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About the Prostate Cancer TelemEDucation Empowerment Resource Center

The TelemEDucation Empowerment Resource Center works to significantly improve prostate cancer patients’ and caregivers’ familiarity with remote access to healthcare, and thus increase quality of care regardless of geographical location.

This one-of-a-kind resource center is intended to educate the prostate cancer community on the practical usage of telemedicine tools to humanize patient and provider experiences.

Noticeably, telemedicine options of virtual visits with healthcare providers, access to patient portals, and virtual translation services have resulted in improved patient care. Patients who were previously too far away or could not get enough time off from work for in-person visits can now have virtual visits, and patients who have limited English language proficiency can now easily take advantage of translation services – all leading formerly underserved patients to better care.

Now that telemedicine has broader application, we now shift to how and why to keep telemedicine in your toolbox post-COVID. We also explore the digital health landscape and mobile-optimized tools for connecting to specialized cancer care.

"Telemedicine, in general, is one of the silver linings of COVID... I do think for patients who have access to an Internet or a smartphone and are able to do their visits, it is really decreasing the burden on them."

-Heather Cheng, MD, PhD
Are Mobile-Optimized Tools Making an Impact in Prostate Cancer?

**Expert:** Heather Cheng, MD, PhD

Why Is Specialized Care Important in Prostate Cancer?

**Expert:** Heather Cheng, MD, PhD

Can Prostate Cancer Patients Rely on Telemedicine Without Risk?

**Expert:** Heather Cheng, MD, PhD

Telemonitoring and How It Benefits Prostate Cancer Patients

**Expert:** Heather Cheng, MD, PhD
Utilizing Your Prostate Cancer Telemedicine Toolbox

**How Can We Improve Remote Access for Prostate Cancer Patients?**

*Expert:* Heather Cheng, MD, PhD

**Should Prostate Cancer Patients and Families Keep Using Telemedicine?**

*Expert:* Heather Cheng, MD, PhD

**Prostate Cancer Treatment Tools and Advancements**

*Expert:* Heather Cheng, MD, PhD

**What Prostate Cancer Populations Will Benefit Most From Telemedicine?**

*Expert:* Leanne Burnham, PhD
Connecting to Specialized Care

Where possible, select a physician who specializes not just in cancer but in the nuances of your specific type of prostate cancer. How do you find such a doctor? If you are newly diagnosed, start by consulting your diagnosing doctor, that is, the one who found your prostate cancer. They may be an expert in the field, or they may refer you to one or more doctors who are. Some questions to ask:

- Are they covered by your health insurance?
- Are they affiliated with a university or research hospital?
- Does their “bedside manner” align with your personality? Are they analytical? Compassionate?
- Do they seem interested in making you a partner in this process? Do they seem interested in what is important to you?

Take your time
- Don’t be afraid to shop around and get second or even third opinions.
- Be careful of random advice, e.g., “surgery is the best” or “radiation is the best” or “eat this herb, and your cancer will be cured.”
- For accurate information, use data on reputable websites and those that your doctor recommends.
- After you have committed, trust is key, but continue to be your own advocate: ask questions, do research, and remain curious.

Source: Prostate Cancer Foundation
Resources to Find and Evaluate Doctors

**Administrators in Medicine DocFinder**
Information on licensing and disciplinary actions taken against doctors in 18 states; links to state medical boards of remaining states.

**American Board of Medical Specialties (ABMS)**
Includes a database to find doctors who are ABMS Member Board Certified Specialists, a designation achieved through additional training and education.

**American College of Surgeons**
Information about finding surgeons who are board-certified as well as information about surgical specialties. Includes database of member surgeons.

**American Medical Association DoctorFinder**
Education, board certification, and hospital admitting privileges for doctors who belong to the AMA.

**American Society for Radiation Oncology (ASTRO) RT Answers**
Includes searchable database of radiation oncologists.

**American Society of Clinical Oncology (ASCO) Cancer.Net**
Oncologist-approved cancer information from the American Society of Clinical Oncology (ASCO) can be found on the site Cancer.Net. This site includes a “Find an Oncologist” tool with tips on choosing a doctor and a database of oncologists.

**Urology Care Foundation**
Searchable database of member urologists all of whom have been certified by the American Board of Urology.

