## DEAN Office of Discovery, Education and Affiliate Networks 2023 YEAR IN REVIEW

### Moving health care forward.



### Foreword

#### Where is health care going?

While that's a question we address yearly for our Nation's Veterans, it was one we focused on more intently in FY23, as health care overall began moving beyond the COVID-19 pandemic. This year's DEAN Annual Report logs the journey we took, as depicted by the energetic, multi-lane road on the cover bringing together DEAN's offices in forward motion. This vibrant and colorful path represents the opportunities and challenges along the way, with VHA ahead of the curve, driving the future.

As you'll read in the program office section, FY23 was a year of many firsts. We launched two new conferences aimed at better understanding care for specific Veteran sub-groups - the Age-Friendly Summit and the Perinatal Reproductive Educational Planning and Resources Maternal Health Summit - and held the first-ever VHA Resuscitation Symposium. We introduced a new award series during VA Research Week and presented the first Karen M. Sanders Designated Education Officer (DEO) Award at a summer conference. Additionally, we launched the SimVET Center, thereby expanding our ability to actively engage frontline staff and VHA leaders in simulation learning, and expanded our work in artificial intelligence by assessing ambient dictation software, among other efforts.

Through strategic partnerships, we worked to improve health equity for chronic lung disease patients and LGBTQ+ Veterans, among others, and expanded access to support service and health education. And through our research program, we led the way in spearheading critical research and developing novel technologies and launched the largest-ever liver cancer screening study.

The Report's cover art also serves as a metaphor for DEAN's role in moving health care forward post-pandemic, which is featured in the Report's special section. While the pandemic may be in the proverbial rear-view mirror, its long-term impact on health care is undeniable. Because of its numerous programs in place before lockdown, VHA was better prepared than many private sector organizations. Among these programs are the many overseen by DEAN including a near-century-old research program, an embedded innovation ecosystem, a portfolio of national and community partnerships, and a world-class education and training program for health care providers. This section demonstrates how DEAN leveraged these assets in response to this once-in-a-century public health emergency.

I hope you find this Report informative and engaging. No matter what the journey, our destination remains the same: meeting Veterans where they are. I am incredibly proud of the work you're about to read and the remarkable achievements that helped shape the lives of Veterans and the Nation's health care.

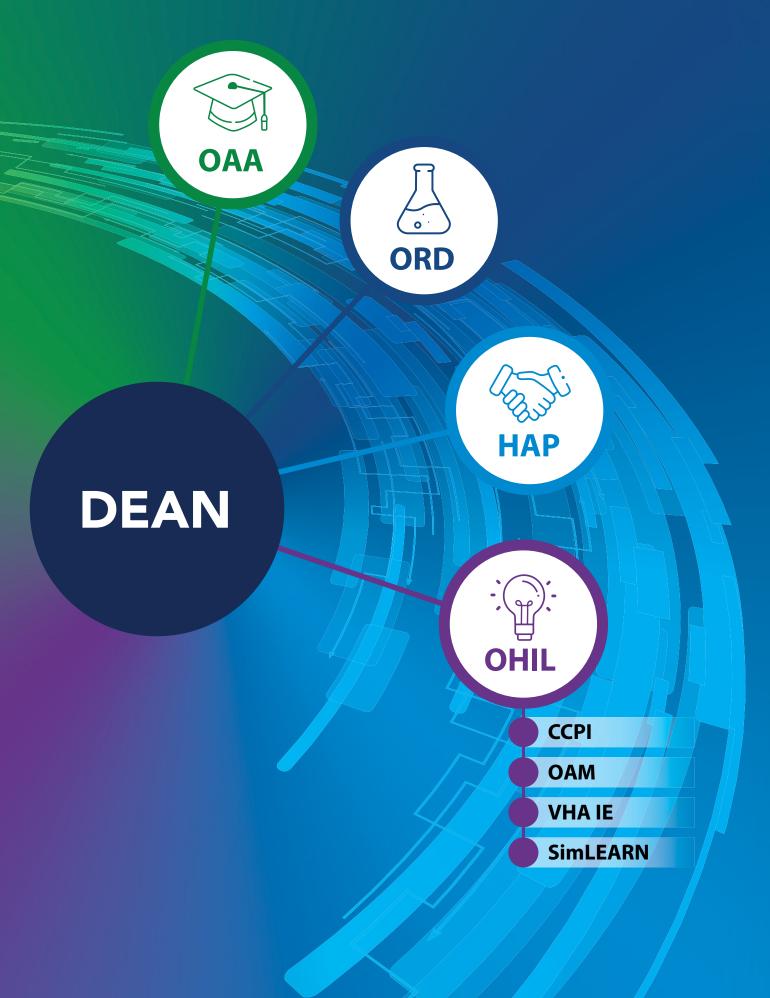


Dr. Carolyn M. Clancy
Assistant Undersecretary for Health
Discovery, Education, and Affiliate Networks
Veterans Health Administration



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# DEAN's Affiliate Program Offices

Transforming health care for Veterans and the Nation through innovation, training, research, and partnerships.



**The Office of Academic Affiliations (OAA)**, which, through its extensive graduate medical education programs, trains the next generation of health care providers.



The Office of Research and Development's (ORD) 95-year-old research program, which is embedded as part of the Nation's single largest health care system.



**The Office of Healthcare Innovation and Learning (OHIL)**, which improves existing processes and rapidly disseminates learning through the Center for Care and Payment Innovation (CCPI), the Office of Advanced Manufacturing (OAM), the VHA Innovation Ecosystem (VHA IE) and the Simulation Learning, Evaluation, Assessment, and Research Network (SimLEARN).



The National Center for Healthcare Advancement and Partnerships (HAP), which expands and strengthens collaboration with national and local organizations.





### OFFICE OF ACADEMIC AFFILIATIONS

In partnership with more than 1,400 academic affiliates, including 97% of U.S. medical schools, VA conducts the Nation's largest education and training program for health professions students, interns, and residents across over 1,000 sites of care. Overseen by OAA, VA provides health professions education (HPE) to 118,000+ health professions trainees (HPTs) across 60+ disciplines each year. VA's HPE mission creates a pathway for health care professionals to be ready to address the complex clinical needs for Veterans and Americans in the ever-changing health care landscape.

"VA, in partnership with our 1,400 academic affiliates, is setting the bar for patient care and interprofessional medical education that trains the next generation of health care professionals to meet the complex needs of our Veterans and our citizens."

— **Dr. Marjorie A. Bowman** Chief Academic Affiliations Officer

## First Recipient of Karen M. Sanders Award Announced at DEO Conference

In August 2023, more than 140 Designated Education Officers (DEOs) from VA medical centers (VAMCs) nationwide gathered for the National DEO Conference to share best practices and collaborate on academic programs. As facility-based learning leaders, DEOs advance the quality of health care for Veterans and the Nation through oversight, responsibility, and accountability for all accredited and affiliated clinical trainee programs within their facilities. With the theme "Discover, Empower, Optimize," this year's conference was the first in-person gathering since lockdown in 2020, and also introduced the Karen M. Sanders DEO Award. The new national award program recognizes VA medical facility DEOs with an outstanding track record in HPE.



