

Foreword

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Fed Pract. 2020;37(suppl 4):S8-S9.
doi:10.12788/fp.0038

For > 90 years, the US Department of Veterans Affairs (VA) has been in the vanguard of cancer research and treatment—improving the lives of veterans and all Americans. In 1932, recognizing the intrinsic link between research and clinical care, the Edward Hines, Jr. VA Hospital in Chicago, Illinois, established a tumor research laboratory to complement the work of its cancer treatment center. As the first VA laboratory to receive funding specifically for research, the new facility symbolized a paradigm shift in thinking about cancer treatment.

Today, through its National Precision Oncology Program (NPOP), the Veterans Health Administration (VHA) has embarked upon another paradigm shift—one that also puts research front and center by leveraging VHA's unique assets as a learning health care system. As noted by Montgomery and colleagues, “given its size, integration and capabilities, the VA is an ideal setting for rapid learning cycles of testing and implementing best practices at scale.”¹ The articles in this special issue, which focus on the 2 cancers that affects the most veterans—prostate and lung—show the transformative work underway to develop a new model of collaboration in cancer care.

At VHA, research and practice are not just proximal; they are truly integrated in the service of enhancing veterans' outcomes. For example, > 60% of VA researchers are clinicians who also provide direct patient care. As observed by Levine and colleagues, “meaningful advances in cancer care depend on both laboratory and clinical research. This combination, known as translational research, takes discoveries in the laboratory and applies them to patients and vice versa.”²

For example, it was physician-scientist Donald Gleason, MD, PhD, who in the 1960s pioneered the standardized system that helps doctors better assess and treat prostate cancer (the Gleason score). More recently, physician-scientists Matthew Rettig, MD, and Bruce Montgomery, MD, both leading experts in prostate cancer research, were instrumental to VA's partnership with the Prostate Cancer Foundation (PCF) to establish a national network for oncology trials serving veterans.

Having an embedded research program within

the nation's largest integrated health care system also provides the VA with the ability to conduct large-scale, multisite clinical trials. Since the 1940s, the VA Cooperative Studies Program (CSP) has generated key research findings across a range of diseases, including cancer, and provided definitive evidence and learning. In 1994, CSP launched its Prostate Cancer Intervention vs Observation Trial (PIVOT) study to determine whether observation is as effective as surgery for early-stage prostate cancer. Today, through the CSP, VA researchers are conducting a randomized, phase 3 clinical trial called VA Lung cancer surgery Or stereotactic Radiotherapy trial (VALOR) that will assess which of the 2 modalities is better when treating veterans with operable early-stage non-small cell lung cancer.

Additionally, VA is privileged to serve a patient population so dedicated to their country that many volunteer to serve again as participants in VA research clinical trials. In fact, Levine and colleagues credit the patients willing to enter clinical trials for the collective call to action and “critical philanthropic investment” that led to the Precision Oncology Program for Cancer of the Prostate (POPCaP).²

As a learning health care system, we also have been mindful of lessons drawn from the ongoing COVID-19 public health crisis. Almost overnight, VHA shifted from in-person to virtual visits to minimize the risk for veterans and their families. At the same time, we limited in-person clinical research visits to those that were required for the Veterans' health or well-being and conducted large numbers of virtual research visits. (Notably, the current crisis motivated accelerated study regarding virtual research trials, clarifying which touchpoints must be face-to-face and which have been face-to-face due mainly to convention.) In parallel, we also launched numerous clinical studies focused on the fight against COVID-19. Our capacity to transition both clinical care and research is due in no small part to our preexisting and strong foundation in telehealth.

With one-third of our patient population living in rural areas, these achievements are vital to our commitment of “no veteran left behind.” These efforts were recently boosted by VHA's newest partnership with the Bristol Myers Squibb

Foundation to establish a national teleoncology center that will enable all veterans to benefit from new research advances no matter where they live.

Precision oncology represents a new model of collaboration in cancer care among clinicians, operations leaders, researchers and veterans. By leveraging the many assets that have contributed to VA's success as a learning health care system, we can fulfill the promise of providing leading edge cancer care to all veterans.