**Medicare Physician and Other Healthcare Professional Directory**
Provider profiles including specialties, practicing locations, and phone numbers. Other information may also include education, gender, residency, foreign languages spoken, and hospital affiliation.

**Society of Urologic Oncology (SUO)**
The purpose of the SUO is to develop educational and research initiatives and to study issues in urologic oncology and provide physician statements that represent a state of the art assessment of these issues to other organizations. Site includes a database of members.

*Source: Prostate Cancer Foundation*
Mobile-optimized tools were expedited after onset of the COVID-19 pandemic. There are now mobile apps specifically for prostate cancer patients, and websites and patient portals have been optimized for use on mobile devices.

Mobile-optimized tools translate to improved viewing and consumption of prostate cancer resources, which results in better patient care. Patients who formerly had poor experiences with mobile versions of patient portals can now easily use them as another tool for their prostate cancer care.

In addition, some healthcare providers now have access to handheld mobile tools to assist them with updating patient records and collecting samples, which increase efficiency of patient care.

Mobile PSAs, another telemedicine approach has become especially important during the pandemic and the increasing unfavorable imbalance between demand. Closely studied, the mobile PSA has shown to significantly reduce delays in reporting prostate-specific antigen (PSA) test results to patients and in reducing medical costs.

With technology advancements continuing, mobile-optimized tools will be used by more healthcare providers. And with increased use will come improved efficiency that results in more time spent with patients for better prostate cancer health outcomes.
Artificial Intelligence & Prostate Cancer

What Is Artificial Intelligence?

Artificial intelligence (AI) involves a variety of technology types. Prostate cancer AI involves technology tools that assist in the diagnosis and grading of prostate cancer. A recent clinical study used a scanner to convert slide images of prostate biopsies into a digitized form for evaluation by AI.

What AI Means for Prostate Cancer Care

A recent clinical study called the PANDA challenge looked at the results of a large group of AI-generated Gleason gradings from digitized prostate biopsies from the U.S. and European samples.

The study concluded that the AI-generated gradings met a detection level that laboratory scientists are able to meet along with a high level of speed in generating results. This is an exciting development in prostate cancer.

The use of this prostate cancer AI can improve accuracy by eliminating missed or inaccurate diagnoses that some lab scientists might categorize differently and help decrease time to diagnosis.

By eliminating some of the variation in prostate cancer gradings, this can then translate into more accurate prostate cancer diagnosis and treatment. This technology has been approved by the FDA in the U.S., and improvements will ultimately result in better quality of life and health outcomes for patients.

Sources
https://www.nature.com/articles/s41591-021-01620-2
https://www.sciencedaily.com/releases/2022/01/220113111518.htm
https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2785792
What Are Telegenetic Consultations in Prostate Cancer?

Telegenetic consultations can be carried out with genetic counselors via telemedicine.

With the rise of genetic mutations playing a factor in cancer care and treatment decisions, it’s a natural development for telegenetic consultations to emerge as another option in the telemedicine toolkit that protects patients from exposure to viruses and potential infections and saves them valuable time, energy, and travel costs.

What Telegenetic Consultations Mean for Prostate Cancer

With personalized medicine becoming a fundamental part of prostate cancer patient care that analyze genetic mutations like BRCA1, BRCA2, and HOXB13 mutations, telegenetic consultations make sense as another tool in prostate cancer care.

The future of prostate cancer care looks more optimistic with these virtual care options as part of the equation.

What about future developments? E-skins, a form of tattoos, have now emerged as part of remote health monitoring.

Used in detection of physical and electrical functions including heart, muscle, and brain activity, e-skins have shown reliability in monitoring tests even under body stress conditions like sweating and while consuming spicy foods.
Next-Generation Sequencing and Prostate Cancer

Next-generation sequencing is a DNA analysis process that enables sequencing a portion of a patient’s genome.

The process allows for processing of multiple DNA sequences in parallel. Next-generation sequencing also can identify hereditary cancer mutations and cancer mutation carriers among other things.

What Next-Generation Sequencing Means for Prostate Cancer

Next-generation sequencing is a medical advancement that aids improvements in prostate cancer patient care.

By identifying cancer mutations and hereditary cancer mutation carriers, next-generation sequencing assists oncologists in further refining targeted therapies and personalized medicine – leading to optimal patient care.

