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Cancer treatment of tomorrow is personalized

By WP BrandStudio
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The pandemic has been devastating for cancer screening and oncology care. Yet, providers are hopeful about the future, thanks to targeted treatments for combatting the disease.

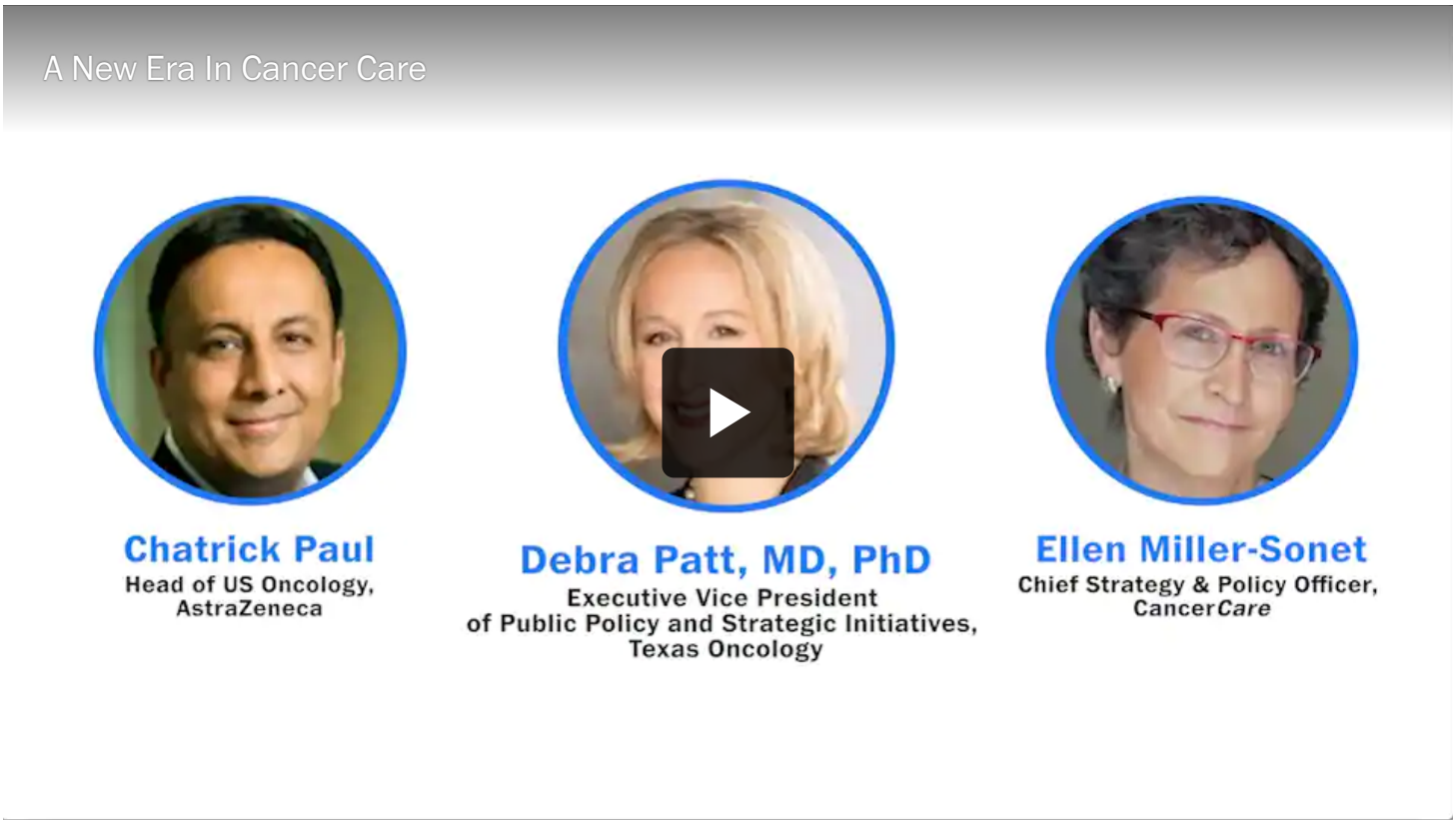
The recent approval of COVID-19 vaccines is a first tentative sign that the pandemic may be nearing its final stages. Medical professionals, however, are warning of a dire, long-term public health consequence of the crisis—one not directly tied to the virus itself: People aren't getting checked for cancer.

