterans are
30% more
likely than
non-Veterans
to have a
severe
hearing
impairment





Atlas Knee Supporter Increases Veteran Comfort During Knee Procedures





Interventional radiology knee procedures use imaging techniques like X-rays and ultrasound to help doctors deliver medication to a specific area in the body. They are often painful and require precision accuracy while providers stabilize, align, and inject medication into Veterans' knees, or other areas of the body. During these procedures, pillows, towels, and sheets are commonly used to add comfort and positioning support, but often fall short of making Veterans comfortable. This problem inspired Debra Cole, a radiology technologist in the Pain Clinic at the Central Virginia VA Health Care System in Richmond, VA, where she has served since 1980.

"I saw a need to make these knee pain management procedures less stressful for both the Veterans and our staff. It wasn't uncommon for Veterans to have to reschedule their appointments because of the intense pain and increased radiation. My idea was to design a new positioning device to secure the Veteran's leg in a more natural resting position while still allowing the provider to effectively conduct the procedure," said Cole.

With a vision in mind, she began initial designs in 2018 through research and interviews with VA providers and Veterans to understand what requirements a patient knee positioning device would need to meet. By 2021, Cole had a working prototype named the **Atlas Knee Supporter**,

which stabilizes the Veteran's lower leg and supports their knee during X-ray guided injections. The Atlas Knee Supporter reduces the time needed for adjustments and manual stabilization, decreases radiation exposure to Veteran patients and staff, and increases Veteran comfort and satisfaction. The device can help decrease rescheduling rates, procedure time, and use of anesthesia.

Cole has received multiple years of investment funding through the VHA Innovators Network Spark-Seed-Spread program, helping to support her innovative spirit and advance the Atlas Knee Supporter. "Debra's commitment to innovation and improving the Veteran experience is unparalleled. She has shown determination in taking her concept from idea to licensing and manufacturing through multiple iterations and rounds of Veteran feedback," said Allison Amrhein, Director of the VHA Innovators Network.

Feedback from Veterans who have used the Atlas Knee Supporter has been extremely positive. Veterans noted how the device made the procedure more efficient and eased their anxiety about the procedure. Since implementing locally in 2021, there have been zero appointments rescheduled, which represents a dramatic drop from the pre-implementation 20% rescheduling rate. The average procedure time was also reduced by 15 minutes.

Atlas Knee Supporter's usage has expanded into radiation therapy and nuclear medicine. It is also making an impact in other healthcare areas like hospice, home-based care, podiatry, MRI, radiology, orthopedics, spinal cord procedures, and bariatrics.

As of 2023, VA has licensed the Atlas Knee Supporter to be manufactured and distributed for use at VA facilities across the country through the VA Intrapreneurial Product Marketplace. With VAIPM questions, email VACOVAIPMSupport@va.gov.

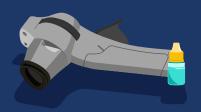




VHA Device Makes Drops Easier on the Eyes

DropEase Aids Veterans with Eyedrop Applications





DropEase provides a stable platform for patients to administer eyedrops on their own, complete with a handle that is easy to squeeze if patients have weak or shaky hands due to conditions such as Parkinson's disease or arthritis. The device can hold standard eyedrop bottles from 2.5-30ml and allows users to release the proper amount of medication every time. The easy-squeeze handle makes it easier to apply enough force to a small bottle to produce sufficient eyedrops, and the device also features an aiming channel to help direct drops into the eye.



Terri Ohlinger is a retired U.S. Army nurse with over 30 years of experience in both civilian and military nursing. Since 2016, she has served as a nurse case manager for eye surgery at the Cincinnati VA Medical Center. During this time, Ohlinger has met many Veterans who were unable to squeeze the small bottles of drops or could not position the dropper correctly over their eyes. "There were a lot of patients who weren't doing their eyedrops or I was re-ordering their drops frequently because they were using too much. Many of our patients have manual dexterity issues and could not squeeze the bottle, and they just gave up," said Ohlinger. This led to poor outcomes and increased costs.

It wasn't until Ohlinger read an allemployee email advertising the VHA Innovators Network's Spark-Seed-Spread program—which identifies and accelerates VA employee healthcare innovations—that she realized there just might be a better way. With an idea for improved Veteran experience in mind, Ohlinger began to sketch out her idea for an eyedropper device. She connected with Cincinnati Innovation Specialist Dr. Lindsay Riegler and the rest is history. In 2020, Ohlinger collaborated with the engineering department at the University of Cincinnati. Through human-centered design training and help from a local American Veterans (AMVETS) chapter, Ohlinger sought continuous Veteran feedback, and the

team came up with two prototypes. The second prototype was ultimately selected and **DropEase** was born.

"I have had Veterans and their families ask to be put on a waiting list," Ohlinger says, as the device awaits increased production. "I have heard things like 'I can't wait' and 'this is sorely needed,' and 'my mom could sure use one of those." DropEase is currently in use by Veterans at the Cincinnati VA Medical Center and Louis Stokes Cleveland VA Medical Center with exciting plans in store.

In August 2021, Ohlinger applied for and was awarded a patent with the help of VA's Technology Transfer Program (TTP), a group focused on translating VA technologies to the private sector. Cleveland VAMC TTP assisted with the development of device add-ons allowing for custom padding that enhances the user experience and improves eye drop efficiency. Additional add-ons include an attachment that can be used for the administration of ear drops for humans and pets alike.

DropEase was licensed to Harbor Design and Manufacturing in June of 2022 with assistance from Tech Link. DropEase will soon be available for purchase on the VA Intrapreneurial Product Marketplace website. With VAIPM questions, email VACOVAIPMSupport@va.gov.





"It's my dream to make this Smart
White Cane available to all
Veterans...to be used on their
white canes, 4-wheel walkers,
and wheelchairs."

-Brian Higgins,
U.S. Navy Veteran,
Smart White Cane Creator

More than one million Veterans today live with vision impairment or blindness, a community that VHA has long supported through assistive technologies and rehab services, like electronic reading machines and sensory training. And while many have found greater independence through technological advancements in medicine, loss of or impaired vision still often comes with significant challenges, including decreased safety, loss of independence, isolation, and depression.

For the last 100 years, the traditional long white cane has been a standard option for assisting those with visual impairments—users wave their cane as they walk to detect objects and hazards in their immediate path. Unfortunately, this strategy has limitations, including the risk of missing dangerous obstacles that are not on or close to the ground where the cane is usually waved, such as low-hanging tree branches.

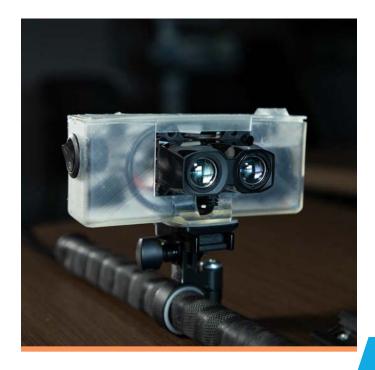
However, VA employee Brian Higgins knew this traditional method was due for a modern upgrade. Higgins, a visually impaired Veteran himself, started to conceive of an advanced navigational sensor system that could fit on the traditional long white cane and give it "smart" features to make it safer and more reliable. He investigated the potential use of lidar sensors, which use laser lights to determine the shape and distance of objects. The information from the sensors could then be converted to sounds or vibrations to alert the user of nearby objects. The converging of these technologies, he imagined, could allow someone with impaired vision to more safely perceive and navigate the world around them while walking.

"People who are blind or visually impaired are still using an outdated navigation tool ... in a highly technological world ... Veterans deserve a custom cane that will increase their sense of safety as they navigate the world," Higgins said. "The safer Veterans feel, the more they will accomplish in life."