As more research goes on in next-generation sequencing, there's potential for new genetic mutations to be discovered to further enhance quality of life with patient symptoms and treatment side effects.

Please remember to ask your healthcare team what may be right for you.
Prostate Cancer Resources

National Cancer Institute (NCI) designated comprehensive centers and renowned treatment centers.

**UAB Comprehensive Cancer Center**
1824 Six Avenue South; Birmingham, **Alabama**

**Arizona Cancer Center**
515 North Campbell Avenue; Tuscon, **Arizona**

**Chao Family Comprehensive Cancer Center**
University of California Irvine
101 The City Drive
Building 56, Rt. 81. Room 216L; Orange, **California**

**City of Hope Duarte**
Comprehensive Cancer Center
1500 East Duarte Road; Duarte, **California**

**Salk Institute Cancer Center**
10010 North Torrey Pines Rd.
La Jolla, **California**

**Sanford Burnham Prebys Medical Discovery Institute**
10901 North Torrey Pines Rd
La Jolla, **California**

**Stanford Cancer Institute**
Stanford University
Lorry Lokey Stem Cell Building; 265 Campus Drive
Suite G2103; Palo Alto, **California**

**UC Davis Comprehensive Cancer Center**
University of California
Davis 4501 X Street Suite 3003; Sacramento, **California**

**UC San Diego Moores Cancer Center**
University of California at San Diego
3855 Health Sciences Drive; La Jolla, **California**

**UCLA Jonsson Comprehensive Cancer Center**
University of California
8-684 Factor Building, 10833 Le Conte Avenue
Los Angeles, **California**
UCSF Helen Diller Family
Comprehensive Cancer Center University of California at San Francisco
1450 3rd Street Box 0128; San Francisco, California

USC Norris Comprehensive Cancer Center
University of Southern California
1441 Eastlake Avenue; Los Angeles, California

University of Colorado Cancer Center
13001 East 17th Place
Aurora, Colorado

Yale Cancer Center
Yale University School of Medicine
333 Cedar St.; New Haven, Connecticut

Georgetown Lombardi Comprehensive Cancer Center
Georgetown University
3970 Reservoir Road, NW; Washington, District of Columbia

Moffit Cancer Center
12902 Magnolia Drive
Tampa, Florida

Winship Cancer Institute
Emory University
1365C Clifton Rd; Atlanta, Georgia

University of Hawaii Cancer Center
701 Italo St.
Honolulu, Hawaii

Robert H. Lurie Comprehensive Cancer Center
Northwestern University
303 East Superior Street; Chicago, Illinois

The University of Chicago
5841 South Maryland Avenue; Chicago, Illinois
Indiana University Melvin and Bren Simon Cancer Center
535 Barnhill Dr.
Indianapolis, Indiana

Purdue University Center for Cancer Research
Hansen Life Sciences Research Building
201 South University St.; West Lafayette, Indiana

Holden Comprehensive Cancer Center
University of Iowa
200 Hawkins Drive; Iowa City, Iowa

The University of Kansas Cancer Center
University of Kansas
3901 Rainbow Blvd; Kansas City, Kansas

Markey Cancer Center
University of Kentucky
800 Rose St.; Lexington, Kentucky

The Jackson Laboratory Cancer Center
600 Main St.
Bar Harbor, Maine

Sidney Kimmel Comprehensive Cancer Center
Johns Hopkins University
401 North Broadway; Baltimore, Maryland

University of Maryland Marlene and Stewart Greenbaum Comprehensive Cancer Center
University of Maryland
22 South Greene Street; Baltimore, Maryland

Dana-Farber/Harvard Cancer Center
450 Brookline Avenue
Boston, Massachusetts

David H. Koch Institute for Integrative Cancer Research at MIT
Massachusetts Institute of Technology
77 Massachusetts Ave; Cambridge, Massachusetts
The Barbara Ann Karmanos Cancer Institute
Wayne State University School of Medicine
4100 John R St.; Detroit, Michigan

University of Michigan Comprehensive Cancer Center
University of Michigan
1500 East Medical Center Drive; Ann Arbor, Michigan

Masonic Cancer Center
University of Minnesota
420 Delaware Street, S.E.; Minneapolis, Minnesota

