

Precision medicine navigators increase genomic testing rates for Black patients with prostate cancer

October 2 2023



Credit: Unsplash/CC0 Public Domain

The presence of a clinical navigator to act as a liaison between people with prostate cancer and the health care system greatly increases the

likelihood that patients, especially Black patients, will receive advanced testing that can help predict the severity of their disease and guide treatment, a new study suggests.

The study showed [patients](#) seen by a precision medicine navigator were substantially more likely to receive [genomic testing](#) than those not seen by the navigator. Black patients, whose genomic testing rates traditionally are much lower than white patients, experienced a six-fold increase if they were seen by a navigator.

Findings were presented at the [American Society for Radiation Oncology \(ASTRO\) Annual Meeting](#).

"Black patients with prostate cancer in the U.S. have disparately worse clinical outcomes compared to other [racial groups](#)," said lead study author Alexander J. Allen, MD, a [radiation oncology](#) resident physician at the University of Maryland Medical Center in Baltimore. "Our findings suggest hiring a precision medicine navigator who specializes in genetic testing can improve the rates of Black patients receiving these tests, which could potentially reduce [health disparities](#) and improve outcomes."

Research [shows](#) Black patients are 76% more likely to be diagnosed with prostate cancer than [white patients](#) and 120% more likely to die from it. This disparity stems from many factors, including [lower rates](#) of early prostate cancer screening that result in more aggressive cancers by the time Black patients are diagnosed.

Genomic testing is used to gauge the likelihood that a cancer will metastasize, or spread beyond the prostate, within the next five to 10 years; the most common form of this test is called Decipher, which analyzes RNA markers in tumor tissue samples.

[Research](#) presented at ASTRO's 2021 Annual Meeting suggested genomic testing may be better at predicting the risk for metastases than conventional prostate cancer tests, such as the Gleason score and prostate-specific antigen (PSA) levels. Dr. Allen said oncologists use the results of all three tests to guide treatment decisions.

"Genomic testing provides additional information that can alter a patient's treatment plan," he said. "For example, if Gleason scores and PSA levels suggest a patient has an intermediate risk for metastases, but the [genetic analysis](#) categorizes them at high risk because of the biological makeup of the tumor, then you might intensify treatment."

Precision medicine navigators are people whose job is focused entirely on identifying patients eligible for genomic testing and then making sure the tests are completed—a task Dr. Allen said is much more complicated than it sounds.

"Obtaining genetic tests in a clinical setting is complex and requires knowledge of the submission requirements," he said. After working with [health care providers](#) to identify which patients are eligible, the navigator helps the patient fill out requisition forms and coordinates the submission of biopsy tissue samples to the appropriate genomic testing company.

In this study, researchers compared how frequently patients with prostate cancer in a large [health care system](#) received [genetic testing](#) from the seven months prior to the arrival of a precision medicine navigator (PMN) to the seven months following the creation of that position.

Of the 693 patients studied, 44.9% (n=311) were treated prior to the arrival of the PMN and 55.1% (n=382) were treated after the PMN began work. The median age in both groups was 68 years, and racial distributions were similar (60% white, 35.1% and 34% Black, 3.2% and

3.7% Asian/Pacific Islander and 1.3% and 2.1% Latino). There were no significant differences between the two groups in disease severity, type of insurance coverage or type of facility in which they were treated.

Black patients seen by the PMN were six times more likely to receive testing than those not seen by a PMN. Following the arrival of the PMN, the proportion of Black patients referred for genomic testing rose from 19% to 58%. Genomic testing rates also rose for lower-income patients (from 20% to 64%), those on Medicare and Medicaid (from 20% to 68.5%) and people who were being treated at community hospitals (from 6% to 77%), after the introduction of the PMN.

"We thought there would be some increase but did not expect the testing rates to grow so substantially," Dr. Allen said. He also said that genomic testing results altered treatment plans for many patients who received them. "The most common way treatments were altered based on genomic testing results was in whether or not patients with intermediate risk disease were given hormone blocking therapy," in which hormones are suppressed to stop them from fueling [cancer](#) cell growth.

Dr. Allen said the next step for his team is to design a study that investigates whether the increased rates of genomic testing ultimately lead to better patient outcomes. "We theorize that if patients are treated differently based on this new genome-based risk stratification, outcomes will improve."

But making sure genomic testing is available to all patients who might benefit will be key to helping lessen racial disparities in [prostate cancer](#) going forward, he said.

"As precision medicine becomes more mainstream, it has the potential to alleviate disparities," said Dr. Allen. "But if there are no measures taken to ensure access to these tools, we could just be maintaining or even

worsening the health inequities that we have today."

Provided by American Society for Radiation Oncology

Citation: Precision medicine navigators increase genomic testing rates for Black patients with prostate cancer (2023, October 2) retrieved 27 April 2024 from <https://medicalxpress.com/news/2023-10-precision-medicine-genomic-black-patients.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.