Higgins assembled a team and began building a prototype of the advanced sensor-enabled navigation system for the "smart cane" he had envisioned. He collaborated with Dr. Thomas Osborne, Director of the VA National Center for Collaborative Healthcare Innovation (NCCHI), who helped Higgins improve his prototype. Higgins received support from the VHA Innovators Network Spark-Speed-Spread program to accelerate his designs, and eventually had his invention patented through the VA Tech Transfer Program. **The Smart White Cane** had come to life.

The Smart White Cane aims to enhance the safety, independence, and well-being of Veteran patients through thoughtfully designed technology. This invention also highlights the power of Veteran-directed innovations and the value of successful collaboration.

Although Brian is officially retired from his full-time job working at the VA Western Blind Rehabilitation Center (WBRC), he continues to follow his passion on the NCCHI team as a volunteer. WBRC and NCCHI have started recruiting Veterans for pilot testing of the Smart White Cane.







FOSTERING

HEALTH & WELLNESS

FOR THOSE WHO SERVED

VHA is not just leading the charge in innovative healthcare, but is also fully invested in how those innovations can help ensure that our Veterans receive comprehensive care that supports their health holistically. Providers at VHA aim to care for Veterans' whole health by addressing their physical, mental, emotional, and social well-being. From specialized programs that honor and empower marginalized Veterans to practices that foster a person-first healthcare approach, addressing care holistically means Veterans receive comprehensive, tailored care that nurtures their mind, body, and spirit.

In this section, you can read about the various programs VHA innovators have created—like PRIDE in All Who Served, THRIVE, and Mission Daybreak—to amplify Veteran voices and empower them to take charge of their health, life, and well-being.

- **VA Immersive Technology for Pain and Suicide Prevention**Developing a New Reality for Veterans
- Taking PRIDE in Veterans' Healthcare
 VA PRIDE Program Promotes Social, Mental, and Physical Health for LGBTQ+ Veterans
- Helping Veterans THRIVE at VA
 Integrating Mind and Body Wellness for Veterans
- 67 Caring for Caregivers
 VA Collaboration Brings Veteran Caregivers Much Needed Relief
- **Building Communities of Innovation with Veteran Service Organizations**How VSO Collaboration Creates a Stronger VA Healthcare System
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 Cultivating an Ecosystem of Support for Suicide Prevention

VA Immersive Technology for Pain and Suicide Prevention





Within VHA, as many as 50% of Veterans experience chronic pain and may be at increased risk for suicide. One of VHA's top clinical priorities is to prevent Veteran suicide and addressing pain is essential to this effort. VA Immersive, a core program of VHA's Office of Healthcare Innovation and Learning, facilitates national pilots, builds repeatable pathways, and acts as a resource hub for VA providers to integrate technology into their daily workflows. To address chronic pain and suicide prevention, VA Immersive, VA Office of Mental Health and Suicide Prevention (OMHSP), and providers at 60 VA sites of care across the country are working together to pilot virtual reality (VR) to address chronic pain and support suicide prevention.

As a part of this pilot, VA Immersive and OMHSP connected with three VA providers to help develop Veteran- and VA-specific VR content to aid with exposure therapy (directly facing a feared object, situation, or activity in real life). Drs. Greg Reger, Billy Rutherford, and Tyson Chung are leveraging their clinical expertise to design experiences Veterans may encounter in everyday life that cause stress, anxiety, or exacerbate phobias.

By collaborating with a company for development and use of a 360-degree video to capture a real-life restaurant and grocery store environments, VA is able to provide a safe way for Veterans to be exposed to and gradually overcome otherwise triggering scenarios. Providers can then help Veterans process these experiences, prepare for future encounters, and learn new responses to these stressors. This development may help to improve access to a type of therapy historically difficult to provide inside and outside of VA. "It's really a different way of thinking about how we deliver healthcare," said Dr. Anne Lord Bailey, Director of Clinical Tech Innovation and VA Immersive Lead.

For some Veterans diagnosed with chronic pain, VR can also assist with pain management by providing an escape. "When you're in a confined room for long periods of time with a bleak future in front of you and severe lifestyle changes, it helps to get your mind off your troubles," shared U.S. Army Veteran Butch Phillips. "That way you're not thinking about the pain, you're not thinking about your sorrows. You can escape and just be free in that environment."

Lynn Mennin, inpatient pain management case manager at Western North Carolina VA Healthcare System, shared her admiration for the ability to help Veterans have a better pain experience and quality of care. "A lot of times when people experience chronic pain, they stop dreaming. They stop thinking that they can still do things in life," said Mennin. "A lot of the conversations that I have with Veterans are about what they saw virtually, if it brings up any past experiences, and I start dreaming with them. I ask them, 'Where do you want to go in the next year or the next five years?' That can instill a lot of hope that they normally haven't been experiencing."

VA Immersive Chronic Pain and Suicide Prevention pilot program is available to Veterans at 60 VA sites of care and has already impacted over 200 Veterans. To learn more, contact VAImmersive@va.gov and visit the VA Immersive@va.gov website.







VHA prioritizes its commitment to providing quality care and services to all Veterans, including those who identify as LGBTQ+. However, LGBTQ+ Veterans remain at increased risk for suicide and other adverse health outcomes partially due to healthcare access barriers, discriminatory care, and lack of social support. Understanding how stigma and discrimination affect healthcare for LGBTQ+ Veterans has informed VHA's unwavering pursuit in championing Veterans' whole health and delivering the best, most inclusive care.

To support LGBTQ+ Veterans, a VA provider at the VA Hampton Health Care System developed the **PRIDE In All Who Served program (PRIDE)** in 2016, focusing on reducing healthcare inequities through education, empowerment, and social connection. With support from the VHA Diffusion of Excellence program, PRIDE has since expanded to more than 50 VA facilities, with an additional 23 facilities currently working to formally adopt the program. The program engages LGBTQ+ Veterans in 10 weekly one-hour group sessions that address identity development, health promotion, accessing specialized VA services, and increasing social connectedness.

Educating and empowering Veterans to confidently navigate the VA healthcare system can help reduce healthcare inequities. In addition to provider-focused education, patient health education is a method for encouraging positive health behaviors. The PRIDE program specifically covers sexual health, relationship safety, coming out, community resources, and more.

PRIDE sessions also place a special emphasis on suicide reduction and prevention both in its programming and its session format. The closed-group sessions provide LGBTQ+ Veterans an opportunity to build a peer support system—which is linked to an increased sense of security—while improving their health literacy and facilitating reflections on identity.

"One of the most exciting things we get to do is think about the future needs of our LGBTQ+ Veterans since their needs are constantly shifting," said Heather Sperry, Ph.D., LGBTQ+ program manager at VA Indiana Healthcare System. "It's our job to keep up and evolve with them and shift the content to meet our Veterans' current needs."

Veteran-reported outcomes include increased confidence in identity, increased community involvement, reduced likelihood of attempting suicide in the future, and reduced symptoms of depression and anxiety. Veteran feedback is a central focus of the group, and Veterans can provide anonymous input to the PRIDE program team.

Those interested in learning more about or participating in the PRIDE In All Who Served program can email <u>VAPRIDEinallwhoserved@va.gov</u>, or reach out to their local facility's LGBTQ+ Veteran Care Coordinator or Primary Care provider.



Testimonials from Veterans who participated in PRIDE

"Being in this group has reduced my sense of shame in who I am."

"Talking with the group is so important. Someone heard me, and I'm not alone."

"The group gave me the confidence to come out. It provided a starting point and direction for my next steps in my journey."



"Because of THRIVE, I am alive." A simple statement with profound implications. Janet is a middle-aged Veteran whose list of physical and psychological ailments filled an entire computer screen. This accomplished career soldier left active duty with high aspirations and was eager to rediscover her purpose after leaving the service. Five years later, she was declared 100% disabled, had dozens of diagnoses, and took even more pills every day. Worst of all, her spirit was broken. She had lost all hope and regularly contemplated suicide. The only thing that kept Janet hanging on were her three grandchildren.

