

Investing in the Front Line: Leading a Cultural Innovation Revolution

Allison Amrhein, director of operations, VHA Innovators Network, Department of Veteran Affairs, Washington, D.C.

Culture: Social behavior and norms found in human societies as well as the knowledge, beliefs, arts, laws, customs, capabilities, and habits of the individuals in these groups

Innovation: The action or process of innovating—a new method, idea, product, and so forth

Revolution: A sudden, radical, or complete change

—Definitions adapted from the *Oxford English Dictionary*

According to the U.S. Office of Personnel Management, the federal government civilian workforce consists of approximately 2.1 million employees. Of that number, 367,200 people are employed by the Department of Veterans Affairs (VA), including more than 225,000 full-time healthcare professionals and support staff at the Veterans Health Administration (VHA). To put those numbers into perspective, the entire state of Wyoming has roughly 580,000 people. So, the VHA workforce would be the equivalent of 40% of the population of Wyoming working for a single employer with a single mission—but spread across 50 states and serving 9 million people. Delivering world-class healthcare at this scale requires calculated risk-taking, and VHA's Innovators Network (iNET) encourages those risks. iNET's mission is nothing less than to lead the cultural revolution in which innovative thinking and doing can lead to endless possibilities.

The foundation for this revolution has been laid by many leaders over the years. The first clinically successful implantable cardiac pacemaker in 1960 and the nicotine patch in 1984 are just two notable VA healthcare breakthroughs. VA's robust research program continually breaks new ground, applying scientific knowledge to develop effective individualized care solutions. Building on this foundation, iNET aims to radically change behaviors, habits, and capabilities—the culture—throughout the country's largest healthcare system. By empowering frontline employees to identify veterans' needs and encouraging experimentation with small-scale solutions to meet those needs, iNET fosters the discovery of the best methods and new models of care for all.

iNET was launched in 2015 in response to VA's annual employee survey, which found that some employees did not feel encouraged to try new things at work. To determine the

For more information regarding the concepts in this column, contact Ms. Amrhein at allison.amrhein@va.gov.

The author declares no conflicts of interest.

© 2021 Foundation of the American College of Healthcare Executives

DOI: 10.1097/JHM-D-21-00196

root cause of the unsatisfactory survey results and brainstorm solutions, a team of VHA employees and Presidential Innovation Fellows conducted a large-scale, human-centered design project across multiple VA medical centers (VAMCs). They determined that a top-down approach was not always the appropriate route to innovation. Employees were often in the best position to solve their day-to-day challenges, and what they needed were resources to frame the challenges and design solutions. Perhaps most importantly, they needed to be encouraged and recognized as individuals, uniquely important contributors to VA's mission.

iNET is part of VHA's Innovation Ecosystem (described fully at www.va.gov/innovationecosystem), which covers 36 VAMCs throughout the country. While its core network has been kept small by design to showcase these sites as flagships for the revolution of change, iNET has increasingly expanded innovation opportunities for employees outside the formal 36 sites, and ultimately all VHA employees.

To fulfill its mission, iNET combines VHA-wide and iNET site-specific idea competitions, programming, and educational opportunities for employee innovators. These initiatives apply fundamental frameworks (e.g., human-centered design and Lean startup), storytelling and idea pitching, a life cycle starting with an Innovation Accelerator Bootcamp and the annual VHA Innovation Experience conference, collaborations with external healthcare innovators and entrepreneurs, and iNET's secret weapon: the innovation specialist. Innovation specialists are local VAMC leaders who facilitate local programming; lead national and local innovation events and activities; and connect employees with the knowledge and resources they need to design, develop, and test their solutions.

FROM FAILURE, SUCCESS

iNET executes its mission with one mantra in mind: "Think big. Start small. Fail small."

The failure aspect is critical to the success of the cultural revolution. Because iNET operates outside of the day-to-day operations of VAMCs, the employees' innovation activities do not compromise patient care. Employees can experiment and test their ideas safely—iNET provides the space to fail, and that is special. At the largest integrated healthcare system in the United States, iNET sees failure as a negative experience only if you do not learn from it. This is a radical shift. Imagine the raw power of 225,000 uniquely qualified individuals who are given the tools and permission to make a healthcare system better. What a tremendous opportunity for VA to be a place where visionaries and dreamers want to work.

