Reducing Disparities and Improving Outcomes for Special Populations in Prostate Cancer

Addressing the unique needs of LGBTQ+ patients, Black men, and U.S. Military Veterans with prostate cancer, across settings and disease stages
DURING his initial consult visit, a new patient intake form was completed, which has a section about sexual history including questions such as if the patient is sexually active, what types of partners they are sexually active with, and what type of contraception they are using. The patient marked that he was currently sexually active with only male partners. The advanced practitioner (AP) confirmed this information while reviewing the intake form with the patient and asked the patient how he was tolerating his treatment up to this point. He admitted that treatment had negatively impacted nearly all aspects of his life including his mental health, his work as a lawyer (by impacting his confidence and mood, and causing short temper), his relationship (eg, loss of libido, sexual dysfunction), and his overall health (eg, decreased exercise tolerance and muscle tone). The AP asked the patient to further elaborate on his sexual dysfunction issues, and he expressed concern about erectile dysfunction, as well as rectal pain during receptive anal intercourse since completing radiation therapy. He also elaborated that he had been struggling with increased anxiety and depression since being on therapy due to his side effect-associated “new normal”; in particular, the sexual dysfunction and how it had impacted the dynamics of his relationship with his partner was difficult.

Meet the Faculty
Sarah E. Traverso, PA-C, is a physician assistant who has been working in hematology and medical oncology since the beginning of her career in 2018. She currently practices in genitourinary oncology at the Robert H. Lurie Cancer Center at Northwestern Medicine, treating adult patients with prostate, renal, urinary tract/bladder, and testicular cancers. She often works with her urology colleagues who lead the Gay and Bisexual Men’s Urology Program at Northwestern Medicine. She is an active member of APSHO.

MSM PATIENT WITH INCREASED ANXIETY AND DEPRESSION RELATED TO SEXUAL DYSFUNCTION AND RECTAL PAIN

A 59-YEAR-OLD MALE presented to medical oncology after being diagnosed with stage IVA high-risk prostate cancer. He had recently undergone a radical prostatectomy, and his postoperative prostate-specific antigen (PSA) was slightly elevated at 0.04 ng/mL. Bone and CT scans showed no evidence of metastatic disease; however, a pelvic MRI showed possible recurrence of his cancer in the prostate bed. He started on androgen deprivation therapy (ADT), completed salvage radiation therapy, and was referred to medical oncology to discuss additional therapy intensification. He reported that he has a brother who also has prostate cancer.
Given his young age at diagnosis of high-risk prostate cancer and his family history, the AP recommended that he undergo genetic testing. The AP advised the patient that it may be helpful knowledge for him to have, may have implications for his family, and may provide additional treatment options in the future, if needed, if an abnormality was detected. The AP also discussed the option to intensify the patient’s current therapy by adding an additional medication that has been shown to improve progression-free survival benefit but may exacerbate current side effects. The patient wanted to further discuss this with his partner before making a decision. The AP then discussed the patient’s adverse side effects in more detail, including various options to treat his erectile dysfunction including phosphodiesterase inhibitors (sildenafil or tadalafil), prostaglandin injections, or inflatable penile prosthesis. The patient was offered a referral to a sexual dysfunction urologist to discuss these options in more detail. In this case, the institution where the patient was seen had a gay and bisexual men’s urology clinic, and the patient was referred because of his unique needs and concerns. The AP and patient also discussed the possibility of a gastroenterologist referral to further evaluate the patient’s possible rectal fibrosis and rectal pain during receptive anal intercourse. A third referral was given, this one for an oncology psychologist to provide additional support for the patient’s ongoing anxiety and depression. Throughout the patient’s visit, the AP provided reassurance that his concerns were not uncommon. The AP also enforced that the patient’s issues were valid and important. The AP provided support to the patient by actively listening to all of his concerns, both physical and emotional, and asked follow-up questions to fully understand how these side effects were impacting the patient’s quality of life. By doing so, the AP was able to create a safe, judgment-free, and supportive environment for the patient to fully share his concerns so that he could make a decision about what treatment would be best for him.