When Dr. Jacquelyn Paykel, a Navy Veteran who had herself experienced depression, met Janet and other Veterans in her clinic at VA, she was troubled by the profound hopelessness her patients were experiencing. She began to ask, "Why?" Dr. Paykel is a gynecologist with a specialty in integrative medicine and is also a 2023 Senior Innovation Fellow with VHA Innovation Ecosystem.

After discussions with the Women Veteran Program manager and the medical director of the Women's Center in Tampa and countless interviews with Veterans and colleagues, something became apparent to Dr. Paykel: Veterans' well-being after leaving the military was dependent upon two crucial and often missing elements-developing a new community and defining a new life purpose. She knew VA could provide these missing links. Inspired by research, literature, and clinical practice, she developed a curriculum and recruited like-minded colleagues, like Dr. Candis Connell, clinical psychologist, who is also a 2023 Senior Innovation Fellow and an Army Veteran. As a result, **Transforming** Health and Resilience through Integration of Values-based Experiences, better known as the **THRIVE** program, was born.

THRIVE is designed to improve overall well-being for Veterans through 14 weeks of carefully programmed sessions that explore their sense of purpose, self-esteem, whole-health, and life

satisfaction. Unlike traditional, reactive heathcare approaches that aim to treat the symptoms, THRIVE proactively guides Veterans through targeted workshops where they can explore topics not often discussed in medical appointments. The series covers 12 total topics including sleep, mental health, stress reduction, relationships, sexual health, spirituality, and more. "Our body has a significant impact on the mind, and our mind has significant impact on our body. THRIVE focuses on the whole being so we can help Veterans to truly flourish," said Paykel.

THRIVE also recognizes the importance of community, which is why the program's group format allows Veterans to connect and develop supportive networks. Veterans participating in THRIVE workshops have reported a reduction in depression, anxiety, and the stigma of mental illness. Group sessions promote interactions that restore Veterans' faith in themselves, their community, and VA. "There were so many experiences during THRIVE that will make a difference for me in my life. I have to say my quality of life is much better today, and I believe it will continue to be positive. I hope many more Veterans will have the chance that I did," said a Veteran who participated in THRIVE at the James A. Haley Veterans' Hospital in Tampa, FL.

Since her THRIVE experience, Janet has moved to the Midwest and lives in her own apartment where she can spend more time with her grandchildren. The wraparound support of the THRIVE community was the launching pad that helped Janet embrace her values and create a fulfilling life for herself, said Paykel.

THRIVE is available at 21 VA facilities and providers at an additional 47 facilities have been trained on how to facilitate THRIVE with their Veteran patients. Veterans who wish to participate in THRIVE sessions can request a referral from their VA provider. Veterans can also contact the THRIVE team directly at VHATAMWholeHealthTHRIVETeam@va.gov.

ROADMAP TO THRIVE



































Caring for Caregivers



"VA has pulled incredible lessons from this model. We are now reimagining the way VA supports Veterans and their caregivers with more accessible and lower cost home care services."

—Suzanne Shirley, Director of Community Engagement at VHA IE



VA's home respite care services were founded on a simple idea: by offering temporary in-home care, VA can give family caregivers a break, preventing their burnout and improving the long-term health of the Veteran. But there's an unfortunate fact of life that plagues respite care—many people don't want a stranger in their home. Add COVID-19 to the equation, and respite care services plummeted for Veterans who rely on caregivers. "On a good day, a caregiver has an informal network of support," says Steve Schwab, CEO of Elizabeth Dole Foundation (EDF), a nonprofit that supports military and Veteran caregivers. "But those networks disappeared during the pandemic. It was a crisis for frontline Veteran caregivers."

VHA Innovation Ecosystem (VHA IE) saw an opportunity to act. In collaboration, EDF and VHA IE designed a pilot that not only allows Veterans to select a respite caregiver of their choice—a trusted friend or neighbor, for instance—but also ensures the home care provider is vetted with a background check, certified with education courses, and paid a decent wage.

Called Respite Relief for Military and Veteran Caregivers, the program worked with CareLinx to pilot an innovative, techenabled model that connects licensed and insured home care providers with those in need. CareLinx's app also allows for easy onboarding and training of family members and friends as home care providers.

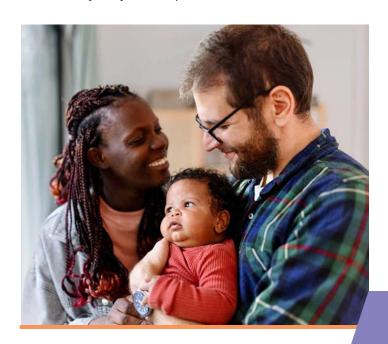
As of July 2023, 1,600 Veteran families hired respite home care providers and more than 63,000 hours of respite care had been delivered. The Respite Relief program also significantly increased hourly wages for both professional caregivers and

family and friends. While the national average for professional caregivers is \$14/hour, the EDF pilot paid caregivers \$22/hour on average. For the Veteran, this was hugely empowering. "He was excited about the hourly pay," one Veteran said about onboarding his neighbor as his respite home care provider, "and I felt good that I didn't have to ask for help without being able to pay him a fair wage."

VHA IE is leading a new pilot within VA's Geriatrics and Extended Care (GEC) Program called the **Tech Enabled Respite Homecare Pilot (TERHM)**. The pilot will use the CareLinx model so eligible Veterans and caregivers can easily access lower cost home care services.

"TERHM is developing a flexible, cost-effective program that will increase the number of Veterans who take advantage of home care services and will improve both the Veteran and caregiver experience," says Daniel Schoeps, director of purchased long-term services and supports at GEC. As one Veteran previously said, "I had to wait for an agency to contact me, and I was uncomfortable with home care providers that I don't know coming into my home. But now I can hire my neighbor as my caregiver, and it was very easy for him to enroll and get paid." Just as importantly, that Veteran's primary caregiver got a break. Primary caregivers have long been called "hidden heroes" because they support Veterans often at significant costs to their own professional and personal success. By offering more accessible and sustainable care, TERHM aims to both acknowledge and support their contribution.

Interested Veterans should reach out to <u>Suzanne.Shirley@va.gov</u>, their social worker, or their care team to find out what home care and respite options may be available to them.



Building Communities of Innovation with Veteran Service Organizations

How VSO Collaboration Creates a Stronger VA Healthcare System

The concept of innovation in healthcare is often seen as synonymous with technology, including machinery, robotics, and technical devices. But the process of healthcare innovation in VA is a deeply human-centered effort, one which revolves around what Veterans want to see in their healthcare experiences. For every technological advancement and solution, there are also improvements to process, training, and care delivery that require more conversations than computing.



TUSCALOOSA INNOVATION SPECIALIST JAMIE KEY WORKING WITH LOCAL DAV CHAPTER COMMANDER TO ENROLL VETERAN IN THE MONARCH PROGRAM

VA cannot innovate alone. It relies on the expertise of academia, industry, non-profits, and other government agencies. For the Veteran perspective, VA relies on Veteran Service Organizations (VSOs). They are the eyes and ears of every community where Veterans live, work, and thrive. VSOs' understanding of Veterans outside of healthcare settings, combined with their role in advocating for their members, makes VSOs ideal resources for better understanding what Veterans want in their interactions with VA. By involving VSOs in the process of healthcare innovation, VA can foster a symbiotic relationship, involve Veterans in the process, and address the most important and relevant issues impacting Veterans now and in the future.

To engage the VSO community, VHA Office of Healthcare Innovation and Learning (VHA OHIL) prioritizes building relationships not only at the national level with executive leadership and national advocates, but at the local post and chapter level, where many Veterans go for community support. This year VHA OHIL attended multiple VSO annual conventions where VA employees were able to meet with thousands of Veterans to share information and resources about the present and future of Veteran healthcare that members could take back their local communities.