Over the past year, patients have delayed routine doctor's visits, either by choice or necessity as providers manage limited care resources. Mounting job losses due to the pandemic have also meant the loss of employer-sponsored health insurance for many. As a result, cancer screenings and diagnoses have fallen since COVID-19 first hit the United States. According to a report published in July, new cases of breast, lung, prostate, colorectal and hematologic cancers, and melanoma dropped by about 74 percent in April 2020 compared to the same time last year. This has led to inevitable deferments in treatment.

"The natural consequence of having delays in diagnosis is that cancer will progress," said Debra Patt, MD, PhD, executive vice president for policy and strategic initiatives at Texas Oncology. "You can anticipate that cancer care will become more complicated and less likely to be curable, with a heightened patient morbidity and mortality if this trend continues."

The trend in delayed screenings and treatment is alarming because it comes at a time when acceleration in medical advancements have made the ability to detect—and treat—cancer better. Breakthroughs in genomic testing and therapeutic technologies have opened up exciting avenues for individualized

care. Often termed precision medicine, the groundbreaking approach offers a more targeted approach for responding to the disease.



A New Era In Cancer Care (WP BRANDSTUDIO)

“The last decade has been a time of remarkable innovation in cancer care. With the advent of targeted therapies and immunotherapies, we are able to do more than we have been before. You see new drug approvals and therapeutic innovation, even during the pandemic,” said Patt. “Just making sure patients have access to all of them is the current challenge, but that innovation continues to happen.”

The emergence of personalized care

Up until several years ago, individuals who received a cancer diagnosis were typically prescribed a one-size-fits-all treatment. In other words, people who had the same type and stage of cancer received the same type of intervention, with common options being surgery, radiation therapy and chemotherapy.

By contrast, precision medicine uses the characteristics from a patient’s cancer—determined through an evaluation of the diseased cell’s genetic

makeup known as genomic testing—to guide their treatment, says Lincoln Nadauld, MD, PhD, chief of precision health and academics at Intermountain Healthcare and a 2020 Cancer Community (C2) Award winner. By understanding what kinds of genes and biomarkers are present in a patient's cancer, it allows health care providers to know which regimen, including ever-improving drug therapies, will be most appropriate for a patient.

"The advent of precision medicine and immunotherapies have really offered patients an array of treatments that weren't available before," said Nadauld. "In some cases, patients with metastatic disease are having complete responses. Five or ten years ago, that's not something we would have considered a possibility."

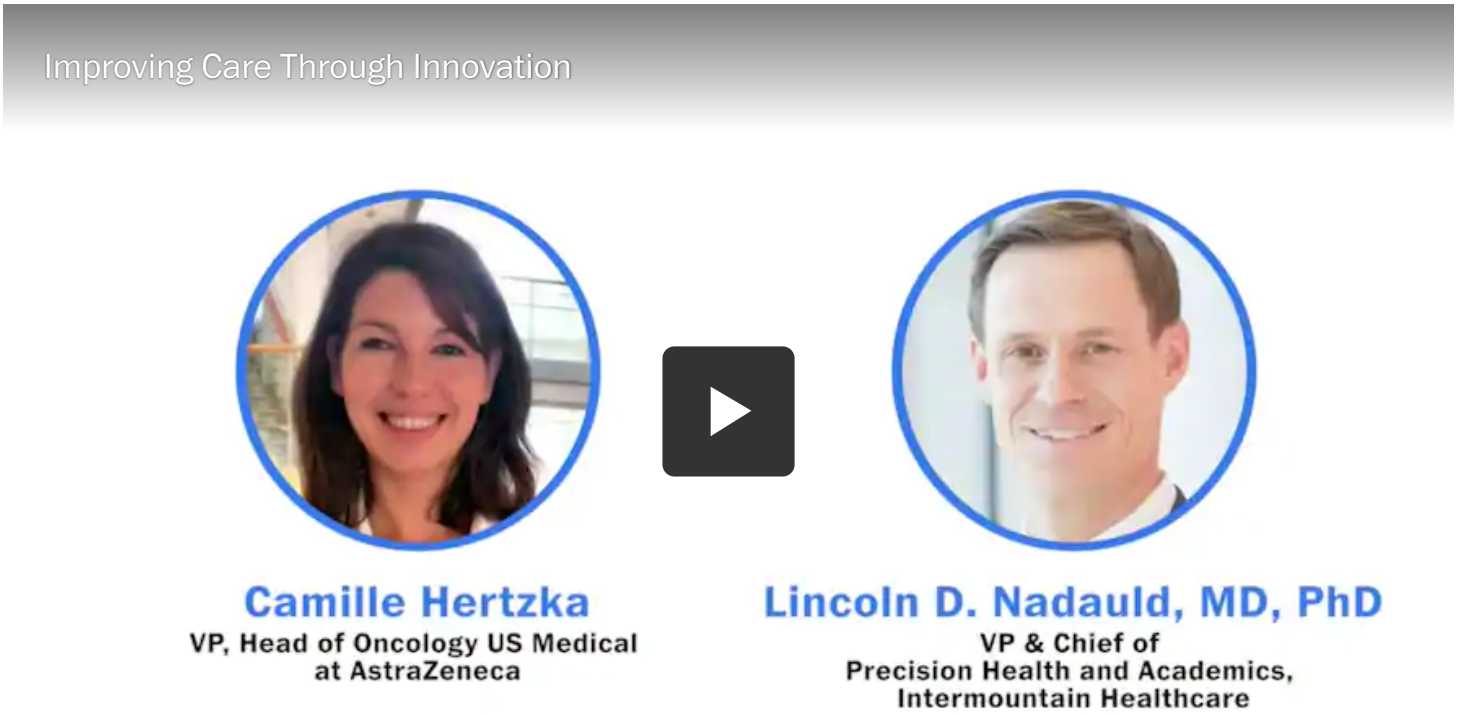
As an example, Nadauld describes a patient he had who was in his mid-50s. The patient had been diagnosed with advanced lung cancer and had failed standard chemotherapy options. After conducting a comprehensive genomic analysis of the tumor, they learned he was a candidate to receive a precision medicine therapy.