Implementing Sensitivity and Candor into Real-world Discussions with LGBTQ+ Patients

As found in a survey of prostate cancer physicians, one-third of respondents assumed that their patients were heterosexual. In addition, urologists receive less than 5 hours of education about LGBTQ+ healthcare in medical school. Daniels et al. noted that medical mistrust was present among most men who have sex with men (MSM) and their partners, as few study participants described an openness to discuss their sexuality and relationships with their urologists.

In this case, we see that the AP prioritized conversation about the patient’s sexual orientation and how his side effects may be impacting his sexuality.

Not asking patients about their sexual orientation can create a ‘don’t ask, don’t tell’ environment which could negatively impact the patient’s comfort level and trust with their provider, as well as prevent key factors in treatment decision making from being discussed.”
by confirming this information with the patient while reviewing the intake form. Not asking patients about their sexual orientation can create a “don’t ask, don’t tell” environment, which could negatively impact the patient’s comfort level and trust with their provider, as well as prevent key factors in treatment decision making from being discussed. Putting the responsibility on the patient to initiate this conversation with their providers may also add additional psychological burden for the patient. Using a new patient-intake form that asks questions about sexual orientation is a simple but effective way to gather this information from patients and show patients that their care team is open and comfortable with having these conversations. This also helps the AP counsel patients appropriately from the very first visit.

A study conducted by Simon Rosser et al. found that, compared with heterosexual patients with prostate cancer, MSM had significantly worse urinary, bowel, and hormone function. They also had worse depression and overall mental health, as well as worse physical, social/family, functional, prostate-specific, and overall well-being outcomes for quality of life. In this case, the patient exhibited many of the unique adverse side effects that can impact MSM while receiving treatment for prostate cancer including anxiety and depression, concerns about sexual function and impact on his relationship, and issues with both erectile dysfunction and rectal pain with receptive anal intercourse. Discussing the extent of his side effects was very important for this patient, as the primary focus of the visit was to discuss adding another medication to his treatment regimen that might have further exacerbated these symptoms. By having an open and honest conversation about risks and benefits of this treatment, it allowed the patient to make a fully informed decision about whether to proceed. It was evident that discussing treatment options with his partner was important to the patient because he previously stated that the treatment and related side effects were impacting not only him but his relationship as well.

It is important to note that there are still unanswered questions regarding specific recommendations for MSM. Timelines regarding when to safely

FOR FURTHER READING

Whether serving LGBTQ+ patients with genitourinary cancer in an oncology clinic or seeing them earlier in the urology setting, APs can have a dramatic impact on the quality of care that these patients receive, which can influence overall outcomes. APs are key to creating a safe, affirming environment for these patients, in which sensitive but candid communication is essential.

LGBTQ Cultural Humility for the Urology Healthcare Provider
By Elizabeth K. Kuzma and Brooke C. Acarregui Lehmann
Chapter in: The Nurse Practitioner in Urology

Urologic Issues in LGBT Health
By Drs. Matthew D. Truesdale, Benjamin N. Breyer, and Alan W. Shindel
Chapter in: Lesbian, Gay, Bisexual, and Transgender Healthcare

Providing a Tailored Approach to Prostate Cancer Care for Gay and Bisexual Men: A Conversation with Channa A. Amarasekera, MD
In: The ASCO Post