To reach Veterans in their communities, the VHA Innovators Network (iNET), a national group of innovation specialists at 44 VA medical centers across the nation, was empowered to reach out to VSOs in their local areas. To support this community building initiative, innovation specialists attended a two-day training where they learned ways they can weave VSOs into the fabric of their local innovation efforts. The training was met with overwhelmingly positive feedback and has already begun to make an impact.

During the initial rollout, Innovation Specialist Jamie Key from the Tuscaloosa VA Medical Center met with her local Disabled American Veterans (DAV) chapter commander about the innovative Monarch Program for holistic and individualized oncology care. Following this engagement, the commander encouraged one of their chapter members who would benefit from the program to look at enrolling in VA care. Tuscaloosa VA was able to get the Veteran enrolled and into care at their facility, which he reports has been "wonderful." Ongoing training and support to iNET is currently underway to facilitate local VSO engagement, getting community members excited about VA innovation, and involving local Veterans in the process.

While the work this year has been powerful, building these communities is a journey rather than a destination, and there is still more to be done. "VA doesn't just want VSO collaboration on innovation; it needs VSOs as partners to ensure VA can continue to deliver on its mission of delivering for Veterans," said Matt Rowley, U.S. Air Force Veteran and community builder with VHA Innovation Ecosystem.

If you are a Veteran or VSO who would like to learn more about this initiative or find a local facility to collaborate with in support of Veteran healthcare innovation, reach out to VHAIECommunityEngagement@va.gov.

"In our efforts to improve VA healthcare it is vital that we hear from those closest to the care itself. Frontline staff, Veteran support networks, and most importantly, Veterans themselves, all play an essential role in ensuring that we are focusing on the right problems at the right times."

–Matt Rowley,U.S. Air Force Veteran,Community Builder withVHA Innovation Ecosystem



DELIVERING ON THE MISSION: FOSTERING TRUST & TRANSFORMING CARE



Mission Daybreak Grand Challenge Supports Suicide Prevention Solutions for Veterans

Cultivating an Ecosystem of Support for Suicide Prevention



Through the **Mission Daybreak** initiative, VA supports the development of promising suicide prevention innovations. Preventing Veteran suicides is a top clinical priority for VA. That is why VA launched the Mission Daybreak Grand Challenge in 2022, calling on external innovators to develop suicide prevention solutions that meet the diverse needs of Veterans. The challenge offered \$20 million in funding, access to synthetic datasets, research, mentorship, educational webinars, and opportunities to collaborate.

Suicide is a serious public health problem that affects communities everywhere. In 2019, more than 45,000 American adults died by suicide—including 6,261 U.S. Veterans. While suicide can affect all Americans, it has a disproportionate impact on the Veteran community. To be effective, prevention solutions must meet individuals where they are, rather than taking a one-size-fits-all approach. The Mission Daybreak Grand Challenge marked an important step forward, receiving more than 1,300 submissions from Veterans, Veteran Service Organizations, community-based organizations, health technology companies, startups, and universities.

In February 2023, VA announced 10 winners: two first-place winners each received \$3 million; three second-place winners each received \$1 million; and five third-place winners each received \$500,000. Building off the work that began with the grand challenge, the Mission Daybreak initiative is facilitating the continued development of promising innovations so Veterans can realize the benefits of these solutions. VA is now working with a range of teams to support program pilots and is collaborating with promising awardees such as Televeda and

BehaVR. Televeda's Project Hózhó is the first mental health app and comprehensive operational plan for American Indian and Alaska Native (AIAN) populations. Televeda designed the tool in collaboration with AIAN and Veteran communities for Navajo Veterans, with plans to adapt and expand for use with other tribes. The solution incorporates traditional healing practices such as storytelling and talking-circle interventions. To enable access, Televeda is now working to expand broadband connectivity to the 22 tribes across Arizona. Televeda continues to expand its team and identify new applications, with Project Hózhó advancing as a finalist in the U.S. Department of Health & Human Services' \$500,000 Rural HIV and Aging Challenge.

BehaVR's gameChange is a digital therapeutic that has received the Food and Drug Administration's Breakthrough Device designation. Through virtual reality, gameChange treats severe social isolation that is common to PTSD, psychosis, and severe depression, and is a precursor to suicidal thoughts and behavior. The digital therapeutic offers an immersive and scalable opportunity to treat Veterans where they are before a crisis moment. BehaVR has worked with initiatives such as the Wounded Warrior Project's Independent Program on studies showing that gameChange has had significantly positive clinical effects in populations with severe mental illness.

VA is now working with a range of Mission Daybreak teams to identify new collaboration opportunities and accelerate research and development. VA has identified a selection of solutions with high potential to reduce Veteran suicide based on the results of the grand challenge. Through the Mission Daybreak initiative, VA is collaborating with early-stage solutions for additional human-centered design and learning through the Greenhouse Initiative as well as running direct pilots with more developed solutions.

Meet the teams and learn more about the challenge at MissionDaybreak.net. Have questions about Mission Daybreak? Email: hello@missiondaybreak.net.



If you're a Veteran in crisis, Dial 988 then Press 1, chat at VeteransCrisisLine.net/Chat, or text 838255 now.

Responders are ready to listen and help.





INTRODUCING

VHA OFFICE OF HEALTHCARE INNOVATION AND LEARNING

The Office of Healthcare Innovation and Learning (OHIL) is a leader in innovative healthcare transformations within VHA. Since its launch in October 2020, OHIL has strategically united powerhouse programs to deliver on VHA's mission to innovate: VHA Innovation Ecosystem (VHA IE), Simulation Learning, Evaluation, Assessment and Research Network (SimLEARN), Center for Care and Payment Innovation (CCPI), and Office of Advanced Manufacturing (OAM).

- 75 VHA Office of Healthcare Innovation and Learning How VA employees drive innovation in Veteran healthcare
- **Get Connected to VA Innovation on Diffusion Marketplace**Learn About VA Employee Innovations Advancing Care for Veterans
- 79 VA Pathfinder Provides Veterans a Front Door to Innovating with VA Collaborating with the Veteran Community to Improve Veteran Healthcare

VHA OFFICE OF HEALTHCARE INNOVATION AND LEARNING

Through these core programs, OHIL advances VHA healthcare delivery and service by (1) fostering the discovery and spread of grassroots and strategic innovative solutions, practices, and products across VA; (2) promoting competencies in innovation and simulation; (3) combining clinical simulation and training to further enhance the utilization and uptake of emerging healthcare technology in clinical practice; (4) developing innovative approaches to testing payment and service delivery models; and (5) advancing the use of clinical training and simulation to further VHA's mission of becoming a high-reliability organization.



INNOVATION ECOSYSTEM

VHA IE is the catalyst for enabling the discovery and spread of mission-driven healthcare innovation to advance care delivery and service that exceeds expectations, restores hope, and builds trust within the Veteran community. VHA IE leverages the collective power of innovation champions from across VA, academia, other government agencies, and industry to operationalize innovation and scale best practices. Through these collaborations, VHA IE is able to test, scale, and deploy innovations into practice to drive operational value for the enterprise.



SIMULATION LEARNING, EVALUATION, ASSESSMENT, AND RESEARCH NETWORK

SimLEARN is VHA's program for simulation in healthcare training. SimLEARN provides an ever-growing body of curricula and tools that improve Veteran well-being through simulation-based innovation and emerging technologies. The use of emerging technologies in a safe learning environment enhances diagnostic, procedural and communication skills to support quality care and the best possible outcomes. SimLEARN also supports VHA's journey as a high-reliability and learning organization through the coordination of all national VHA simulation-based clinical education products and activities supporting enterprise level innovative healthcare solutions.