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not necessarily reflect those of *Federal Practitioner*, Frontline Medical Communications Inc., the US Government, or any of its agencies.

References

1. Montgomery B, Rettig M, Kasten J, Muralidhar S, Myrie K, Ramoni R. The Precision Oncology Program for Cancer of the Prostate (POPCaP) network: a Veterans Affairs/Prostate Cancer Foundation collaboration. *Fed Pract.* 2020;37(suppl 4):S48-S53. doi:10.12788/fp.0021
2. Levine RD, Ekanayake RN, Martin AC, et al. Prostate Cancer Foundation-Department of Veterans Affairs Partnership: a model of public-private collaboration to advance treatment and care of invasive cancers. *Fed Pract.* 2020;37(suppl 4):S32-S37. doi:10.12788/fp.0035

Introduction: Precision Oncology Changes the Game for VA Health Care

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With this program, I would tell the physicians and the patients: Don't just accept your treatment, find out what else is out there. There's always something new going on, so keep looking. Don't give up hope.

Tam Huynh, US Army Veteran¹

For US Army veteran Tam Huynh, the US Department of Veterans Affairs (VA) precision oncology program has been the proverbial game changer. Diagnosed in 2016 with stage IV lung cancer and physically depleted by chemotherapy, Huynh learned that treatment based on the precise molecular makeup of his tumors held the potential for improving quality of life. Through the VA National Precision Oncology Program (NPOP), Huynh was matched to a medication shown to help patients whose tumors had the same genetic mutation as Huynh's tumors. Today, Huynh is not only free of chemotherapy's debilitating adverse effects, but able to enjoy time with his family and return to work.

Huynh is one of 400,000 veterans treated for cancer annually at the VA. The life-changing treatment he received is due to the legacy of research, integrated care, and collaboration that is the hallmark of the VA health care system. The NPOP is a natural outgrowth of this legacy, and, as Executive-in-Charge Richard Stone, MD, notes in his Foreword, part of the Veterans Health Administration's (VHA) evolution as a learning health care system. The articles in this special issue represent a snapshot of the work underway under VHA NPOP as well as the dedication of VHA staff nationwide to provide patient-centric care to every veteran.

Leading off this special issue, NPOP director Michael J. Kelley, MD, provides context for understanding the paradigm shift represented by precision oncology.² He also discusses how, within 5 years, the program came together from its start as a regional effort to its use today by almost every VA oncology practice. Kelley also explains the complexity behind interpreting next-generation sequencing (NGS) gene panel test results and how VA medical centers can call upon NPOP for assistance with this interpretation. Further, he states the "obligation" for new medical technology to be accessible and notes how NPOP was "intentional" during implementation to ensure rural veterans would be offered testing.²

Following Kelley's discussion is a series of articles focused on precision oncology for prostate cancer, which affects 15,000 veterans yearly. The first, an overview of the Prostate Cancer Foundation (PCF), provides a short history of the organization and how it came to partner with the VA.³ Written by several PCF staff, including President and CEO Jonathan Simons, MD, the paper notes how the commitment of early leaders like S. Ward Casscells, MD, and Larry Stupski led to PCF's "no veteran left behind" philosophy; ie, ensuring veteran access to clinical trials and world

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Fed Pract. 2020;37(suppl 4):S9-S10. doi:10.12788/fp.0039

class care regardless of location. As the first disease-specific national network for oncology trials serving veterans, PCF aims to provide a model for all of US health care in the delivery of precision oncology care.

A critical part of PCF is the Precision Oncology Program for Cancer of the Prostate (POPCaP), which focuses on genetics and genomic testing. Bruce Montgomery, MD, and Matthew Retting, MD—VHA's leading experts in prostate cancer—shine the spotlight on VA's research track record, specifically the genomics of metastatic prostate cancer.⁴ They also note the program's focus on African American veteran patients who are disproportionately affected by the disease but well represented in the VA. In discussing future directions, the authors explain the importance of expanding genetic testing for those diagnosed with prostate cancer.