HOW INET WORKS

Spark-Seed-Spread

How does iNET engage frontline employees in this revolution? Our three-tiered Spark-Seed-Spread Innovation Investment Program provides VAMCs with the resources (primarily small amounts of funding for project costs) for employees to explore the problem they aim to solve, then design, develop, and test their ideas and solutions in an accelerated life cycle. The terms *spark* (design), *seed* (prototype), and *spread* (test/implement) describe the maturation of the solution. Through Spark-Seed-Spread, iNET identifies deeply

committed employees and then trains them to think differently as they create and implement their solutions. More than 600 employees have participated in the first six cohorts of Spark-Seed-Spread, and their innovative solutions have helped more than 1.5 million veterans by expanding access to care and offering new programs and modes of care delivery. Some examples are as follows:

- **VEText.** The creation and support of VEText have enabled rapid messaging and appointment scheduling through veterans' mobile devices during the COVID-19 pandemic. In 2017, well before COVID-19 hit, two frontline employees at the VA Loma Linda Health Care System in California brought to light the fact that more than 9 million appointments a year nationwide went unfilled because of patient no-shows. With the support of our Spark-Seed-Spread Innovation Investment Program, the facility developed VEText to provide appointment reminders and a quick and easy way for any veteran with a smartphone to confirm or cancel an appointment. Veteran satisfaction in early trials has led to a nationwide rollout to all VAMCs.
- **Open Slot Management.** The VA Loma Linda team built on its VEText innovation by developing the Open Slot Management texting tool, which automatically redirects canceled appointment options to veterans who have waited more than 30 days for an appointment. To date, VEText has enabled the rebooking of more than 1 million appointments—greatly improving clinic utilization.
- **PRIDE.** LGBTQ veterans are at an increased risk for suicide and other healthcare issues resulting from discrimination. In response, a Hampton VAMC employee created PRIDE, a 10-week health education group to support LGBTQ veterans that includes tools and training for VA employees. The program has expanded through support from the Tuscaloosa VAMC and iNET. It has now been implemented in 27 VAMCs across the nation. More than 275 LGBTQ veterans who have taken part have reported a reduced likelihood of attempting suicide, less anxiety about not being accepted, and increased feelings of community and inclusiveness.

The Incubator

The Incubator is an annual, six-session virtual experience scheduled over the course of 4 months. Part workshop, part training, part panel discussion, it brings together iNET leadership, innovation specialists, alumni innovators, and external experts to share their approaches to healthcare innovation. Participating employees gain tools and templates to refine or start working on their own ideas and learn more about other opportunities offered by the network. In this way, the Incubator brings more employees into iNET from throughout the entire healthcare system, broadening its reach and expanding the revolutionary forces.

The Greenhouse

In December 2020, iNET launched a collaboration initiative called the Greenhouse to match VHA employees with healthcare entrepreneurs. It gives external innovators access

to iNET's pool of engaged and equipped healthcare professionals, enthusiastic end-users (clinical staff and veterans), and innovation specialists. Importantly, the Greenhouse incorporates the voice of the veteran in the innovative products of the future. In its first 6 months, the Greenhouse received 87 applications from external companies to collaborate with VHA in different ways. Competition is tough, and iNET only supports collaborations with those that are in the earliest phases of design and development. Currently, 12 companies are at some stage of collaboration with iNET. They include:

- **Unlimited Tomorrow.** This pioneer in next-generation prosthetic arms and hands will collaborate with frontline employees from the VA Salt Lake City Health Care System to develop a lifelike, alternate-reality equine therapy experience for veterans who are unable to take advantage of an actual experience.
- **LeviSense Medical.** This company's SensorCell technology treats severe pressure injuries, burns, and other severe risks of skin breakdown with a therapeutic bed system that minimizes the need for caregiver intervention. The new system includes a digital interface so users can provide feedback for potential improvements. LeviSense Medical is collaborating with frontline staff at eight different VAMCs.
- **RIF Robotics.** To reduce the surgery infection rate from contaminated tools and increase the number of surgeries performed each day, RIF Robotics is applying its robotics, computer vision, and artificial intelligence expertise to improve the efficacy and efficiency of cleaning, sterilizing, and managing surgical tools. The company is collaborating with staff at three VAMCs in the iNET Greenhouse to identify steps in the surgical tool supply chain process that contribute to potential inefficiencies or risks and automate them.
- **Sober Puffin.** Veterans who are struggling with substance addiction, along with their families and caregivers, can find care and support through reliable and easy-to-understand education and discovery tools developed by Sober Puffin. In addition, Sober Puffin provides localized resource mapping that identifies available clinical and community help for everyone impacted by the disease of addiction. Sober Puffin is collaborating with employees at two VAMCs via the Greenhouse to iterate the tools and codesign content for a new, veteran-specific module within the application.

CONCLUSION

Each of the mechanisms described here enables iNET to empower frontline employees and revolutionize a caregiving culture. This radical empowerment is just one small part of VA's greater mission: to care for those "who shall have borne the battle" and their families, caregivers, and survivors. That is why every VA employee comes to work every single day. In the end, we are all united, passionate, and committed to the cause. And isn't that what enables a successful revolution?