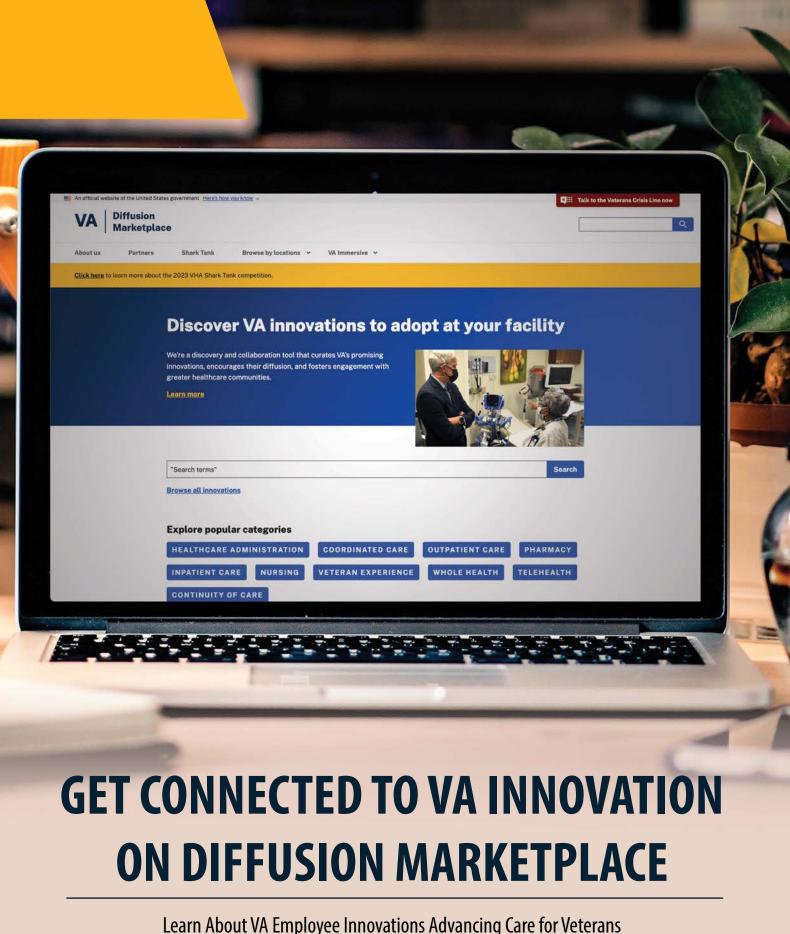
CENTER FOR CARE AND PAYMENT INNOVATION

Authorized by Section 152 of the MISSION Act of 2018, CCPI plays a critical role in ensuring that VA maximizes quality of care, while balancing costs known as high-value healthcare, and delivers needed services to Veterans. CCPI collaborates across the government and healthcare industry to design develop, and test innovative approaches to enhance quality, accessibility, and equity of care. Through these collaborative efforts, CCPI aims is to transform healthcare at VHA and transition the system to a value-based model that comprehensively responds to the needs of Veterans while increasing efficiencies, reducing costs, and enhancing the quality of care provided.

OFFICE OF ADVANCED MANUFACTURING

VHA Office of Advanced Manufacturing (OAM) guides the use of advanced manufacturing technologies, like 3D printing, in healthcare applications at VHA. OAM is developing national policy, providing oversight, and operating and coordinating VHA clinical Advanced Manufacturing Laboratory Services to provide equitable access to Veteran patient-matched medical devices. These innovations empower frontline providers to design and implement product-based solutions to clinical challenges, and they strengthen VA's supply chain by providing in-house manufacturing capabilities. OAM is building digital and physical infrastructure to bring medical device innovation and manufacturing back onto VA soil, so that Veterans are first in line to receive new products and innovative services.





MARKETPLACE BY THE NUMBERS

As of September 2023, Marketplace has:

Publicly Published Over VA Innovations

Averaged Page Views Each Month

Gained Over New Users Each Month in 2023

Successful Adoptions of Innovation on Diffusion Marketplace

796 In-progress Adoptions of Innovations on Diffusion Marketplace

Visit marketplace.va.gov to explore and engage with VA's innovative solutions today! VA Diffusion Marketplace (Marketplace) is a discovery and collaboration tool that curates promising clinical, operational, and strategic VA innovations. The website also fosters engagement between VA and the greater healthcare community, encouraging the spread of promising innovations across VA—solutions that ultimately improve Veteran quality of care, enhance Veteran quality of life, and save Veteran lives.

Created by the VHA Diffusion of Excellence (Diffusion) program, Marketplace first launched in February 2020 as an internal site for VA employees. In 2021, Marketplace launched as a publicly available site, opening the doors for Veterans, caregivers, VA employees, external organizations, and the public to discover VA innovation. On the Marketplace website, Veterans can explore innovative solutions and learn how VA employees across the nation are striving to improve how Veterans experience VA healthcare.

Innovations featured on the Marketplace website are developed by VA providers and support critical healthcare priorities, such as access to care, mental health, whole health, and improved Veteran experience. Designed for discovery, the website is mobile friendly and leverages human-centered design principles to make finding and interacting with promising innovations a positive experience. Each innovation has its own webpage where visitors can learn about an innovation's solution, process, successes, and at which VA locations the innovation is available. Veterans, VA employees, and visitors can even connect with innovation teams through the individual pages to ask questions.

With the ability to search for innovations by keyword, category, regional healthcare system, and medical facility, Veteran patients can discover innovations within their healthcare system and explore solutions that align with their needs. VA employees can find innovations to adopt at their facility, further spreading solutions for Veterans with chronic pain, injuries, PTSD, loneliness, depression, anxiety, age-related care needs, and more across VA.



2023 VHA State of Innovation Report DELIVERING ON THE MISSION: FOSTERING TRUST & TRANSFORMING CARE



Collaborating with the Veteran Community to Improve Veteran Healthcare

If you want to know what Veterans need or what will make life better for them, the answer is simple: ask them.

That's exactly what VA is doing through Pathfinder, the website and "digital front door" designed to help innovators, people looking to do business with VA, VA employees and, most importantly, Veterans themselves who share a common goal: improving Veterans' healthcare.

"Adding more Veterans to the process will
help ensure innovators are collaborating
directly with the people who could benefit
from their product or service the most. We
know that no one knows Veterans like other
Veterans, so we are refining the process
around the mantra, 'Nothing about me,
without me."'

—Stacey Lewis, VHA Innovation Ecosystem
Entrepreneur in Residence Fellow and
Pathfinder Expert

Pathfinder is a website that allows Veterans to submit their innovative ideas, solutions, products, or services. The intake process takes about 20-30 minutes to complete. Through two prompts, "I want to innovate with VA," or "I want to sell to VA," Pathfinder guides submissions through the appropriate VA channels, which includes a growing pool of more than 300 VA reviewers with the goal to match the submissions with the VA reviewers who most intimately understand the submission's impact area. For Veteran entrepreneurs with more mature products, Pathfinder provides a potential avenue to pilot their solution at VA facilities or sell to VA.

For Veterans who don't yet have an idea or solution but want to be involved in VA innovation, Pathfinder offers an opportunity to join the "Innovation Community" and learn about future opportunities to inform VA's work as a Veteran, caregiver, or subject matter expert.

Since its launch in June 2022, Pathfinder has received more than 400 submissions, about half of which were from Veterans. Veterans participating in the Pathfinder process is a good sign.

If you have a problem you want to solve, an idea for an innovation, have a solution that's ready to go to market, or just need more information about Pathfinder, visit www.pathfinder.va.gov. Have a market-ready solution you want to sell to VA? Pathfinder has resources for you, too.



The VHA Innovator's Network (iNET) Greenhouse Initiative is one way that companies can work with VA to solicit user feedback on early-stage designs or prototypes. Jim Riley is a U.S. Marine Corps Veteran with a mission to improve outdoor recreational therapy experiences for Veterans who are blind or have low vision through a device called VibroGuide. Using sensor technology, VibroGuide sends messages from a guide to a "vest wearer" or patient letting them know which direction to move without shouting. The technology allows Veterans who are blind or have impaired vision to fully participate in outdoor therapy. Through the Greenhouse Initiative, VibroGuide is collecting Veteran feedback at seven VHA iNET facilities across the nation: VA Central Ohio Healthcare System, Central Virginia VA Health Care System, VA Greater Los Angeles Healthcare System, Malcom Randall VA Medical Center (Gainesville, FL), Minneapolis VA Health Care System, VA Sierra Nevada Health Care System, and West Palm Beach VA Healthcare System.