The National DEO Conference, August 2023

#### **Geo-mapping Tool Advances Diversity in Health**

VA's new academic geo-mapping tool was designed by OAA to help VA medical facilities identify local Minority Serving Institution (MSI) academic partners to potentially expand diversity in health professions training. Geo-map is a new way to identify new academic partnerships, bringing more HPTs from diverse backgrounds to care for Veterans while training at VA. The Northern California VA, located in a geographically and culturally diverse region, used the geo-mapping tool to develop two new MSI academic affiliations since January 2022. "We need to go to where the Veterans are," said Raja Jagadeesan, MD, Associate Chief of Staff for Education and DEO at Northern California VA, "so we should be looking for new affiliates in new locations at the local level to fill those pipelines. We can then hire and recruit the best to take care of the next generation of Veterans."



#### Advanced Dementia Patients Often Need a BRO

Being diagnosed with any form of dementia, including Alzheimer's Disease, can be devastating to Veterans, families, and caregivers. While not all cases of dementia occur in seniors, the majority of people affected are 65 years of age and older. The Veteran population, like the Nation at large, is getting older, with an estimated 168,600 enrolled patients 65+ in 2021. Through her direct daily interactions with older Veterans at Central Iowa VA's Community Living Center, Dr. Kathleen Matthews saw the distress behaviors associated with the disease and realized these Veterans may benefit from non-pharmacologic behavior plans compared to the traditional method of psychotropic medications. She developed the Behavioral Recovery Outreach (BRO) Program, an inter-disciplinary team focused on neurobehavioral medicine for geriatric patients, which helps Veterans reduce distress behaviors by providing a sense of connection, hope, and shared purpose. The program is being taught to the residents at that facility, and trainees are being incorporated into an inter-disciplinary team and spending time with each patient. Under the BRO Program, even Veterans who initially felt hopeless about their future can improve to the point of being discharged from an inpatient setting.

fill

"Caring for patients, especially those who have had devastating injuries, is heavy to carry, but I think PM&R brings some light to that. They're able to do these new movements that they couldn't do before, and it almost adds a bit of buoyancy to that heavy situation."

- Kersten Schwanz, Medical Student

## VALUE Clerkship Brings New Opportunity to Explore Specialties

Like most medical students, Kersten Schwanz, MD, could choose any number of specialty areas for her career. Many specialties interested her, but as a former college athlete, she knew she wanted to provide care for other athletes. By participating in the VA Longitudinal Integrated Clerkship (VALUE), she discovered her passion for physical medicine and rehabilitation (PM&R). The VALUE clerkship provides third year medical students a year-long opportunity to work with a group of Veteran patients, learning continuity of care while completing clinical competencies across multiple disciplines such as internal medicine, surgery, neurology, and primary care. Each year, Minneapolis VA—one of a handful of VA-sponsored VALUE programs—welcomes

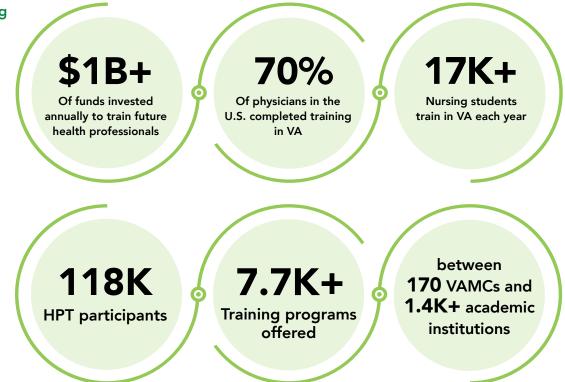






approximately 10 VALUE clerks from the University of Minnesota Medical School. The program exposes trainees to various clinical areas and involves them in Veteran care, which often leads to students discovering their preferred medical specialty and a passion to serve at VA.

#### 2023 Training **Numbers:**



### **Bringing Chiropractic Care Closer to Rural Veterans**

Like many Veterans who live in rural locations, when Air Force Veteran Marty Alne experienced severe back pain a few years ago, his only treatment options were to travel more than two hours to the Des Moines VAMC or see the only community chiropractor near him. Today, that has all changed thanks to OAA's efforts to expand chiropractic residencies for chiropractors who work, teach, and train at the Fort Dodge Community Based Outpatient Clinic in Iowa. Des Moines VAMC's chiropractic residency, now accredited by the Council of Chiropractic Education, demonstrates the value of chiropractors in a multidisciplinary health care system and paves the way for the establishment of more private hospital chiropractic residency programs based on VA's interprofessional training programs.

"VA is such a great and unique experience for trainees. The thing that makes VA so precious in a medical education is that it's comprehensive and, in our country, health care is fractionated. So, when our students and residents are learning in a VA [facility], they're learning a system that they can't see anywhere else and it really does give them a different view of health care. It helps them know what can be."

- Dr. Deborah German Vice President for Health Affairs University of Central Florida College of Medicine



— **Dr. Rachel B. Ramoni** Chief Research and Development Officer

Picture above: The lab of Dr. W. Timothy Garvey (blue shirt) in Birmingham is one of the Nation's leading sites for diabetes research.

## OFFICE OF RESEARCH AND DEVELOPMENT

Through ORD, VA covers the full gamut of health research, from basic sciences like biomedical laboratory studies to clinical trials, data analyses, and studies of how health care is delivered and how it can be improved. As an integrated health care system, VA is uniquely positioned to rapidly translate, disseminate, and implement research findings into everyday practice and care for Veterans.

#### Joining Forces with NIH to Study Gulf War Illness

In April, VA and the National Institutes of Health (NIH) announced a joint, five-year study called Project IN-DEPTH, which aims to apply new research methods to explain the chronic symptoms of Gulf War Illness (GWI), a disease that impacts multiple systems in the body and includes long-term symptoms such as fatigue, memory difficulties, and poor sleep. About one-third of the nearly 700,000 men and women who served in the Persian Gulf during Operations Desert Shield and Desert Storm are affected by GWI. The new study aims to develop better diagnostic criteria, new testing procedures, and potential treatments for GWI. Within the first month of the project's announcement, more than 400 Veterans volunteered to join the study team.

#### **Cancer Moonshot**

VA is part of the White House's Cancer Moonshot initiative, which was reignited in 2022 with the goal to reduce cancer mortality by 50% by 2047. Below are three research highlights from over 2,000 VA cancer studies in the past year:

VA Launches Largest Liver Cancer Screening Study in History: VA Preventing Liver Cancer Mortality through Imaging with Ultrasound vs. MRI (PREMIUM)

VA embarked on the largest-ever clinical trial to determine the most effective screening technique for liver cancer, comparing abbreviated Magnetic Resonance Imaging (MRI) to ultrasound, which is the current standard of care but known to have a varied quality. The abbreviated MRI, which reduces the time an MRI takes, has shown promise in detecting liver cancer at early stages when the risk of death is much lower. Researchers recruited 4,700 Veterans with cirrhosis from 47 VAMCs who will be followed for eight years to see whether screening with abbreviated MRI leads to earlier liver cancer detection. The findings could provide definitive answers to key questions about liver cancer screening that have been hotly debated for more than 30 years.