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return to anal intercourse following treatment are still unclear given the possibility of rectal inflammation, bleeding, or residual radiation from brachytherapy (radioactive seeds implanted in the prostate) that could impact the insertive partner. In this particular case, the patient had already received some treatment for his prostate cancer before presenting to the oncology AP, but this highlights the importance of thorough preoperative counseling regarding sexual side effects of treatment for MSM. Discussion regarding all of the different management options and their associated risks is essential in order for the patient to be able to make an informed choice. For those patients who may not have a gay and bisexual men’s urology specialist, or even a sexual dysfunction urologist, in their area but are interested in establishing care with one of these specialists, patients can see if these clinics are able to provide telemedicine visits to patients outside of the clinic’s immediate area. Another alternative is to see if there are any urologists who specialize in LGBTQ+ issues in the area to help manage these unique needs. Patients can often identify providers through word of mouth among their friends, by reaching out to local clinics and LGBTQ+ centers in the area, or using online resources such as the Gay and Lesbian Medical Association (GLMA) provider directory.

Prostate cancer affects patients both physically and emotionally, and this may translate in more unique ways for MSM. Patients may require support in a variety of ways from their AP throughout their diagnosis and treatment courses, and discussion about their sexuality as it relates to these needs is vital. The AP’s goal should be to create a safe, comfortable, judgement-free environment for all of their patients to allow open and honest conversation about these issues. APs must work together to educate one another about aspects of care that are important and unique to this community to be able to serve all patients during times of peak vulnerability and need.

References
Meet the Faculty

Lisa D. Hineman, RN, MSN, AOCN, PHN, ANP-C, is a Senior Oncology Nurse Practitioner and Director of Clinical Operations with Los Angeles Cancer Network. Lisa was the Greater Los Angeles Oncology Nursing Society Advanced Certifi ed Oncology Nurse of the Year for 2008. She lectures nationally on cancer therapies, symptom management, health promotion, and improving outcomes. She has been recognized by the city of Glendale, California for the Donald L. Bogdon Cancer Survivor Award for contributing to the community’s better health and cancer education, and she has received national recognition by being awarded the AstraZeneca Visions of Hope Award for her contribution and service to the breast cancer community.

EDUCATING AN ENTIRE COMMUNITY ABOUT PROSTATE CANCER AS A “CHRONIC DISEASE,” ONE PATIENT AT A TIME

DG IS A BLACK MAN, AGE 56, with a 7-year history of prostate cancer and HIV. He was transferred to our care in 2021, after his oncologist moved out of the area. He was diagnosed with HIV at the same time as his cancer diagnosis, prompted by a phone call telling him to get tested. Of interest, this was not revealed until recently, when we finally received old records that we had requested multiple times throughout the years. His HIV has been well managed, with undetectable levels for 7 years on current medication.

DG’s cancer history began in 2016, at age 49, when he actively sought medical care after hearing that “younger black men are getting prostate cancer.” He was seen by his primary care physician, who performed a prostate-specific antigen (PSA) test and a digital rectal exam. His PSA level was elevated at 12.0 ng/mL, so his primary care provider referred him to Urology, where a prostate biopsy revealed adenocarcinoma of the prostate and a Gleason score of 7 (3+4).

DG was offered radical prostatectomy or high-dose radiation; he opted for radiation. He received the standard dose of 5,040 cGy using daily 180- to 200-cGy fractions 5 days per week, after which he was placed on androgen deprivation therapy (ADT) with leuprolide for 2 years and then monitored for observation after achieving a complete response (PSA 11.2 ng/mL). His care was transitioned to urology upon initiation of the ADT. Of interest, it was noted by the urology advanced practitioner (AP) that the patient stated he had never been referred for bone density assessment. As discussed by Guise et al.1 in 2007, men undergoing prolonged ADT incur bone loss at a rate higher than menopausal women (Figure 1). This is important, as early treatment for hormone-related bone loss may affect or prevent future skeletal-related events.

In January 2019, DG’s PSA level had risen to 9.8 ng/mL, so he was referred to Medical Oncology.
A bone scan was negative for disease progression, but because biochemical recurrence was noted, bicalutamide was initiated and leuprolide therapy was restarted. His PSA level was well controlled at 0.4 ng/mL, but a bone scan performed 6 months after resuming ADT revealed bone metastasis. He continued on the same therapy with the addition of denosumab monthly for bone metastasis.