<u>Click here</u> to learn more about the VHA iNET Greenhouse Initiative.

VHAINDEX OF INNOVATIVE CARE

Welcome to the VHA Index of Innovative Care, where you can find more information about the programs and products featured in this report. VHA is fully invested in ensuring our Veterans can learn about and engage with our innovative developments. We encourage you to scan available QR codes, visit linked websites, and find the VA location closest to you that sponsors the program(s) relevant to your healthcare journey. Please feel free to show this report to your care provider for reference.

Please keep in mind that VHA's mission of providing accessible healthcare solutions to Veterans is never-ending. While some programs in this index may not yet be at a VA facility near you, our providers and their teams share the goal of expanding care to all eligible Veterans—and they are working to do just that.

The lists of VA facilities participating in the programs and projects below are up to date as of October 2023, and may change. Please scan available QR codes, ask your care provider, or contact the project teams via available emails to find more up-to-date information.



EXPANDING ACCESS TO CARE FOR THOSE WHO SERVED

CONTRACEPTION ON DEMAND Implementation currently underway at eight

additional facilities.

COLORADO

Rocky Mountain Regional VA Medical Center (Aurora)

FLORIDA

Bruce W. Carter Department of Veterans Affairs Medical Center (Miami)

James A. Haley Veterans' Hospital (Tampa)

Orlando VA Medical Center

West Palm Beach VA Medical Center

PENNSYLVANIA

Pittsburgh VA Medical Center-University Drive (Pittsburgh)

WASHINGTON

Seattle VA Medical Center

PREPARe

This program is still in early stages of development, but consultations may be available at your VA medical center. Ask your care provider for more information.

VA LACTATION PROGRAM

This program is in early stages of development and is only available at a limited number of facilities. <u>Click here</u> to learn more about womens health services at VA.

VHA-UBER HEALTH CONNECT

ALABAMA

Central Alabama VA Medical Center

Tuscaloosa VA Medical Center

ARIZONA

Carl T. Hayden Veterans' Administration Medical Center (Pheonix)

ARKANSAS

Fayetteville VA Medical Center

John L. McClellan Memorial Veterans' Hospital (Little Rock)

CALIFORNIA

Fresno VA Medical Center

Jennifer Moreno Department of Veterans Affairs Medical Center (San Diego)

Jerry L. Pettis Memorial Veterans' Hospital (Loma Linda)

Sacramento VA Medical Center

San Fransisco VA Medical Center

FLORIDA

C.W. Bill Young Department of Veterans Affairs Medical Center (Bay Pines)

Bruce W. Carter Department of Veterans Affairs (Miami)

James A. Haley Veterans Hospital (Tampa)

Malcom Randall Department of Veterans Affiars (Gainesville)

Orlando VA Medical Center

West Palm Beach VA Medical Center

GEORGIA

Carl Vinson Veterans' Administration Medical Center (Dublin)

Charlie Norwood Department of Veterans Affairs Medical Center (Augusta)

Joseph Maxwell Cleland Atlanta VA

HAWAII

Spark M. Matsunaga Department of Veterans Affairs Medical Center (Honolulu)

KANSAS

Colmery-O'Neil Veterans' Administration Medical Center (Topeka)

Robert J. Dole Department of Veterans Affairs Medical and Regional Office Center (Wichita)

KENTUCKY

Franklin R. Sousley Campus (Lexington)

Robley Rex Department of Veterans Affairs Medical Center (Louisville)

LOUISIANA

Alexandria VA Medical Center

New Orleans VA Medical Center

Overton Brooks Veterans' Administration Medical Center (Shreveport)

MISSISSIPPI

Biloxi VA Medical Center

G.V. (Sonny) Montgomery Department of Veterans Affairs Medical Center (Jackson)

MISSOURI

Harry S. Truman Memorial Veterans' Hospital (Columbia)

Kansas City VA Medical Center

John J. Cochran Veterans Hospital (St. Louis)

NEBRASKA

Omaha VA Medical Center

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EXPANDING ACCESS TO CARE FOR THOSE WHO SERVED

VHA-UBER HEALTH CONNECT CONTINUED

North Las Vegas VA Medical Center

Reno East VA Clinic

NEW JERSEY

East Orange VA Medical Center

NEW YORK

Samuel S. Stratton Department of Veterans Affairs Medical Center (Albany)

Bath VA Medical Center

James J. Peters Department of Veterans Affairs Medical Center (Bronx)

Buffalo VA Medical Center

Canandaigua VA Medical Center

Franklin Delano Roosevelt Hospital (Montrose)

New York Harbor VA Medical Center

Northport VA Medical Center Syracuse VA Medical Center

OREGON

Portland VA Medical Center

Roseburg VA Medical Center

PENNSYLVANIA

Altoona VA Medical Center
Abie Abraham VA Clinic (Butler)

Coatesville VA Medical Center

Erie VA Medical Center

Lebanon VA Medical Center

Pittsburgh VA Medical Center -University Drive

West Philadelphia VA Medical Center

Wilkes-Barre VA Medical Center

Wilmington VA Medical Center

PUERTO RICO

San Juan VA Medical Center

SOUTH CAROLINA

Wm. Jennings Bryan Dorn Department of Veterans Affairs Medical Center (Columbia)

TENNESSEE

Lt. Col. Luke Weathers, Jr. VA Medical Center (Memphis) Charlotte Avenue VA Clinic (Nashville)

TEXAS

Thomas E. Creek Department of Veterans Affairs Medical Center (Amarillo)

George H. O'Brien, Jr., Department of Veterans Affairs Medical Center (Big Spring)

Dallas VA Medical Center

El Paso VA Clinic

Harlingen VA Clinic

Michael E. DeBakey Department of Veterans Affairs Medical Center

(Houston)

Audie L. Murphy Memorial Veterans' Hospital (San Antonio)

Temple VA Clinic

WASHINGTON

Mann-Grandstaff Department of Veterans Affairs Medical Center (Spokane)

MoPOC Implementation currently underway at five additional facilities.

COLORADO

Grand Junction VA Medical Center

GUAM

VA Guam Community Based Outpatient

Clinic

NORTH DAKOTA

Fargo VA Medical Center

NEBRASKA

Grand Island VA Medical Center

Syracuse VA Medical Center

OREGON

NEW YORK

White City VA Medical Center

SOUTH CAROLINA

William Jennings Bryan Dorn Department of Veterans Affairs Medical Center (Columbia)

SOUTH DAKOTA

Royal C. Johnson Veterans' Memorial Hospital (Sioux Falls)

WASHINGTON

American Lake VA Medical Center

Seattle VA Medical Center

MAILED FIT

By the end of 2023, Mailed FIT will be available in all regions of the <u>click here</u> to learn more about VA colorectal cancer screening.

GREENHOUSE WAREOLOGIE™ PORTABLE PARALLEL BARS

This product is widely available and can be found on the VA Intrapreneurial Product Marketplace website. <u>Click here</u> to learn more!

TRANSFORMING CARE DELIVERY FOR THOSE WHO SERVED

VIONE

This program is widely available across the U.S. and its territories. <u>Click here</u> to find the participating location closest to you!

OPIOID OVERDOSE EDUCATION AND NALOXONE DISTRIBUTION

This program is widely available across the U.S. and its territories. <u>Click here</u> to learn more about the <u>VA OEND program</u>.

REMOTE TEMPERATURE MONITORING OF DIABETIC FOOT ULCERS

This program is widely available across the U.S. and its territories. <u>Click here</u> to find the participating location closest to you!