#### Lung Cancer Screening Program Saves Veterans' Lives

This year, an innovative lung cancer screening program at the Michael E. DeBakey VAMC in Houston saved the life of its 30<sup>th</sup> Veteran. The Lung Precision Oncology Program (LPOP) at the hospital is part of a national initiative to give VA clinicians a range of tools to proactively detect lung cancer and provide innovative care for Veterans. The program has been able to make 90% of their lung cancer diagnoses in the early stage, when the cancer is most curable, and is now providing screenings to more than 175 Veterans each month. The team has also expanded services from the hub site at the DeBakey VAMC to multiple spoke sites in the community, allowing VA to bring important lung cancer screenings to more Veterans in rural areas.

#### Using Artificial Intelligence (AI) to Find High-Risk Prostate Cancer

ORD researchers launched a study at five VAMCs, eventually expanding to 14 sites, that evaluates more than 5,000 Veterans who have been diagnosed with high-risk metastatic prostate cancer. The researchers are building new computer algorithms to analyze data from MRIs, tissue biopsies, and social determinants of health (SDOH) to better warn Veterans when their prostate cancer is likely to spread to other parts of the body.





#### **New Clinical Trial Tests Prosthetic Implants**

Researchers from VA are testing a new type of artificial leg called a percutaneous osseointegrated prosthesis (POP). Surgeons implant a titanium rod with a docking system that allows a user to quickly attach an artificial leg to their residual limb. The clinical trial involves approximately 150 Veterans with abovethe-knee amputations who have been using a traditional socket prosthesis. Researchers are building on the results of an earlier study and reported that the implanted prosthesis has many benefits, including ease of use, improved gait and balance, and better quality of life.

"It can't be overstated how useful it is to have a skeletal connection to a prosthetic device. There was asymmetry in my hips because the socket would interfere with my ability to do things safely under heavier loads. But once I had my surgery... my fitness options expanded."

#### — Ed Salau

Army National Guardsman, Marine Corps Veteran, and POP prosthesis user

2023 Research Numbers:

105 Active research sites nationwide

**7.4K Actively funded** research projects\* \$916M

Total congressional appropriation for research

\$2.3B

Total research budget\*

11.1K

**Published** research articles

From left to right: SECVA Denis R. McDonough, USH Dr. Shereef Elnahal, Dr. Nicholas Nickols, Dr. Samantha Connolly, Dr. Donna

Washington, AUSH Dr. Carolyn Clancy, Dr. Elizabeth Yano, Dr. Rachel B. Ramoni, and Dr. Ziyad Al-Aly. Front: Dr. Rory Cooper.

#### SECVA Recognizes Investigators at 2023 Research Week

In May, Secretary Denis McDonough hosted the kickoff event for Research Week 2023. This annual event raises awareness of the 3,700 investigators and their teams who work daily to discover medical breakthroughs that improve the lives of Veterans. The kickoff featured comments from Dr. Elnahal, the VHA Under Secretary for Health, and recognized six researchers for their contributions to medical research.

<sup>\*</sup>including VA funding and other sources

## OFFICE OF HEALTHCARE INNOVATION AND LEARNING

OHIL brings together four programs to deliver on the VHA's mission to innovate: the Center for Care and Payment Innovation (CCPI), the Office of Advanced Manufacturing (OAM), VHA Innovation Ecosystem (VHA IE), and the Simulation Learning, Evaluation, Assessment and Research Network (SimLEARN). Through its core programs, OHIL advances health care delivery and service and cements VHA as a learning organization and as a global leader in health care innovation. Together, these offices provide innovative solutions that change and save Veteran lives.

#### STRATEGIC INITIATIVES LAB

Strat Lab supports OHIL, DEAN, and VA by taking on early and emerging innovations that may have a high risk for failure but also high potential for impact should they prove successful.

#### **VA Immersive Summit**

In August, hundreds of VA leaders, Veterans, VA frontline staff, Veteran Service Organizations, and academics gathered both in Washington, D.C., and virtually at the 2023 VA Immersive Summit to experience how immersive technology is transforming Veterans' care. In-person attendees had the opportunity to try out the dozens of immersive technologies available in the exhibition area and learn about both VA and industry-built software programs. Exhibitors included a VA-led program, Moments that Matter, that allows VA clinicians to experience the inpatient discharge process through the perspective of their patients. Other exhibitors showcased the wide range of existing commercial programs that Veterans are currently using, including gamified physical therapy, emotional regulation and in-vivo exposure therapy for post-traumatic stress disorder (PTSD), relaxing and engaging programs to positively distract from chronic pain, and a virtual Honor Flight that allows Veterans who are unable to travel to "visit" several war memorials.

#### Preventing Suicide through VR

As many as 50% of Veterans receiving care from VHA experience chronic pain which is linked to increased risk for suicide. Preventing suicide is a top clinical priority at VHA, and VA Immersive is working with VA's Office of Mental Health and Suicide Prevention and providers at 60 VA facilities on a new Chronic Pain and Suicide Prevention pilot that incorporates two virtual reality (VR) approaches to reducing stress and pain levels. One software program is a therapeutic VR experience that immerses Veterans in nature as a form of distraction therapy. The other, developed through a collaboration between VA subject matter experts and software programmers, helps Veterans with avoidance behaviors. VA clinicians can immerse their patients gradually and safely into fully virtual, real-life environments as part of exposure therapy.

"Integrated Practice Units provide a high level of coordination and collaboration that reduces the need for multiple, separate consultations and empowers Veterans to be active participants in their care journeys. This results in a more efficient, patient-centered approach that improves the Veteran experience and ultimately, clinical outcomes."

- Dr. David Au CCPI Executive Director



CCPI collaborates across government and industry to design, evaluate, and scale innovative payment and service delivery approaches to enhance the quality of care for Veterans and drive value throughout the Department.

#### **Transforming Diabetes Care for Veterans**

One in four Veterans lives with type 2 diabetes, more than double the rate of the general population. CCPI, in collaboration with VA fieldbased providers and subject matter experts, is pioneering a pilot to address this condition. The pilot utilizes an integrated practice approach to manage type 2 diabetes, strengthening Veteran self-management with frequent checkins using dedicated clinical support. The interdisciplinary team includes registered nurses, clinical pharmacists, and endocrinologists – all

#### Value-Based Care at the **Front Line**

CCPI is partnering with several VA sites of care to build a field-based Value-Based Care (VBC) Center program. These CCPI-supported VBC Centers will be on the front lines of piloting value-driven innovations to improve the patient and employee experience and maximize Veteran well-being. CCPI will also work with these facilities to foster a greater understanding and adoption of VBC best practices, which can then be scaled across facilities within each center's Veterans Integrated Services Network (VISN). VBC Centers will strengthen VA's commitment to improve Veteran outcomes while giving care teams the flexibility, support, and tools they need to deliver the right care in the right place at the right time.

of whom actively collaborate to provide higher quality care, streamline Veterans' experiences (e.g., with scheduling and care counseling), and create a more patient-focused care cycle. The pilot empowers Veterans to manage their diabetes by providing customized care that prioritizes patient education, engagement, and preventative follow-up care. The integrated practice unit works behind the scenes to provide seamless, coordinated care to treat and manage type 2 diabetes and related conditions.

