Prostate Cancer Prevention in the Black Community: Fostering Culturally Competent Care

A CUA Accredited Webinar in collaboration with Princess Margaret Cancer Centre, University Health Network & The Walnut Foundation

Developed by:

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Learning Plan

Estimated time to complete: 1 hour







Learning Objectives

To appreciate the **higher prevalence** and severity of Prostate cancer among Black men



To recognize the **risk factors** that make Black men more likely to develop prostate cancer



To understand prostate cancer **screening** guidelines for high-risk groups



To identify appropriate patient and physician **resources** for awareness, screening, and detection







1 in ___ Canadian men are diagnosed with prostate cancer in their lifetime:

A) 3

B) 5

C) 7

D) 10

Answer:

C) 1 in 7 Canadian men are diagnosed with prostate cancer in their lifetime.



What are the most common risk factors for developing prostate cancer?

- A) Age
- B) Genetic factors
- C) Family history
- D) Race/ethnicity
- E) All of the above

Answer: E) All of the above, with Age being the most common risk factor





How much more likely are Black men to get aggressive prostate cancer, compared to white men?

- A) 2 times more likely
- B) 3 times more likely
- C) 4 times more likely

Answer: B) 3 times more likely





Are there screening guidelines for Black men in Ontario?

- A) Yes
- B) No

Answer: B) No. Guidelines are not specified by ethnicity.





Genetic factors account for approximately ____% of the variability in prostate cancer risk.

- A) 38%
- B) 67%
- C) 58%
- D) 40%

Answer: C) 58%





Which one negatively affects prostate cancer screening rates in the Black population?

- A) Lack of knowledge
- B) Miscommunication or lack of communication with the healthcare provider
- C) Cultural barriers
- D) All of the above

Answer: D) All of the above





As a Black man, which factors are important for early detection of prostate cancer?

- A) Understanding the signs and symptoms of prostate cancer
- B) Being aware of your family history of any cancer
- C) Making an informed decision about screening tests
- D) All of the above

Answer: D) All of the above









Prostate Cancer Prevalence

1 in 7 Canadian men are diagnosed in their lifetime

Prostate cancer is the most common type of cancer in Canadian men, followed by colorectal, lung and bladder







Prostate Cancer Risk Factors







Prostate Cancer in Black men

Prostate cancer is the most commonly diagnosed cancer in African American men

In a study of almost 1000 men, Black men were almost **3 times more likely** than White men to have high-grade prostate cancer



Sydney Poitier 1927-2022 Diagnosis date unknown



Harry Belafonte 1927-2023 Diagnosed in 1996 at 69

Al Roker 1954-Diagnosed 2020 at 74

Ken Griffey Sr 1950-Diagnosed in 2005 at 55





Notable black men who have had prostate cancer

MODULE 2: Prostate Cancer Risk Factors



Interrelating Determinants of Health



Be cognizant of the community you serve.

Consider cultural competencies







pdhpe.net

Genetic Risk

- Genetic factors comprise **58%** of prostate cancer risk
 - Frequently in DNA-repair genes
- Mutations associated with other cancer sites can also cause
 prostate cancer
 - Consider comprehensive family history of cancer
- Genetic testing is limited
 - Not all mutations have been described



Germline Mutations Matter

Hereditary (germline) mutations can predispose black men to prostate cancer



Cancer Care Ontario Hereditary Cancer Testing Eligibility Criteria: Version 3

Hereditary Cancer Testing Common Gene Panels	
Syndrome / Disease Site	Associated Genes
Hereditary Breast/ Ovarian/ Prostate	ATM, BARD1, BRCA1, BRCA2, BRIP1, CDH1, CHEK2, EPCAM, HOXB13, MLH1, MSH2, MSH6, PALB2, PMS2, PTEN, RAD51C, RAD51D, STK11, TP53





Address disparities in research

Black men are consistently underrepresented in genetic research

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Inherited DNA-Repair Gene Mutations in Men with Metastatic Prostate Cancer

C.C. Pritchard, J. Mateo, M.F. Walsh, N. De Sarkar, W. Abida, H. Beltran, A. Garofalo, R. Gulati, S. Carreira, R. Eeles, O. Elemento, M.A. Rubin, D. Robinson, R. Lonigro, M. Hussain, A. Chinnaiyan, J. Vinson, J. Filipenko, L. Garraway, M.-E. Taplin, S. AlDubayan, G.C. Han, M. Beightol, C. Morrissey, B. Nghiem, H.H. Cheng, B. Montgomery, T. Walsh, S. Casadei, M. Berger, L. Zhang, A. Zehir, J. Vijai, H.I. Scher, C. Sawyers, N. Schultz, P.W. Kantoff, D. Solit, M. Robson, E.M. Van Allen, K. Offit, J. de Bono, and P.S. Nelson





MODULE 3: Identifying Risk



Identify High-Risk Patients

AGE

Are they over the age of 40?