OAM ASSISTIVE TECHNOLOGY DESIGN LIBRARY

OAM Assistive Technology is widely available to eligible Veterans. Ask your primary care or rehabilitation provider to refer you to the OAM team. You can also <u>click here</u> to visit the NIH-OAM AT Design Library!

VHA RADIOTHERAPY BOLUS

OAM is currently in the process of making the VHA <u>Radiotherapy Bolus</u> available to all 40 radiation oncology programs across VA with the goal of providing access to any eligible Veteran in the country.

CCPI BREAST CANCER PILOT

To learn more about VA's efforts in the fight against cancer, visit VA's National Oncology Program website at https://www.cancer.va.gov/.

VA WAYFINDING APP

The VA Wayfinding app by SimLEARN is available for download on Apple and Android devices.

IMPROVING EXPERIENCES FOR THOSE WHO SERVED

MY LIFE, MY STORY

My Life, My Story is available to any Veteran who self-refers. <u>Click here</u> to listen to the My Life, My Story podcast.

COMPASSIONATE CONTACT CORPS

ALASKA

Colonel Mary Louise Rasmuson Campus of the Alaska VA Healthcare System (Anchorage)

ARIZONA

Tucson VA Medical Center

CALIFORNIA

Los Angeles VA Clinic

Palo Alto VA Medical Center

FLORIDA

James A. Haley Veterans' Hospital (Tampa)

Malcom Randall Department of Veterans Affairs Medical Center (Gainesville)

Orlando VA Medical Center

West Palm Beach VA Medical Center

GEORGIA

Joseph Maxwell Cleland Atlanta VA Medical Center

HAWAII

Spark M. Matsunaga Department of Veterans Affairs Medical Center (Honolulu)

ILLINOIS

Marion VA Medical Center

MASSACHUSETTS

Edith Nourse Rogers Memorial Veterans' Hospital (Bedford)

MARYLAND

Baltimore VA Medical Center

Loch Raven VA Medical Center

Perry Point VA Medical Center

MICHIGAN

Battle Creek VA Medical Center

John D. Dingell Department of Veterans Affairs Medical Center (Detroit)

Lieutenant Colonel Charles S. Kettles VA Medical Center (Ann Arbor)

MINNESOTA

Minneapolis VA Medical Center

MISSOURI

John J. Cochran Veterans Hospital (St. Louis)

NORTH DAKOTA

Fargo VA Medical Center

NEW YORK

Brooklyn VA Medical Center

St. Albans VA Medical Center

Syracuse VA Medical Center

OHIO

Chalmers P. Wylie Veterans Outpatient Clinic (Columbus)

Chillicothe VA Medical Center

Cincinnati VA Medical Center

Dayton VA Medical Center

OREGON

White City VA Medical Center

PENNSYLVANIA

Coatesville VA Medical Center

Pittsburgh VA Medical Center-University Drive

Wilkes-Barre VA Medical Center

SOUTH CAROLINA

Ralph H. Johnson Department of Veterans Affairs Medical Center (Charleston)

SOUTH DAKOTA

Hot Springs VA Medical Center

TENNESSEE

Nashville VA Medical Center

TEXAS

El Paso VA Clinic

WISCONSIN

Clement J. Zablocki Veterans' Administration Medical Center (Milwaukee)

CCPI DIABETES PILOT

To learn more about VA diabetes research, visit https://www.research.va.gov/topics/diabetes.cfm

VA IMMERSIVE REHAB PILOT

CALIFORNIA

West Los Angeles VA Medical Center

COLORADO

Rocky Mountain Regional VA Medical Center (Aurora)

FLORIDA

Orlando VA Medical Center

IUWA

Des Moines VA Medical Center

Richmond VA Medical Center

NORTH CAROLINA

Charles George Department of Veterans Affairs Medical Center (Asheville)

VIRGINIA

IMPROVING EXPERIENCES FOR THOSE WHO SERVED

GREENHOUSE XANDERGLASSES™ COLLABORATION

Click here to learn more about VHA Innovators Network Greenhouse Initiative.

ATLAS KNEE SUPPORTER

This product is widely available and can be found on the VA Intrapreneurial Product Marketplace website. <u>Click here</u> to learn more!

DROPEASE

This product will soon be widely available on the VA Intrapreneurial Product Marketplace website. Click here to learn more!

SMART WHITE CANE

This product is in early stages of development and is not yet available. The <u>NCCHI</u> and WBRC teams look forward to bringing the Smart White Cane to you in the near future.

FOSTERING HEALTH AND WELLNESS FOR THOSE WHO SERVED

VA IMMERSIVE CHRONIC PAIN AND SUICIDE PREVENTION PILOT

ALASKA

Wasilla Vet Center

CALIFORNIA

Fresno VA Medical Center

Jennifer Moreno Department of Veterans Affairs Medical Center (San Diego)

Jerry L. Pettis Memorial Veterans' Hospital (Loma Linda)

Martinez VA Medical Center

Palo Alto VA Medical Center

Sacramento VA Medical Center

San Fransisco VA Medical Center

Tibor Rubin VA Medical Center (Long Beach)

FLORIDA

James A. Haley Veterans' Hospital (Tampa)

Malcom Randall Department of Veterans Affairs Medical Center (Gainesville)

Orlando VA Medical Center
Orlando Vet Center

HAWAII

Spark M. Matsunaga Department of Veterans Affairs Medical Center (Honolulu)

IOWA

Des Moines VA Medical Center

ILLINOIS

Jesse Brown Department of Veterans Affairs Medical Center (Chicago)

KANSAS

Robert J. Dole Department of Veterans Affairs Medical and Regional Office Center (Wichita)

KENTUCKY

Franklin R. Sousley Campus (Lexington)

Troy Bowling Campus (Lexington)

Robley Rex Department of Veterans Affairs Medical Center (Louisville)

LOUISIANA

Alexandria VA Medical Center (Pineville)

MASSACHUSETTS

Edith Nourse Rogers Memorial Veterans' Hospital (Bedford)

MICHIGAN

John D. Dingell Department of Veterans Affairs Medical Center (Detroit)

MINNESOTA

Minneapolis VA Medical Center

MISSOURI

Harry S. Truman Memorial Veterans' Hospital (Columbia)

MISSISSIPPI

Biloxi VA Medical Center

G.V. (Sonny) Montgomery Department of Veterans Affairs Medical Center (Jackson)

MONTANA

Fort Harrison VA Medical Center

NORTH CAROLINA

Charles George Department of Veterans Affairs Medical Center (Asheville)

Durham VA Medical Center

W.G. (Bill) Hefner Salisbury Department of Veterans Affairs Medical Center

NORTH DAKOTA

Fargo VA Medical Center

FOSTERING HEALTH AND WELLNESS FOR THOSE WHO SERVED

VA IMMERSIVE CHRONIC PAIN AND SUICIDE PREVENTION PILOT CONTINUED

NEBRASKA

Omaha VA Medical Center

NEW MEXICO

Raymond G. Murphy Department of Veterans Affairs Medical Center (Albuquerque)

NEVADA

Ioannis A. Lougaris Veterans' Administration Medical Center (Reno)

North Las Vegas VA Medical Center

NEW YORK

Castle Point VA Medical Center

Franklin Delano Roosevelt Hospital (Montrose)

OHIO

Cincinnati VA Medical Center

OKLAHOMA

Jack C. Montgomery Department of Veterans Affairs Medical Center (Muskogee) **OREGON**

Portland VA Medical Center

Roseburg VA Medical Center

PENNSYLVANIA

Erie VA Medical Center

Lebanon VA Medical Center

PUERTO RICO

San Juan VA Medical Center

TENNESSEE

James H. Quillen Department of Veterans Affairs Medical Center (Mountain Home)

Lt. Col. Luke Weathers, Jr. VA Medical Center (Memphis)

TEXAS

Sam Rayburn Memorial Veterans Center (Bonham)

UTAH

George E. Wahlen Department of Veterans Affairs Medical Center (Salt Lake City) **VIRGINIA**

Hampton VA Medical Center

Richmond VA Medical Center

WASHINGTON

Mann-Grandstaff Department of Veterans Affairs Medical Center (Spokane)

Seattle VA Medical Center

American Lake VA Medical Center

(Tacoma)

Vancouver VA Medical Center

WISCONSIN

William S. Middleton Memorial Veterans' Hospital (Madison)

WEST VIRGINIA

Hershel "Woody" Williams VA Medical

Center (Huntington)

WYOMING

Sheridan VA Medical Center

Martinsburg VA Medical Center

PRIDE IN ALL WHO SERVED Implementation currently underway at 17 facilities.