### **Improving Breast Cancer Care Coordination**

Although women Veterans are the fastest growing Veteran population, counting more than two million in the U.S. today, they experience several unique barriers to care. DEAN and CCPI partnered to develop a pilot program with VAMCs that addresses challenges in breast care diagnosis and treatment and identifies opportunities for intervention. A key aspect of the pilot is to determine ways to electronically capture patient-reported outcomes (PROs), a set of standard self-reported health measures used to understand a patient's health status. These measures provide an opportunity for Veterans to have a greater voice in their care. The pilot is also testing feasibility and impact of using virtual second opinions to ensure high quality care delivery for women Veterans.



#### OFFICE OF ADVANCED **MANUFACTURING**

OAM is the centralized program office that guides the utilization of advanced manufacturing technologies, like 3D printing, in health care applications at VHA.

#### **OAM Technology Improves Smiles**

OAM's ability to manufacture dentures in record time is bringing smiles to many Veterans. Gary Maddela, a Vietnam era Navy Veteran, moved to Washington state to live with his adult children after losing his wife. Prior to moving, he had completed a full mouth extraction leaving him with no teeth and was understandably eager to get his dentures. Significant for this Veteran, as he navigated a new town and

tried to make new friends in the wake of losing a spouse, having teeth that he could smile and speak clearly with was a very important and timesensitive priority. Using OAM technology for the creation of dentures, the total treatment time for this Veteran was reduced to a month and a half. compared to traditional denture fabrication, which would have taken up to six months.



VHA IE empowers frontline employees and leverages the collective power of external partners from academia, industry, non-profits, and other government agencies to facilitate mission-driven, health care innovation.

#### PREPARe Maternal **Health Summit**

Among women Veterans using VA health care, 43% are of reproductive age. In July, the Perinatal Reproductive Educational Planning and Resources (PREPARe) program hosted its first VA Maternal Health Summit at the Orlando VA Healthcare System. The inaugural program focused on the current and future state of maternal health and ways to improve in-house perinatal services for Veterans. Inspired by her own experiences with perinatal resources in the community, VHA IE Senior Innovation Fellow, Melissa Tran, hosted the summit which brought together maternal and reproductive health care professionals to collaborate, share knowledge, and explore innovative ideas for advancing maternal and reproductive care for Veterans and their families. More than 155 VA providers and executive leaders "VHA IE is built to empower VA employees who are motivated to make their idea a reality and improve the care and experiences we provide for our Veterans. By providing opportunities for employees at every stage of the innovation journey, they are helping the *VA* to scale the transformative innovations of today and develop the revolutionary ideas of tomorrow."

— Dr. Beth Ripley Acting Director of OHIL

from 46 VA facilities nationwide, community partners, and Veteran Service Organization representatives gathered for the event.



#### **Age-Friendly Summit**

With nearly half of Veterans over the age of 65, VHA's Office of Geriatrics and Extended Care is leading efforts to transform VHA into the Nation's largest age-friendly health system. Last summer, frontline staff from every VISN gathered in Providence, Rhode Island to accelerate the widespread adoption of the "Age-Friendly Health Systems" movement. Growth of this movement within VHA has already exceeded expectations

#### **VHA-Uber Health Connect Initiative**

For Veterans, transportation is one of the greatest barriers to accessing health care. Veterans who do not live near a VAMC, lack the ability to travel, or who rely on caregiver assistance to travel and access care are especially vulnerable. To address these challenges, VHA IE, VHA's Veteran Transportation Program (VTP), and Uber Health collaborated to create the VHA-Uber Health Connect (VUHC) initiative. Launched in 2022, the initiative offers rideshare services as a supplemental transportation option to Veterans eligible for VA travel benefits and their caregivers. Phase Two of VUHC began in May 2023, expanding the program to 60 additional VA facilities spanning 18 states and Puerto Rico. Less than one month after the launch of Phase Two, more than 4,500 rides had been completed, demonstrating VUHC's immediate impact on access.

with more than 100 VAMCs implementing a framework guided by the 4Ms – What Matters, Medication, Mentation (Mind) and Mobility – and the movement is now part of VHA's 2022-2028 Strategic Plan. The two-day Age-Friendly Summit, supported by Diffusion of Excellence, convened leaders and champions to document lessons learned from early adopters at VAMCs and develop a five-year plan to ensure that all care for older Veterans is age-friendly.

#### **Remote Patient Monitoring Pilot Program**

To support Veterans with Spinal Cord Injuries (SCIs), VA launched a pilot program to remotely monitor key health measures (e.g., respiratory rate, pulse, temperature) and conduct telehealth triage using a wearable device. Having received initial investment funding through the VHA Innovators Network's Spark-Seed-Spread Program, this monitoring program addresses a critical need to reach Veterans who struggle with mobility issues and provide them with access to specialty care. Built upon a nationwide hub-and-spoke model, the program utilizes a product that enables true remote patient monitoring that can be spread and scaled throughout the SCI system of care. The current sites involved are the St. Louis SCI Center in VISN 15 and the Cleveland SCI Center in VISN 10, two of VA's 25 SCI Centers. A team evaluating the feasibility of the program is based at the Center of Innovation for Complex Chronic Healthcare at the Hines VA in VISN 12 and is supported by VHA's Office of Connected Care.

## SIMLEARN

SIMULATION LEARNING, EVALUATION, ASSESSMENT, AND RESEARCH NETWORK

SimLEARN provides world-class innovation and simulation education to VA health care providers. SimLEARN uses these five program portfolios to improve Veteran well-being in safe, simulated learning environments: Learning Management (LM); Assessment, Collaboration, and Outreach (ACO); Clinical Training and Engagement (CTE); Resuscitation Education and Innovation (REdI); and Simulation Validation, Evaluation, and Testing (SimVET) Integrations, formerly Emerging Healthcare Technology Integration (EHTI).

#### SimLEARN Partners with Lexington VA Health Care System to Streamline Surgical Protocols

SimLEARN's work with the Lexington VA Health care System (LVAHCS) on the development of Surgical Emergency Team (SET) protocols demonstrates how partnerships overcome geographic barriers to reduce risks and actualize high-reliability organization (HRO) principles such as reluctance to simplify, preoccupation with failure and sensitivity to operations. As part of process improvement for its operating room (OR), the LVAHCS approached SimLEARN for help with developing SET protocols, including a framework, demonstration videos, and educational materials. In response, SimLEARN leveraged simulations to test and evaluate clinical workflows in a safe and simulated surgical environment. LVAHCS conducted training with all of SET's key stakeholders to determine effectiveness in a live clinical setting, and SimLEARN staff joined facility staff on-site to test time spent getting blood products to the OR. Initial results from the first to the second simulation showed a 50% reduction in time.