In June 2020, DG’s PSA level increased to 14.0 ng/mL. The original plan was to change the bicalutamide to enzalutamide, but the co-pay was too high and co-pay assistance was not available; therefore, the decision was made to discontinue bicalutamide and add abiraterone to leuprolide. His PSA level again normalized.

In May 2021, DG’s PSA level again began to increase this time to 7.0 ng/mL. Abiraterone was discontinued, and enzalutamide was added to leuprolide after co-pay assistance (because of the disease progression) was obtained. The AP and DG had a deeper discussion regarding his family history. He noted that his mother had died from breast cancer and that “every other person in her family had died when they were young from heart disease. I didn’t want to die young, so I went to the doctor when I heard that young black men could die from prostate cancer.”
As the information about his mother’s breast cancer was not specifically mentioned since his care transition, the AP used this opportunity to explain to DG that some families are genetic carriers for mutations that can contribute to both breast and prostate cancer, and that his children could potentially benefit from the information genetic (germline) testing would provide. He readily consented to an expanded breast cancer panel, and he was tested for BRCA1, BRCA2, CHEK2, MLH1, MLH2, SSH2, MSH6, NBN, PALB2, PMS2, RAD51D, and TP53. All test results were negative.

In July 2021, bone scan revealed progressive disease to the spine, which was managed with external beam radiation therapy to the spine. After completion of radiation, DG was started on docetaxel every 3 weeks with monthly zoledronic acid and every-3-month leuprolide.

In February 2022, abiraterone was resumed per new recommendations. DG was continued on docetaxel with excellent control of his PSA (1.89 ng/mL).

In October 2022, DG was in for a routine follow-up appointment, and he told his AP that he was “tired of chemo, and my fingers and feet are getting numb.” When asked what was most important to him, DG was quick to answer, “I want to live, but I want to feel good.
The AP and DG talked at length (a conversation they previously had on several occasions) about how some cancers are not curable or immediately fatal, but more like diabetes—treated continuously to keep better control.”

and not feel like I have to rest all the time.” With this in mind, the AP suggested a “chemo holiday,” as DG’s PSA level was within normal range and ADT with abiraterone, leuprolide, and zoledronic acid would be continued with monitoring. DG told the AP that this would be challenging to explain to his friends and family because they were having a hard time understanding why he wasn’t “better or dead.” The AP and DG talked at length (a conversation they previously had on several occasions) about how some cancers are not curable or immediately fatal, but more like diabetes—treated continuously to keep better control. As many of the patients in underserved communities who see community health care providers often experience medication changes for long-term control of health issues, with diabetes and “sugar problems” being familiar to many patients from this community, this example is helpful in increasing understanding about cancer as a “chronic condition.”

In March 2023, because DG’s PSA level had increased to 7.01 ng/mL, a comparison bone scan was ordered. The bone scan revealed progressive disease, but the CT scan remained negative for visceral disease. With bone-only metastatic disease, DG was referred to nuclear medicine for 6 cycles of radium 223. During therapy his PSA level continued to increase to a high of 33.15 ng/mL. He also had increasing bone pain.

Following completion of the radium 223, DG underwent restaging with prostate-specific membrane antigen (PSMA) PET/CT. As DG has not had a recent tissue diagnosis, if this reveals progressive disease and if there is measurable disease for biopsy, the advanced practitioner will order interventional radiology-guided biopsy to test for histology and send for somatic testing with next-generation sequencing. Depending on the testing results, options will include referral for a clinical trial or docetaxel (as DG did not fail it). If there is no measurable disease for a biopsy, the advanced practitioner will discuss options based on DG’s symptoms and desires for further care. All treatment decisions should always take into account the “whole” patient and weigh the risks, benefits, and alternatives in determining the best course of cancer treatment moving forward.