ALABAMA

Birmingham VA Medical Center

Central Alabama VA Medical Center - Montgomery

Tuscaloosa VA Medical Center

ARKANSAS

John L. McClellan Memorial Veterans' Hospital (Little Rock)

ARIZONA

Carl T. Hayden Veterans' Administration Medical Center (Phoenix)

CALIFORNIA

Jennifer Moreno Department of Veterans Affairs Medical Center (San Diego)

Loma Linda VA Clinic

McClellan VA Clinic

Oceanside VA Clinic

COLORADO

Grand Junction VA Medical Center

PFC Floyd K. Lindstrom Department of Veterans Affairs Clinic (Colorado Springs)

Rocky Mountain Regional VA Medical Center

York Street VA Clinic

FLORIDA

C.W. Bill Young Department of Veterans Affairs Medical Center (Bay Pines)

Naples VA Clinic

HAWAII

Spark M. Matsunaga Department of Veterans Affairs Medical Center (Honolulu)

ILLINOIS

Bob Michel Department of Veterans Affairs Outpatient Clinic (Peoria)

Danville VA Medical Center

Jesse Brown Department of Veterans

Affairs Medical Center (Chicago)

Marion VA Medical Center

INDIANA

Richard L. Roudebush Veterans' Administration Medical Center (Indianapolis)

LOUISIANA

New Orleans VA Medical Center

MASSACHUSETTS

Edward P. Boland Department of Veterans Affairs Medical Center (Leeds)

MICHIGAN

Oscar G. Johnson Department of Veterans Affairs Medical Facility (Iron Mountain)

Saginaw VA Clinic

MISSOURI

St. Louis VA Medical Center - Jefferson Barracks

FOSTERING HEALTH AND WELLNESS FOR THOSE WHO SERVED

PRIDE IN ALL WHO SERVED CONTINUED

MISSISSIPPI

Biloxi VA Medical center

G.V. (Sonny) Montgomery Department of Veterans Affairs Medical Center (Jackson)

NORTH CAROLINA

Fayetteville VA Medical Center

Greenville VA Clinic

W.G. (Bill) Hefner Salisbury Department of Veterans Affairs Medical Center

NEW HAMPSHIRE

Manchester VA Medical Center

NEW MEXICO

Raymond G. Murphy Department of Veterans Affairs Medical Center (Albuquerque)

NEVADA

Ioannis A. Lougaris Veterans' Administration Medical Center (Reno)

NEW YORK

Buffalo VA Medical center

Franklin Delano Roosevelt Hospital (Montrose)

OHIO

Chalmers P. Wylie Veterans Outpatient Clinic (Columbus)

OKLAHOMA

Jack C. Montgomery Department of Veterans Affairs Medical Center (Muskogee)

Oklahoma City VA Medical Center

OREGON

Portland VA Medical center
White City VA Medical Center

PENNSYLVANIA

Coatesville VA Medical Center
Pittsburgh VA Medical Center -

University Drive
SOUTH CAROLINA

Ralph H. Johnson Department of Veterans Affairs Medical Center (Charleston)

TENNESSEE

Alvin C. York Veterans' Administration

Medical Center (Murfreesboro)

Nashville VA Medical Center

TEXAS

Harlingen VA Clinic

Temple VA Clinic

(Salt Lake City)

UTAH

George E. Wahlen Department of Veterans Affairs Medical Center

VIRGINIA

Hampton VA Medical Center

Richmond VA Medical Center

Salem VA Medical center

WISCONSIN

Tomah VA Medical Center

William S. Middleton Memorial Veterans' Hospital (Wisconsin)

THRIVE

ARIZONA

Bob Stump Department of Veterans Affairs Medical Center (Prescott)

Carl T. Hayden Veterans' Administration Medical Center (Phoenix)

Tucson VA Medical Center

CALIFORNIA

Jerry L. Pettis Memorial Veterans' Hospital (Loma Linda)

VA Greater Los Angeles Healthcare System

Sacramento VA Medical Center Tibor Rubin VA Medical Center

(Long Beach) **DELAWARE**

Wilmington VA Medical Center

FLORIDA

James A. Haley Veterans' Hospital (Tampa)

ILLINOIS

VISN 12 Clinical Resource Hub

MICHIGAN

Lieutenant Colonel Charles S. Kettles VA Medical Center (Ann Arbor)

MINNESOTA

Minneapolis VA Medical Center
NEVADA

North Las Vegas VA Medical Center Pahrump VA Clinic

Cincinnati VA Medical Center

Louis Stokes Cleveland Department of Veterans Affairs Medical Center

PENNSYLVANIA

VISN 4 Clinical Resource Hub

SOUTH DAKOTA

Royal C. Johnson Veterans' Memorial Hospital (Sioux Falls)

VA Black Hills Healthcare System (Fort Meade)

UTAH

George E. Wahlen Department of Veterans Affairs Medical Center (Salt Lake City)

VIRGINIA

Richmond VA Medical Center

MISSION DAYBREAK

Learn more about the Mission Daybreak initiative at MissionDaybreak.net

OHIO

To our Nation's valued Veterans,

We express our deepest gratitude not only for your service to our country, but also for your continued trust in VA to deliver the quality care you deserve. VA is providing more care to more Veterans than ever before and remains committed to its sacred obligation of caring for Veterans, their families, caregivers, and survivors. Innovation is a key part of that obligation, and so is ensuring that you are informed on ways VA is evolving to meet a wide variety of Veteran healthcare needs.

We hope you have enjoyed reading about some of the innovative solutions outlined in this report which only represents a small sample of the Veterancentered innovation efforts occurring every day across our healthcare system. This year's theme, "Delivering on the Mission: Fostering Trust and Transforming Care," was inspired by your dedication to service before self and the sacrifices you made to keep our country safe. Our goal is to honor your dedication to service through our tireless commitment to deliver the most innovative healthcare solutions. From expanding access to reproductive health services and bringing more care into Veterans' homes, to leveraging trained VA volunteers to combat social isolation among Veterans and supporting LGBTQ+ Veterans through health education groups, Veterans are at the center.

This meaningful progress is made possible by your willingness to be active participants in your healthcare, providing feedback on new programs and embracing innovative healthcare approaches. If you learned about an innovative project in this report that is already available at your local VA medical center, we encourage you to take advantage of it. If you read about an innovation that isn't yet available at your local VA medical center, we encourage you to bring it up to your local provider.

Again, we thank you for taking time to read this report and learn about impactful innovations coming from VA. We will continue to innovate around Veteran needs and evolve with the ever-changing healthcare landscape. We hope this report has helped strengthen your faith in VA and our ability to continue advancing the standards of healthcare for the millions of Veterans entrusted in our care. It is our true pleasure to serve you all as you have served us.



Shereef Elnahal, M.D., MBA Under Secretary for Health

U.S. Department of Veterans Affairs



Carolyn Clancy, M.D., MACP Assistant Under Secretary for Health for Discovery, Education and Affiliate Networks Veterans Health Administration

A very special thank you to all of the Veterans featured in the 2023 State of Innovation Report

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TJ, U.S. Air Force

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