"Each of SimLEARN's portfolios employs simulation-based tools and trainings in an ever-evolving effort for reliability, standardization and innovation."

— Eric Bruns

Executive Director, SimLEARN

### Al Dictation Software Tested at the National SimVET Center

In May 2023, the SimVET team connected with the Office of Primary Care and other VHA leaders to investigate an Al-driven dictation software that could alleviate documentation burdens and ultimately reduce burnout among VA clinicians. Dictation software makes the documentation of clinical conversations seamless by incorporating patient history in its notes and providing, via machine learning, non-diagnostic predictive analytics to best inform care providers. Twentytwo VA frontline staff attended the event. representing the diversity of specialization needed to adequately evaluate this new technology. The team completed 20 simulations in a variety of care environments and with a variety of challenges for the technology, including background noise and complex medical encounters. The product of this event was a document outlining frontline staffdefined requirements for such a technology; this document has become the core of an evaluation tool to be used in a current Tech Sprint Challenge on these solutions.

414

Simulation-based courses and events hosted with 4.7K+ participants

132

Face-to-face events with 2.3K+ participants 27

Tours of the National SimVET Center with 209 participants

739K+

Resuscitation Education and Innovation (REdI) courses



National SimVET Center's ribbon-cutting ceremony

#### Breaking New Ground in Veteran Care: National SimVET Center Launches in Orlando

In September, SimLEARN held a ribbon-cutting ceremony to unveil the newly named National Simulation Validation, Evaluation, and Testing (SimVET) Center in Orlando, Florida. The name of the Center represents SimLEARN's evolved mission to enhance Veteran health care through simulation, analysis, and innovative technologies. The Center's unveiling launches SimLEARN's advanced approach to health care innovation, which ensures that no medical device is issued for Veterans unless it has been rigorously tested and proven safe and effective through simulation. SimVET's portfolio teams led participants through a variety of live emerging technology demonstrations,

including 3D printing and scanning, extended reality (XR), emerging networks, holoportation and the Ceribell Point-of-Care EEG system. SimVET engages frontline staff, clinicians, and leaders within VHA to actively participate in test-driving clinical software applications and medical devices. This approach empowers them to contribute to VHA's modernization efforts as an HRO, where patient safety is a top priority. The National SimVET Center will continue to serve as the hub for the analysis and integration of health care technologies for VHA into the future.

#### Resuscitation Symposium Demonstrates the Need for Simulation in Saving Lives

The first-ever VHA Resuscitation Symposium, hosted by SimLEARN's Resuscitation Education and Innovation (REdI) portfolio, challenged participants to "Be the Change." The three-day conference, held in February, brought together VA leaders and frontline teams nationwide to explore the latest resuscitation education, quality practices and scientific developments. From themed escape rooms to operating room simulations, the event was a catalyst for advancing Veteran resuscitation outcomes. The National SimLEARN Center provided attendees with a modern environment to practice realistic resuscitation situations. The simulations, each lasting 30 minutes, were developed through collaboration with nursing and physician subject matter experts. The simulation activities focused on refining team dynamics by immersing staff in the best resuscitation practices. REdI's reach continues to grow and through efforts such as the Resuscitation Symposium, 78% of facilities have incorporated Resuscitation Quality Improvement (RQI) impacting 250,000 VHA Clinicians.



partnerships and leverages those partnerships along with novel health care approaches to advance Veteran health and social determinants.

nong with hovel health care approaches to davance veterah health and social determinants. Together, VHA and our community partners are more effective at bridging gaps to reach a ".arger and more diverse population of Veterans, their families, caregivers, and survivors."

— Chien Chen

Chief Office/Nurse Executive HAP

## HAP

### NATIONAL CENTER FOR HEALTHCARE ADVANCEMENT AND PARTNERSHIPS

HAP serves as a trusted resource and expert on community partnerships to support the health of VA beneficiaries across social determinants of health.

#### **Addressing Food Security**

According to Feeding America, Veterans face a higher rate of food insecurity than the general population, with a rate higher among those who served in Iraq and Afghanistan — almost doubling that of non-Veterans. To help Veterans experiencing food insecurity, HAP facilitated VHA partnerships with the Rockefeller Foundation and MAZON: A Jewish Response to Hunger. These partnerships have successfully established food box programs with more than 45 food pantries in VAMCs across the country.



## (AAKP) In July 2023, VHA forme health outcomes and en

In July 2023, VHA formed a new partnership with AAKP to improve the health outcomes and enhance the overall quality of life of Veterans living with kidney disease. One in six Veterans live with chronic kidney disease. This includes more than 40,000 VA-enrolled Veterans who have kidney failure (i.e., end-stage renal disease, or ESRD). The joint effort will help to ensure that these Veterans receive comprehensive support and resources to effectively manage their condition by expanding the range of services and resources available to them. The partnership will focus on promoting Veterans' awareness and understanding of chronic kidney disease by providing educational resources, annual webinars focused on kidney health issues, support groups, and enhanced testing capabilities to Veterans.

**American Association of Kidney Patients** 



In May 2023, VHA partnered with Mediflix to enhance and improve the health care of Veterans. Mediflix employs the latest digital technologies to virtually connect Veterans to hundreds of physicians across 37 medical specialties and features video channels programmed by renowned medical organizations such as the Cleveland Clinic and the American Heart Association. This collaboration amplifies health resources that VA offers such as the Veterans Health Library which gives Veterans, family members, and caregivers free 24/7 access to printable health sheets, videos, worksheets, and other helpful resources. In 2024, this collaboration will introduce Vetiflix, a Veterans Health Channel designed by Veterans for Veterans that will provide Veterans, caregivers, and their families free access to an extensive library of video streaming resources from VA medical professionals. Veterans will also be able to interact with Mediflix's cadre of industry experts, allowing them to seek personalized and secure answers to their health-related questions.



#### **Global Liver Institute**

In November 2023, VA formed a new partnership with the Global Liver Institute (GLI) to enhance the quality of life for Veterans who have or are at risk of liver disease. Educating Veterans is a critical step toward preventing and improving care for liver disease. Recent data suggest that more than 30% of Veterans receiving VA care have risk factors for liver diseases, and many are undiagnosed. The goals of this collaboration are to expand access to educational materials and webinars to help increase Veteran awareness about liver diseases, increase health care engagement of Veterans with a suspected or confirmed liver disease diagnosis, and ensure equitable access to information and care for Veterans from disadvantaged or underserved communities. As part of these efforts, GLI is developing a webpage on its website that is specifically for Veterans and provides a variety of liver disease resources.





#### VHA National Community Partnership Challenge (CPC)

CPC is an annual event recognizing and fostering outstanding partnerships that advance the health and well-being of Veterans and their communities. Since 2014, the CPC has recognized recipients for their efforts in a variety of areas including

suicide prevention and SDOH. The CPC is facilitated by HAP on behalf of the Office of the Under Secretary for Health. This year's theme was Accelerating VHA's Journey to High Reliability Through Partnerships.