More frequent **PSA** testing and follow-ups with **DRE** and biopsies may be warranted

GENETIC FACTORS



- Have they or anyone in their family undergone **genetic testing**?
- Germline testing can be offered

FAMILY HISTORY

- Do they have a family history of cancer?
 - Consider <u>1st and 2nd degree</u> relatives
 - Ask about **related cancers** (breast, ovarian, pancreatic, melanoma)



RACE/ETHNICITY

Do they identify as a member of the **Black (Caribbean or African)** community?

- Consider increased risk in these communities
- Determine **social factors** (diet and exercise)
- Be cautious of **sensitivities**

Inconsistencies in Guidelines for PSA Screening



Canadian Urological Association

Age 50 in most men; age 45 in men at increased risk



NCCN GUIDELINES

American Urological Association Age 40-54; screening should be individualized for men younger than age 55 at higher risk

European Association of Urology

Age >45 if at elevated risk

National Comprehensive Cancer Network

Variations in recommended age, frequency, and PSA thresholds





Hereditary Cancer Testing Services Vary Across Canada





BC	
CAN	
CER	

Ontario offers hereditary cancer testing if eligibility criteria are met, such as:

- Personal history of Prostate Cancer
- Personal history with ≥1 close relative with prostate cancer (high risk)
- Personal history with ≥2 close relatives with prostate, breast, ovarian, or pancreatic cancer

There is no prostate cancer genetic screening program in Quebec.

The BC Cancer Hereditary Cancer Program offers genetic counselling and testing for BC/Yukon residents who may have inherited an increased risk for certain cancers.

Consider offering genetic testing to high-risk individuals. Use clinical judgement if established criteria are not met.

MODULE 4: Resources for Practitioners



PSA Testing

Hold space for people who are reluctant to have PSA testing or physical exams. The decision of whether or not to pursue PSA screening should be based on shared decision-making after the potential benefits and harms associated with screening have been discussed (CUA).

Strategies:

- Regular invitations to discuss
- Review CUA guidelines:
 - Offer screening to men with life expectancy >10 years
 - For men with life expectancy <10 years, discontinue screening
 - For men over 60 with a PSA <1 ng/ml, consider discontinuing PSA screening
 - For all other men, discontinue PSA screening at age 70
- Identify barriers to testing (psychosocial vs resource)
 - Insurance options
 - Free-testing clinics such as UHN's PSA Detect & Protect Outreach Clinic
 - Support groups







Genetic Testing & Counselling Services*

http://www.ontariohealth.ca/genetics-clinics

Provincial Health Directories

Ontario Health Provincial Genetics Program

Cancer Care Ontario

Hereditary Cancer Testing Eligibility Criteria

Genetic testing requisitions

• e.g. LifeLabs, Dynacare

Genetic Testing Centres

- Bhalwani Familial Cancer Clinic, Princess Margaret Cancer Centre
- Genetic Risk Assessment Program (GRASP), Princess Margaret Cancer Centre

*coverage and availability varies regionally, but requisitions can be submitted by any licensed physician















Genetic Counselling and Testing Services Across Canada

Patients who reside outside of Ontario and are interested in genetic counselling or testing can contact their respective provincial health services for more information.







Support Organizations Across Canada

Community Health Centres









Professional









Community Support Organizations









Importance of Continuing Medical Education



CUA CPD and Accreditation

Cancer Care Ontario e-learning

University of Saskatchewan Oncology Education Online Course

University of Toronto & Michener Institute Continuing Education

BC Cancer Primary Care Learning Sessions

Online courses with Canadian Medical Education

MODULE 5: Resources for Patients

Resources for Patients

Cancer Organizations

- Canadian Cancer Society
- Movember
- Prostate Cancer Foundation

Community Health Centres

- Regional specific services
- TAIBU (Scarborough, ON)

Community Organizations

- The Walnut Foundation (Toronto, ON)
- Black Physician Association of Ontario

















Applying Knowledge



Take-Home



- Black men are approximately ~3 times more likely to develop prostate cancer and die from disease
- Risk factors among Black men:
 - Earlier age of onset
 - Common ancestry
 - Social factors
 - Diet/Exercise
 - Access to <u>healthcare</u>
 - Sensitivity to the topic
 - Consideration of screening guidelines
 - PSA testing to start from <u>age 40</u> for Black men
 - Genetic screening to be offered
- Look to professional and community resources for access to healthcare and support services