Discussion

Although only some of the conversations between the AP and DG are illustrated in the case, there has always been open communication between them. Each conversation is initiated by the AP with, “How was your week?” versus “How are you?” as patients often feel that the latter just refers to their health. By having a general “light” conversation for a few minutes, it often leads to more thorough discussion of symptoms, insights into general well-being and psychosocial or emotional status, and an understanding of what is most important to the patient. When
discussing concern for the whole person—physical, spiritual, emotional, psychosocial—you often get to know more about the whole picture. The ground rules are laid early so the patient knows that the conversation will always be “real”—for good or bad—and that the conversation should be stopped if there is a lack of understanding, with permission to ask any question for better clarity. Each conversation includes instruction for the patient to “teach someone what you learned.” This has been a very effective way to educate the larger community, whose members are often wary of health care providers. It is so encouraging for APs to overhear a patient in the infusion room or waiting room teaching another patient what they learned that day.

In addition, any time there is potential for progressive disease, it is beneficial to discuss a plan with the patient prior to definitive testing. This could look like, “Okay, here is the plan. If the scans look good, we will change therapy from enzalutamide to abiraterone. If the scans show us some new spots of cancer, we will get a biopsy and send the tissue for special testing to look at any possible target specific to your cancer and choose the future therapy based on your specific test results.” By having a plan prior to results for patients with a chronic cancer, ongoing discussions to build on (i.e., “Remember how we discussed...”), even in the face of disease progression, the patient will be able to enhance the understanding of people in his support group, and he will always know that the AP is in it with him for the long haul, together.

References
Meet the Faculty

Laura Mitchell, PA-C, is a hematology/oncology physician assistant at the Joseph Cleland Maxwell Atlanta VA Medical Center in Decatur, GA, where she serves on the Inpatient Consulting Team. Laura is a member of the American Academy of Physician Assistants (AAPA), Association of Physician Assistants in Oncology (APAO), Georgia Association of Physician Assistants (GAPA), and the African Heritage Physician Assistant Caucus (AHPAC). Laura serves as AAPA/APAO Medical Liaison to the American Society of Clinical Oncology (ASCO). Her vision as a physician assistant is to not only provide quality care but to also educate patients about their disease, complications, and treatments including lifestyle changes, that will lead to an improved quality of life.

IMPROVING OUTCOMES, THERAPEUTIC OPTIONS FOR BLACK VETERANS WITH PROSTATE CANCER

MR. H IS AN 80-YEAR-OLD BLACK VIETNAM-ERA MALE VETERAN with past medical history of type 2 diabetes mellitus, hyperlipidemia, hypertension, and stage 3 chronic kidney disease. At Mr. H’s annual wellness exam, he complained of increased urinary frequency, weak urinary stream, and nocturia up to 7 times per night, but he was not experiencing hematuria or dysuria. Routine labs indicated a prostate-specific antigen (PSA) of 35 ng/mL. He was referred to Urology for evaluation but declined a prostate biopsy. Three months later, his PSA increased to 86 ng/mL. Mr. H agreed to a prostate biopsy, which showed adenocarcinoma of prostate. Staging was completed with a bone scan; there was no evidence of osseous metastatic disease. A CT of the abdomen and pelvis showed an enlarged prostate and right iliac chain and perirectal lymphadenopathy, concerning for metastases. Mr. H was started on 50 mg of bicalutamide daily and was referred to the Medical Oncology clinic for systemic treatment of stage IVA adenocarcinoma of the prostate (Gleason score of 5 + 4 = 9; Grade Group 5; N1M0).

At his initial oncology visit, Mr. H’s PSA level had decreased to 24 ng/mL after 30 days of bicalutamide therapy. Risk factors were assessed by the advanced practitioner (AP). Although he served in the military during the Vietnam era, Mr. H was not deployed to Vietnam or exposed to Agent Orange. He noted no family history of prostate or other cancers. Mr. H was started on 45 mg of leuprolide intramuscular injections every 6 months. At his next visit, 3 months later, his PSA level had further decreased to 5 ng/mL.