#### HAP announced the 2023 National CPC winners:

VA Greater Los Angeles Healthcare System's partnership with AyZar Outreach, Brentwood School, U.S. VETS and Village for Veterans was recognized for providing temporary and permanent housing for Veterans experiencing or at risk for homelessness. As a result of the partnership, the program went from having 10-15 tents in a parking lot to 140 shelters distributed across the property and it takes care of 140-plus Veterans on a daily basis to get them off the street and eventually into permanent housing.

Syracuse VAMC's partnership with the National Alliance for Mental Illness (NAMI) and Clear Path for Veterans was recognized for providing comprehensive educational support to Veterans through a family and peer program. The program brought together different services under one roof at one time to allow family members access

family support and educational programs occurring while their Veteran has simultaneous programming or some type of support group. As a result, Veterans and their families can enjoy a stress-free environment to spend time together exploring empowerment, coping skills, new resources and developing a strong peer network.

The West Palm Beach VA's partnership with Delray Beach Community Center, Vet Centers and the West Palm Beach Sheriff's Office was recognized for its Veterans and police crisis intervention initiative. The main purpose of the initiative is to provide training for police officers on Veteran-relevant issues to improve understanding and promote more positive interactions and outcomes between police and Veterans in the community. As a result, the community has experienced a decrease in violent confrontations between police and Veterans.

### Preventing Suicide through Rural WAVE Initiative

The Rural Veteran Wellness and Veteran Engagement (WAVE) Initiative supports VA priorities in strengthening Veterans' Whole Health and protective factors to prevent Veteran suicide. HAP, the Veterans Rural Health Resource Center – Salt Lake City, and other VA offices collaborated to launch the WAVE Initiative helping Veterans establish community connections through volunteerism to improve their well-being, using the Tomah VA Health Care System as the pilot site.

Pet Partners, another HAP-facilitated VHA partnership that supports suicide prevention, enabled 286 hours of therapy-animal teams interacting with 5,171 Veterans. Also working with the Tomah VA Health Care System, this partnership resulted in 30 hours and 317 Veteran contacts.

#### Veteran Sponsor Partnership Network (VSPN)

VSPN is a nationwide HAP-facilitated initiative focused on improving the experience and outcomes of service members transitioning to civilian life by linking them to a VA-trained peer sponsor. VA and this network of community partners help transitioning service members address social determinants of health including housing, transportation, employment, and more. In FY2023, VSPN partners supported over 4,000 Veterans, an increase of more than 850% from FY2022. Nearly half of the Veterans served by VSPN partners requested peer sponsors to help with their military-to-civilian transition. VA trained over 280 new peer sponsors and increased clinical case management and digital health support, including utilization of the Army STARRS-LS risk calculator, to further reduce suicide risk during the transition out of the military.

#### Salesforce Announces 10K Module Milestone

HAP facilitated the VHA partnership with Salesforce to support service members transitioning into the civilian workforce. The partnership helps service members, Veterans, and spouses access training, education, and job opportunities through a platform called Trailhead. Through this platform, Salesforce's free online learning platform supports indemand technology skills through a gamified, personalized learning experience. Salesforce offers several learning modules in Trailhead to empower Veterans and their families to learn about the health, financial, educational, and career benefits available. To date, more than 13,000 individuals have completed the mental health resiliency module and more than 7,600 individuals have completed the VA benefits for Veterans module on Trailhead.

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#### **VSPN** in Numbers:





## THE FUTURE OF HEALTH CARE POST PANDEMIC



While the worst of the COVID-19 pandemic may be behind us, health care is still feeling its impact. Like the patient on the preceding page, we're working to regain our footing even as we step forward. The way we visualized the future of health care before lockdown is substantially different than the way we see it now. And while the pandemic posed numerous challenges, it also brought opportunities along the way. It accelerated the pace of technology. It pushed forward programs and initiatives that may not otherwise have surfaced for years, or at all. Within VA itself, it hastened efforts already underway and strengthened others.

VHA, by virtue of its numerous assets, programs, and strategies in place prior to lockdown, was in many ways better prepared than the private sector in responding to this national public health emergency. Among these assets are the many overseen by DEAN:

- An embedded research program with a longstanding, clinical research infrastructure;
- A national innovation ecosystem that encourages and supports VA facility staff in developing and disseminating new practices and approaches;
- A growing portfolio of national and community partnerships aimed at ensuring health equity and Veterans' access to much-needed resources; and
- A world-class education and training program for new doctors and health professional trainees.

The following section illustrates how VA, through DEAN, helped assure Veterans' continued access to the soonest and best care, supported the national response to COVID-19, and paved the way forward for health care overall.

#### Research

As COVID-19 rapidly spread across the country, the VHA research program, overseen by ORD and in partnership with other VHA offices, demonstrated the strength and agility that come from being part of a nationwide integrated health care system.

One of the research program's many assets is its nationwide clinical research infrastructure, which became integral to interagency efforts supporting vaccine and therapeutics trials such as ACTIV (Accelerating Therapeutic Interventions and Vaccines). These efforts were further supported by ORD's **Cooperative Studies Program (CSP)** – VA's longstanding initiative that provided the capability to immediately "ramp up" and coordinate large multi-center clinical trials. Within CSP itself, a newly formed effort intended to expand opportunities for Veteran

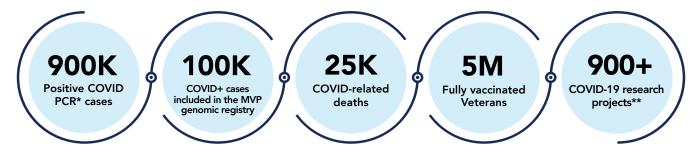
participation in cancer clinical trials – the

Partnered Research Program – was leveraged
to solicit participation in vaccine efficacy trials.

Due to these efforts and other assets, and a
newly launched enterprise strategy to leverage
existing partnerships and forge new ones both
internally in VA and externally with government,
industry, and academia, VA was especially wellpositioned to lead the Nation's research response
to the pandemic. Today, VA research continues
to stay laser-focused on COVID-19, including
numerous studies assessing Long COVID.

#### VA's Unique Capabilities to Study Long COVID

Because of VHA's electronic health record, which includes longitudinal data on 9 million enrolled Veterans, VHA now has data on:



\*polymerase chain reaction

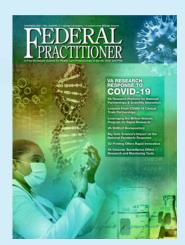
\*\*across VAMCs, with nearly 3K VAaffiliated papers published by mid-2023

More than a decade ago, when VA researchers envisioned a robust genomic database that could unlock answers to Veteran-specific conditions, they also knew its potential to inform future public health emergencies. While no one could have anticipated the novel coronavirus that emerged in 2020, the prescience of VA research in launching



its **Million Veteran Program (MVP)** served the Nation well. MVP is a partnership with Veterans that uses genetic, health, lifestyle, and military background information to understand how genes affect illness and health. During the pandemic, VA Research leveraged MVP by:

- Using its database to explore numerous areas of inquiry, such as why certain population groups might be more susceptible to COVID-19.
- Extending its centralized recruitment and enrollment infrastructure to develop a COVID-19 research volunteer registry that successfully registered 50K Veterans who expressed their interest in volunteering for clinical trials.
- Making full use of MVP partnerships with the Department of Energy, Food and Drug Administration, and other federal agencies to collaborate on a response to the pandemic.