"He received the treatment, and amazingly, he had a complete response," said Nadauld. "His disease, which had spread to both lungs and to his bones, completely disappeared. That was a great feeling for him and for us."

Indeed, the implications for patient outcomes have been significant. A recent study published in *Nature Communications* revealed that patients with advanced cancer who received appropriate precision medicine treatments were more than twice as likely to show improved clinical outcomes than those who received standard therapies. The approach can improve the quality of life for patients, too; recent therapeutic breakthroughs tend to be less toxic than chemotherapy and other traditional remedies.

"Biomarker testing and the ability to treat cancer more precisely is very exciting because it means providing the right treatment at the right time to people with cancer," said Ellen Miller-Sonet, chief strategy and policy officer

at Cancer*Care*, a nonprofit organization dedicated to providing information, support and resources to individuals affected by cancer. “And that will mean significant improvements along the continuum of care in terms of avoiding over-treatment, under-treatment or wrong treatment.”



Improving Care Through Innovation (WP BRANDSTUDIO)

Greater access for all

“The challenge now is to identify patients with cancer as early as possible and understand the specificities of each patient’s cancer. With this understanding, we can create a future with more tailored, targeted treatments and further improve patient outcomes to, ultimately, bring us one step closer to our bold ambition of one day eliminating cancer as a cause of death,” said Camille Hertzka, vice president and head of oncology US medical at AstraZeneca.

“It will take all of us, the entire community, to come together to ensure all patients affected by cancer have an opportunity to benefit from the latest innovative medicines and to ensure that we can identify the right patient for the right treatments,” Hertzka remarked in a sponsored portion of Washington Post Live’s recent Chasing Cancer live stream event; she was in

conversation with Nadauld. Chatrick Paul, senior vice president and head of US oncology at AstraZeneca moderated a sponsored segment in the second event in the series, which featured Patt and Miller-Sonet.

Miller-Sonet agrees: “Cancer is such a complex illness, and it impacts patients as well as everyone around them. It involves their families, their communities, their employers, their social organizations. It involves all the services and systems that exist around patients to help them with diagnosis, treatment, and to manage their symptoms and side effects. Truly, it takes a village and we can all help to ameliorate the impact of cancer, which unfortunately is all too common.”

This is especially true during the pandemic, as we continue to see declines in the rates of cancer diagnoses across the country as people delay screenings. So, the first step, says Patt, is to heighten awareness that people can safely see their doctors again. “Since March, many clinics have implemented multiple CDC safety protocols,” she said, adding that telemedicine can also be a good option in reducing some of the fear.

For their part, physicians also need to utilize genomic testing more, says Nadauld, although payer policies that restrict the ability to do molecular diagnostics remains a major barrier. “We can’t give patients the right treatments if we don’t ever order the test,” he said.

Still, there is hope on the horizon.

“The pace of acceleration in cancer care right now is unlike anything we’ve witnessed. It’s unparalleled in history, frankly,” said Nadauld. “We have more FDA-approved cancer drugs and more FDA-approved targeted and precision therapies than we’ve ever had. My only regret is that not every treatment works for every patient. So, I’m excited for the day—and I don’t think it’s very far away—when we can identify the precise treatment that will work for every patient.”