Mr. H returned to clinic 1 year after starting leuprolide. His PSA level had increased to 40 ng/mL, and his testosterone level was 34 ng/dL, redefining his disease as castrate resistant. The AP discussed initiation of docetaxel and prednisone, but Mr. H stated...
The Cancer Therapy Prescribing Course (CTPC) is an online comprehensive certificate course consisting of 19 self-paced, educational modules designed to prepare the advanced practitioner (AP) to safely prescribe cancer therapeutics.

This course provides advanced education for the prescription of cancer therapies and management of the hematology/oncology patient through the treatment course, including standard of care guidelines, supportive medications, and clinical trials. The CTPC fulfills the unmet need of a universal and comprehensive tool to educate APs to safely write, sign, and manage cancer therapy orders.

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- **Cancer Therapies**
  - Including chemotherapy, targeted therapy, immunotherapy, cellular therapy and other special classes of therapy.

- **Prescribing Cancer Therapies**
  - Including guidelines and workflow for prescribing cancer therapy, dosing, drug resistance, choosing and managing treatment access devices, prescribing within clinical trials, safe handling of hazardous drugs and patient education.

- **Prevention and Management of Adverse Events Related to Cancer Therapy**
  - Including common toxicities such as concomitant therapy toxicities, immune-related toxicities and more.

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that he did not want any chemotherapy; however, he was open to hormone therapy. Mr. H began 160 mg of enzalutamide daily. Genetic testing was discussed in detail with Mr. H, and he consented to testing. He was placed on the Veterans Affairs (VA) Prostate Cancer Pathway—Castrate Resistant Prostate Cancer (CRPC) M1 (Figure 1), and a referral was placed to Genetics. His chart was reviewed by a genetic counselor, and he was found to be eligible for germline genetic testing for hereditary prostate cancer. He completed testing, and results were sent to Mr. H, his oncologist, and his primary care provider.

Mr. H’s genetic testing for hereditary prostate cancer did not reveal a mutation. He also consented to FoundationOne prostate cancer testing on tissue, however, which revealed microsatellite instability (MSI)-high, a tumor mutational burden (TMB) of 50, and a BRCA2 mutation, signifying an acquired mutation (Table).

At his follow-up appointment, Mr. H’s PSA level continued to increase. He also reported side effects (e.g., dizziness, falls) from enzalutamide. The medication was discontinued due to refractory disease and side effects. Chemotherapy with docetaxel and prednisone was discussed again, but Mr. H declined again. His tumor testing results were explained, and treatment with olaparib and pembrolizumab was discussed; ultimately, pembrolizumab was recommended by the AP because of the MSI-high status and high TMB. Mr. H decided to proceed with immunotherapy every 6 weeks. He did well with the first two cycles, but during the third cycle, he experienced grade 2 pancreatitis. Cycle 4 was held.

Once symptoms resolved, the AP and Mr. H met to determine his next course of treatment. Based on the VA pathway, the second-line treatment recommendation would be chemotherapy with docetaxel and prednisone because his ECOG performance status was ≤ 2. If there is a contraindication to the recommended therapy, however, alternate recommendations include pembrolizumab, enzalutamide, abiraterone/prednisone, cabazitaxel, radium 223, and olaparib. As Mr. H was previously treated with enzalutamide but experienced disease progression on therapy, the combination of docetaxel and prednisone was discussed again as a treatment option (radium 223 was not available at the time), and he again chose to defer treatment with chemotherapy. He also declined treatment with abiraterone and prednisone because he did not want to start a new regimen. He was offered the option to rechallenge with pembrolizumab or consider olaparib based on his genetic test results.