A special issue of *Federal Practitioner* published November 2023 showcased the many ways VHA successfully leveraged and rapidly mobilized its research enterprise capabilities as part of the national response to COVID-19 and how it continues its crucial work in this area today.



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As Dr. Shereef Elnahal said in his foreword:

"The VA research program remains tightly focused on understanding the long-term impacts of COVID-19. At the same time, the VA is committed to using lessons learned during the crisis in addressing high priorities in Veterans' health care."

#### **Innovation**

VHA's longstanding culture of innovation has primed it for seeking novel solutions to Veterans' health care and quickly adapting to changing circumstances. With both capabilities in demand during the pandemic, DEAN offices mobilized quickly to address national shortages in critical supplies while ensuring Veterans' continued access to care and responding to physical and mental needs caused by heightened isolation.

When the Nation quickly depleted existing stockpiles of nasal testing swabs during the pandemic, VHA was prepared. DEAN leveraged its Joint Awareness and Management (JAM) board, a collaborative formed prior to the pandemic by OHIL and ORD, to better facilitate and shorten the timeframe from research of a medical product to product delivery. Because of JAM, VA was able to launch the Nasal Swab Objective and Statistical Evaluation (NOSE) study to evaluate the safety and efficacy of 3D-printed nasal testing swabs for use by health care systems. The NOSE study enabled VA to rapidly identify two 3D-printed swab designs that were comparable to the FDA-compliant standard of care, covering the gap between stockpile depletion and ramp-up of traditional product manufacturing.

the early testing and evaluation of virtual and augmented reality - collectively known as XR - to transform Veteran care delivery and experience. The onset of COVID-19 drove further adoption of XR, empowering VA staff to shift toward greater use of these immersive technologies. Awareness and receptivity increased among VA staff and Veterans who were either previously unaware of or who had not shown prior interest in XR, especially as they had more and more opportunities to put their "heads in headsets."

Prior to the pandemic, VA's XR Network, a

part of the VA Immersive, was already leading

Through the VA Immersive and XR Network, the use of immersive technology across VA grew tremendously. From 10 frontline staff across 5 VAMCs to:



\*across all 50 U.S. States, Guam, Puerto Rico, and American Samoa, with most of this growth occurring in the past three years.



Well before lockdown limited Veterans' access to primary care and prospective referrals for physical therapy (PT), VHA had found a way to streamline the process. Referred to as **Patient Aligned**Care Team (PACT-PT), the program provides Veterans' same-day access to PT by having physical therapists embedded within primary care clinics. Prior to the program, Veterans were usually referred to PT only after seeing their primary care

provider, who may have prescribed medications, ordered imaging, and referred the patient to other specialists. During the pandemic, this program allowed Veterans to start PT right away, rather than waiting for additional testing or seeing more providers. Today, access to sameday PT through PACT-PT is available at more than 86 VA medical facilities, including in rural areas, and VA intends to make the program available in every VA health care system by 2025.



VHA Innovation Experience (iEX) 2023

Another access-related initiative that expanded during the pandemic was the **Mobile Prosthetic** and Orthotic Care (MoPOC), which brings prosthetic and orthotic services closer to where Veterans live. The mobile program was piloted in 2019 by researchers at the VA Puget Sound Health Care System who recognized the barriers facing Veterans with limb loss and mobility impairments; namely, geographic distance, lack of transportation and travel costs associated with commuting to VA facilities for in-person care. During the pandemic, these challenges worsened. In 2021, the VHA Office of Rural Health (ORH) adopted the program as an Enterprise-wide initiative. Today, MoPOC has expanded access to VA prosthetic and orthotic care for more than 200,000 Veterans across 11 states and Guam.

When social distancing and lockdown heightened the isolation and loneliness already felt by many Veterans, Lori Murphy, a social worker at the Chalmers P. Wylie Veterans Outpatient Clinic in Columbus, Ohio, created the **Compassionate Contact Corps (CCC)** with the support from a dedicated group of VA social workers and voluntary service specialists. Launched at eight sites during the pandemic, CCC is a social prescription program that matches trained volunteers with Veterans for weekly phone calls or video visits.

Supported by VHA Diffusion of Excellence, CCC has reached 70 VA facilities across the Nation, impacting more than 1,000 Veterans, and engaging nearly 600 trained volunteers to date in its mission to reduce Veteran loneliness.



#### **Partnerships**

VA's established relationships with external stakeholders have long provided Veterans with additional health services and resources. These collaborations were critical in helping VA to continue to address pre-existing gaps for different Veteran communities that were further amplified as a result of the pandemic.

For Veterans, respiratory-related lung cancer inequities are linked to higher rates of smoking, relative to civilians, and include burn pit, Agent Orange, and other toxic environmental exposures. With lung cancer more prevalent among Veterans than the general population, HAP collaborated several years ago with the GO2 Foundation for Lung Cancer and the American Lung Association to focus on chronic lung disease education and phone "buddy" programs. These efforts continued throughout the pandemic to support Veterans with military environmental exposures and their eligible beneficiaries. HAP also increased outreach and expanded the GO2 Centers of Excellence to target Veterans in rural areas, whose needs were heightened by the pandemic.

Increased isolation caused by COVID-19 reduced Veterans' access to needed resources, with particular impact on those already experiencing disparities in care. This included Veterans whose health was affected by social, economic and environmental factors collectively known as SDOH. HAP leveraged existing partnerships such as the Americans for the Arts (AFTA) partnership, which provides art therapy to Veterans, and expanded it to more Veterans during COVID-19. In another example, HAP extended access to an online platform called **PATRIOTlink**, thereby allowing Veterans who may not have enrolled in VA care to receive updates on COVID-19 information. Through PATRIOTlink, Veterans can conduct customized searches for local resources and support (e.g., housing, employment, and food security), enabling them to conduct customized searches according to specific needs.

#### **Training**

Throughout the pandemic, the value of VA's numerous academic and continuing education programs was underscored.

For example, the Rural Interprofessional Faculty Development (RIFDI) program began as a pilot to expand access to care while addressing physician shortage in rural areas. In 2018, OAA joined the ORH to launch a three-year training program designed to attract providers, improve clinician job satisfaction and retention, and develop teaching and training skills for educators in rural settings. RIFDI was based on two dynamics: clinicians tend to work where they trained and clinicians who teach are more satisfied than those who do not. Like many other programs during the pandemic,

RIFDI was forced to adapt its curriculum and operational structure to changing circumstances, and made the program virtually available (e.g., workshops moved from face-to-face to virtual). Even with this restructuring, the cohort number of participants remained consistent. The program, shown to be so effective during COVID-19, moved into a permanent state, and OAA signed a memorandum of understanding with ORH in May 2022 for five years.