Mayo Clinic Cancer Center
200 First Street SW
Rochester, Minnesota

Alvin J. Siteman Cancer Center
Washington University School of Medicine and Barnes-Jewish Hospital
660 South Euclid Avenue Campus; St Louis, Missouri

Fred and Pamela Buffett Cancer Center
University of Nebraska Medical Center
985950 Nebraska Medical Center; Omaha, Nebraska

Norris Cotton Cancer Center at Dartmouth
Dartmouth-Hitchcock Medical Center
One Medical Center Drive; Lebanon, New Hampshire

Rutgers Cancer Institute of New Jersey
Rutgers Biomedical and Health Sciences
195 Little Albany Street; New Brunswick, New Jersey

University of New Mexico Cancer Center
1201 Camino de Salud NE
Albuquerque, New Mexico

Albert Einstein Cancer Center
1300 Morris Park Avenue
Bronx, New York

The Barbara Ann Karmanos Cancer Institute
Wayne State University School of Medicine
4100 John R St.; Detroit, Michigan
Cold Spring Harbor Laboratory Cancer Center
1 Bungtown Road
Cold Springs Harbor, New York

Herbert Irving Comprehensive Cancer Center
Columbia University
1130 St Nicholas Avenue, Room 508; New York, New York

Memorial Sloan-Kettering Cancer Center
1275 York Avenue
New York, New York

Roswell Park Cancer Institute
Elm & Carlton Streets
Buffalo, New York

The Tisch Cancer Institute Mount Sinai
One Gustave L. Levy Place Icahn Building
New York, New York

Duke Cancer Institute
Duke University Medical Center
Box 2714 2424 Erwin Road; Durham, North Carolina

The Comprehensive Cancer Center of Wake Forest University
Medical Center Boulevard
Winston-Salem, North Carolina

UNC Lineberger Comprehensive Cancer Center
450 West Drive CB 7295
Chapel Hill, North Carolina

Case Comprehensive Cancer Center
Case Western Reserve University
11100 Euclid Avenue, Wearn 151; Cleveland, Ohio

The Ohio State University Comprehensive Cancer Center
James Cancer Hospital and Solove Research Institute
460 West 10th Avenue; Columbus, Ohio
Knight Cancer Institute
Oregon Health and Science University
3181 S.W. Sam Jackson Park Rd; Portland, Oregon

Abramson Cancer Center
University of Pennsylvania
3400 Spruce Street; Philadelphia, Pennsylvania

Fox Chase Cancer Center
333 Coltman Avenue
Philadelphia, Pennsylvania

Sidney Kimmel Cancer Center at Thomas Jefferson University
233 South 10th Street
Philadelphia, Pennsylvania

The Wistar Institute Cancer Center
3601 Spruce Street
Philadelphia, Pennsylvania

UPMC Hillman Cancer Center
5150 Centre Avenue
Pittsburgh, Pennsylvania

Hollings Cancer Center
Medical University of South Carolina
86 Jonathan Lucas Street; Charleston, South Carolina

St Jude Children's Research Hospital
262 Danny Thomas Place
Memphis, Tennessee

Vanderbilt-Ingram Cancer Center
691 Preston Research Building
Nashville, Tennessee

Cancer Therapy & Research Center
University of Texas Health Science Center
7979 Wurzbach Road; San Antonio, Texas
Dan L Duncan Comprehensive Cancer Center
Baylor College of Medicine
One Baylor Plaza; Houston, Texas

Harold C. Simmons Comprehensive Cancer Center
University of Texas Southwestern Medical Center
2201 Inwood Road; Dallas, Texas

The University of Texas MD Anderson Cancer Center
1515 Holcombe Boulevard, Unit 91
Houston, Texas

Huntsman Cancer Institute
University of Utah
2000 Circle of Hope; Salt Lake City, Utah

Massey Cancer Center
Virginia Commonwealth University
401 College Street; Richmond, Virginia

University of Virginia Cancer Center
6171 West Complex
Charlottesville, Virginia

Fred Hutchinson/University of Washington Cancer Consortium
1100 Fairview Ave N
Seattle, Washington

University of Wisconsin Carbone Cancer Center
1111 Highland Avenue, Rm. 7057
Madison, Wisconsin