### Table 1. FoundationOne Assay Results and Therapeutic Options

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<tr>
<th>GENOMIC/BIOMARKER FINDINGS</th>
<th>THERAPEUTIC OPTIONS</th>
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<td>Pembrolizumab</td>
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<tr>
<td>Microsatellite status: MSI-high</td>
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<td>Dostarlimab</td>
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Muts/Mb: mutations per megabase.
results, and he chose to rechallenge with pembrolizumab. He has now completed 17 cycles of immunotherapy without any side effects. His most recent PSA level is undetectable at < 0.01 ng/mL. His testosterone level also is low at 3 ng/dL.

Providing a Pathway That Offers Flexibility for Patient Goals

Prostate cancer is the most frequently diagnosed cancer among US veterans, comprising 30% of new cancer diagnoses in the VA. A presumptive condition is a condition caused by military service. Prostate cancer is listed as a presumptive condition for Vietnam, Gulf War, and post-9/11 veterans. Vietnam veterans’ exposure to Agent Orange, an herbicide used by US military forces to destroy vegetation (i.e., trees and foliage) that provided protection/coverage for the enemy forces, is considered a risk factor for prostate cancer. Gulf War and post-9/11 veterans were exposed to environmental hazards that occurred from burning trash and waste in burn pits, which increased their risk of developing prostate cancer.
In 2016, VA Research partnered with the Prostate Cancer Foundation to establish the Precision Oncology Program for Cancer of the Prostate (POPCaP). The program uses genetic information to tailor individualized treatments for veterans with advanced prostate cancer. See Figures 2 and 3 for the first- and third-line pathways for castrate-resistant M1 prostate cancer. The pathways illustrate how POP-CaP has blended genetic testing, clinical trials, and FDA-approved targeted therapies to provide optimal patient care. There are several Veterans Health Administration (VHA) centers that are improving access and participation in clinical trials.

As illustrated in the case of Mr. H, patients with advanced prostate cancer are recommended for germline testing. The purpose of testing, what to expect with results, implications of a positive result, and what that means for family members are discussed with the patient. This conversation is documented in the VA’s electronic medical record system (EMR), regardless of whether the patient agrees to testing. If the patient does
agree to testing, a verbal consent is obtained and documented in the EMR. A consult to Genetics is also ordered, and a genetic counselor reviews the chart to ensure that informed consent was obtained by the care provider and that the patient agreed to have a specimen collection kit and instructions regarding the specimen collection process (buccal or saliva swab) sent to his home. The genetic counselor determines if the patient is eligible for germline genetic testing for hereditary prostate cancer. If so, an order for a hereditary prostate cancer panel (which tests for 16 genes) is placed. Once the patient returns his specimen to the lab, results are usually reported 2-3 weeks later. If a sample is deemed inadequate, lab personnel will arrange for the patient to come to the local lab for specimen collection. Once results are collected, a report is sent to the patient’s oncologist and primary care physician via EMR, and a letter is mailed to the patient.

At the follow-up visit, the results of the genetic testing are discussed with the patient. In this case, Mr. H was informed that he had BRCA2 mutation and that his tumor was MSI-high with high TMB. This information allowed him to receive targeted
therapy, which has been his longest-running and most successful therapy to date.

Another goal of POPCaP is to increase access to clinical trials. Mr. H is currently doing well on his treatment. If his disease progresses, however, he can be referred to the Research Oncology clinic to be screened for a clinical trial offered by the VA. Based on Mr. H’s genetic testing, other targeted therapy options are available to him.

On evaluation of patients with prostate cancer, APs should assess for risk factors and risk-stratify every patient. In those with advanced prostate cancer, genetic testing should be discussed and recommended. If testing is not offered at your institution, patients should be referred to a center for testing. Patients should also be considered for any available clinical trials for which they are eligible.

References
2. U.S. Department of Veterans Affairs website. VA Precision Oncology Program for Cancer of the Prostate (POPCaP). Accessed August 28, 2023