Participants to date:

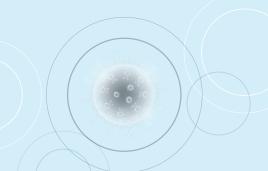


Simulation training, a core part of VHA continuing education for 15 years, became especially critical during the pandemic. The importance of such training was underscored when members of the National Academic Affiliations Council (NAAC), the Federal Advisory Committee Act group that advises OAA, toured the Orlando headquarters in Spring 2023. NAAC members were so impressed with these capabilities they recommended to the VA Secretary that "every VA medical facility with health professions education programs provide access to simulation training for trainees."

Because of **SimLEARN's** well-established learning network of VA facilities, frontline staff and HPTs were able to continue simulation-based training and access new COVID-19-related curricula regardless of location. This capability was further

strengthened by the **SimLEARN Innovation Center for Education (SLICE)** network, which provides accreditation for standardized trainings that local facilities utilize to conduct their own simulation exercises.

Since 2021, SLICE has expanded to 17 sites. And in 2023 it grew to 70, a 312% increase.



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#### **RECOGNIZING SUCCESS**

In 2023, DEAN affiliate program offices conferred awards upon numerous VHA professionals honoring their excellence in education, research, and innovation. Additionally, several DEAN staff and program offices were recognized by external parties for their outstanding contributions.



**Dr. Erica Seidel**DAVID M. WORTHEN RISING
STAR AWARD

For developing trainee-centric multimodal curriculum on treatment of conditions associated with cognitive and physical impairments that integrates experiential learning elements to enhance patient quality of life.



**Dr. Sanjay Saint** 

THE UNDER SECRETARY'S AWARD FOR OUTSTANDING ACHIEVEMENT IN HEALTH SERVICES RESEARCH For generating new knowledge related to preventing hospital-acquired infections and translating it to improve the health of Veterans and the Nation.



**Dr. Richard Lieber**PAUL MAGNUSON AWARD

For his work to return functional capacity, mobility, and quality of life to Veterans with physical disabilities.



Dr. Mark Holodniy
DR. ROBERT L. JESSE
AWARD FOR EXCELLENCE IN

INNOVATION CLINICAL AWARD

For advancing public health and improving Veteran lives through innovation.



Dr. Matthew McDougall
DAVID M. WORTHEN
INNOVATOR AWARD

For developing standardized business practice policies and tools for the academic and training disbursement process.



Dr. Shakaib Rehman

DR. KAREN SANDERS DEO AWARD

For strengthening relationships with the academic community and developing numerous innovative educational programs with lasting impacts.



**Dr. Paula Bickford**WILLIAM S. MIDDLETON AWARD

For research that identified the roles played by oxidative stress and neuroinflammation in normal aging and neurodegenerative diseases.



Dr. Indra Sandal

DR. ROBERT L. JESSE AWARD FOR EXCELLENCE IN INNOVATION NON-CLINICAL AWARD

For her contribution to improving Veterans' mobility experience and health care access.



**Dr. Edward Bope**DAVID M. WORTHEN CAREER

ACHIEVEMENT AWARD

For his longstanding service as a national leader in physician education inside and outside of VA.



**Dr. Kristine Yaffe** 

JOHN B. BARNWELL AWARD For research into Alzheimer's disease and related dementias demonstrating the effects of risk factors like traumatic brain injury and PTSD on cognitive impairment.



**Dr. Alvin Powers** 

WILLIAM S. MIDDLETON AWARD For research into the function of human pancreatic islets that provided critical insights into how several forms of diabetes develop.



Greater Los Angeles Health
Care System/ Care, Treatment
& Rehabilitative Service

DR. ROBERT L. JESSE AWARD FOR EXCELLENCE IN INNOVATION TEAM AWARD

For their innovations addressing the needs of homeless Veterans.

#### **Awards Received by DEAN Staff**



Dr. Beth Ripley

AMSUS INNOVATOR AWARD For outstanding contributions to military or federal medicine by developing and implementing novel approaches to overcome complex and persistent challenges in health care delivery.



Dr. Wendy Tenhula, Dr. Grant Huang, Jason Berlow, Joy Langston, and Dr. Karen Block

SECRETARY'S EXCEPTIONAL SERVICE AWARD (ESA) For support of the PACT Act.



**Dr. Anne Lord Bailey and Caitlin Rawlins (Finalists)**SAMUEL J. HEYMAN SERVICE TO AMERICA MEDALS (SAMMIES)

For building a cutting-edge nationwide immersive technology network to empower front-line staff and enable the treatment of Veterans for a wide range of medical issues.



VHA IE Staff
SERVICE TO THE

CITIZEN AWARD
For reimagining
individualized care through
customized solutions.



Dr. Amanda Lienau

FEDERAL 100 For innovating how data is used in VHA

### **LOOKING AHEAD**

"This is a new beginning to create a better future, and health care systems aimed at the future."

— Michael J. Dowling Chief Executive Officer, Northwell Health

Moving forward, and informed by valuable lessons learned from COVID-19, DEAN has a tremendous opportunity to help VHA shape the health care future for Veterans and the Nation as a whole. Looking ahead, four dynamics, which were accelerated by the pandemic, will continue driving health care:

- Continued shift from inpatient care to ambulatory and at-home care.

  VA programs initiated or expanded during the pandemic to meet increased ambulatory care needs (e.g., MoPOC and PACT-PT) continue to provide care to Veterans post-pandemic. These programs guide our efforts to increase in-home care options, allowing us to meet Veterans where they are.
- Expanded use of Al and XR. The use of these technologies has not only expanded our ability to treat Veterans, but also enhanced the effectiveness and efficiency of the care we provide. Programs such as the VA Immersive and the XR Network continue to strengthen VA's technological capabilities while also increasing adoption by Veterans and providers.
- Continued advancement in precision medicine, including genomics and personal health behaviors. VA's embedded research infrastructure has datarich resources such as MVP, with genomic data from more than one million Veterans, that enables a better understanding of different diseases, including their detection, treatment, and even prevention. Other efforts such as VA's precision oncology programs are revolutionizing VA's ability to target and treat specific types of cancer.
- Adapting to a constant state of learning. Health care innovation is moving at a rapid pace as are the changing needs of our Veterans, requiring VA providers to be in a constant state of learning in order to keep pace. Through DEAN, VA is committed to creating shared learning opportunities through meetings such as the PREPARe Maternal Health and Age-Friendly Summits and investing in our workforce through SimLEARN and the XR Network.

Looking ahead, our North Star is the "Big Six": the key priorities set by VHA Under Secretary for Health Dr. Shereef Elnahal. With innovation as the strategic enabler driving these priorities, DEAN is well-positioned to lead the way. As these pages have shown, innovation is at the heart of all we do. Whether it's empowering frontline staff, advancing research, energizing health professionals, or forging new collaborations, DEAN applies the lens of this strategic enabler to all of VHA health care.







Transforming health care for Veterans and the Nation through innovation, training, research, and partnerships.



Learn more at www.va.gov/dean

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