Prostate cancer Analysis for Therapy Choice (PATCH) is a clinical trials network that works hand-in-hand with POPCaP to use genetic data collected by POPCaP sites to find patients for trials. In their discussion, authors Julie N. Graff, MD, and Grant D. Huang, MD, who leads VA Research's Cooperative Studies Program, focus on 3 key areas: (1) the challenges of precision oncology when working with relatively rare mutations; (2) 2 new drug trials at VA that will help clinicians know whether certain targeted therapies work for prostate cancer; and (3) how VA is emerging as a national partner in drug discovery and the approval of precision drugs.⁵

Turning to lung cancer—the second leading cause of cancer death among veterans—Drew Moghanaki, MD, MPH, and Michael Hagan, MD, discuss 3 multisite initiatives launched in 2016 and 2017.⁶ The first trial, VA Partnership to Increase Access to Lung Cancer Screening (VA-PALS), is a multisite project sponsored by the VA's Office of Rural Health and Bristol-Myers Squibb Foundation. The trial's goal is to reduce lung cancer mortality through a robust early detection program. The second trial, VA Lung Cancer Surgery OR Radiation therapy (VALOR) compares whether radiation or surgery is the best for early-stage lung cancer. Notably, VALOR may be one of the most difficult randomized trial ever attempted in lung cancer research (4 previous phase 3 trials outside the VA closed prematurely). By addressing the previous challenges associated with running such a trial, the VALOR study team already has enrolled more than all of the previous phase 3 efforts combined. The third trial is VA

Radiation Oncology Quality Surveillance Program (VA-ROQS), which was created in 2016 to benchmark the treatment of veterans with lung cancer. VA-ROQS aims to create a national network of Lung Cancer Centers of Excellence that work with VISNs to ensure that treatment decisions for veterans with lung cancer are based on all available molecular information.

The final group of authors, led by Maren T. Scheuner, MD, discuss how the advent of germline testing as a standard-of-care practice for certain tumor types presents opportunities and challenges for precision oncology.⁷ One of the primary challenges they note is the shortage of genetics professionals, both within the VA system and health care generally. To help address this issue, they recommend leveraging VA's longstanding partnership with its academic affiliates.

Precision oncology clearly demonstrates how applying knowledge regarding one of the smallest of living matter can make a tremendous difference in the matter of living. Tam Huynh's story is proof positive. Speaking at last year's AMSUS (Society for Federal Health Professionals) annual meeting about his experience, Huynh said that all veterans should have access to the same life-changing treatment he received. This is exactly where the VA NPOP is heading.

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References

1. How the VA is using AI to target cancer, <https://www.theatlantic.com/sponsored/ibm-2018/watson-va-cancer/1925>. Accessed August 6, 2020.
2. Kelley MJ. VA National Precision Oncology Program. *Fed Pract.* 2020;37(suppl 4):S22-S27. doi:10.12788/tp.0037
3. Levine RD, Ekanayake RN, Martin AC, et al. Prostate Cancer Foundation-Department of Veterans Affairs partnership: a model of public-private collaboration to advance treatment and care of invasive cancers. *Fed Pract.* 2020;37(suppl 4):S32-S37. doi:10.12788/tp.0035
4. Montgomery B, Rettig M, Kasten J, Muralidhar S, Myrie K, Ramoni R. The Precision Oncology Program for Cancer of the Prostate (POPCaP) network: a Veterans Affairs/Prostate Cancer Foundation collaboration. *Fed Pract.* 2020;37(suppl 4):S48-S53. doi:10.12788/tp.0021
5. Graff JN, Huang GD. Leveraging Veterans Health Administration clinical and research resources to accelerate discovery and testing in precision oncology. *Fed Pract.* 2020;37(suppl 4):S62-S67. doi:10.12788/tp.0028
6. Moghanaki D, Hagan M. Strategic initiatives for veterans with lung cancer. *Fed Pract.* 2020;37(suppl 4):S76-S80. doi:10.12788/tp.0019
7. Scheuner MT, Myrie K, Peredo J, et al. Integrating germline genetics into precision oncology practice in the Veterans Health Administration: challenges and opportunities. *Fed Pract.* 2020;37(suppl 4):S82-S88. doi:10.12788/tp.0033