Recap of Resources

FOR PATIENTS

Encourage self-education

Awareness of support organizations: *The Walnut Foundation, CHCs, Canadian Cancer Society*

FOR PRACTITIONERS

Guidelines Genetic counselling/testing Published literature Professional development Support organizations

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known Author is licensed





Case Study: Mr P

Mr. P



Mr. P, a 58 yr old Trinidadian man, generally well with a PSA of 5 ng/mL. No urinary symptoms, but his father died of metastatic prostate cancer and his mother died of breast cancer. His recent prostate biopsy was negative for cancer. To your knowledge, he has never had genetic testing done. His next appointment with you is in 3 months.

Remember... PSA of 0 - 2 is normal, 2 - 4 is borderline and >4 is abnormal

12 months later...

Mr P. missed his 3 month and 6 month appointments. He returns to the clinic urinary frequency and regularly feels as though he is unable to empty his bladder fully. His PSA is now 9.5ng/mL

What are your main concerns? What is your plan of care for Mr P?

Main concerns:

Pain, frequency, increased PSA. **Plan of care:**

Further assessment (DRE, biopsy, imaging), symptom management, test the urine/residual, offer genetic testing due to hereditary risk for cancer, support patient by providing resources, follow-up frequently. Approach patient with cultural sensitivity.







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Look for the companion poster to print and display in your clinic!



...before you go

...or contact

prostatecanceroutreach@uhn.ca

for your free copy



Acknowledgments

GENEROUS SUPPORT FROM THE PRINCESS MARGARET FOUNDATION

Health Equity Grand Challenge Grant Improving prostate cancer outcomes in Black men through genetics, multidisciplinary care and listening to communities

The Princess Margaret Cancer Foundation 🕸 UHN INDEPENDENT REVIEW OF MATERIAL FROM CFPC MEMBERS



SPECIAL CONSULTATION WITH DR. KIRK ANTHONY STEWART, M.D., C.D.



ADDITIONAL SUPPORT FROM:

Tiffany Pizioli (CUA) Rita DeMarco (CUA) Zoe Angermeyer (UHN) Nichole Manneh (UHN)

References

- Berenguer et al. 2023, Underlying features of prostate cancer statistics, risk factors, and emerging methods for its diagnosis, MDPI (<u>https://www.mdpi.com/1718-7729/30/2/178</u>) slide 15
- Canadian Cancer Society 2017, Canadian Cancer Society's Advisory Committee on Cancer Statistics, slide 14
- Cancer Care Ontario 2022, Cancer Care Ontario Hereditary Cancer Testing Eligibility Criteria: Version 3 October 1, 2022 (<u>https://www.cancercareontario.ca/en/guidelines-advice/types-of-cancer/70161</u>) slide 20, 28
- Fisher et al. 2019, The role of race and ethnicity in views toward and participation in genetic studies and precision medicine research in the United States: A systematic review of qualitative and quantitative studies, Molecular Genetics & Genomic Medicine <u>https://onlinelibrary.wiley.com/doi/10.1002/mgg3.1099</u>
- Gong, Y., Deng, J., and Wu, X. 2020, Germline mutations and blood malignancy (review), Oncology Reports (https://www.spandidos-publications.com/10.3892/or.2020.7846) Slide 20
- Kensler et al. 2023, Prostate cancer screening in African American men: a review of the evidence, JNCI (<u>https://doi.org/10.1093/jnci/djad193</u>) slide 16
- LeBlank, A., Demers, A., & Shaw, A. 2019, Recent trends in prostate cancer in Canada, Statistics Canada (https://www150.statcan.gc.ca/n1/pub/82-003-x/2019004/article/00002-eng.htm) Slide 14
- Martin et al. 2019, Clinical use of current polygenic risk scores may exacerbate health disparities. Nature Genetics 51, 584-591 (<u>https://www.nature.com/articles/s41588-019-0379-x</u>) Slide 21





References

 Miles, B. & Tadi, P. 2023, Genetic, Somatic Mutation In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing (https://pubmed.ncbi.nlm.nih.gov/32491819/#:~:text=A%20somatic%20mutation%20describes%20a

ny,not%20pass%20on%20to%20offspring) Slide 20

- Moses et al. 2017, The impact of sociodemographic factors and PSA screening among low-income Black and White men: data from the Southern Community Cohort Study, Prostate Cancer and Prostatic Diseases (<u>https://www.nature.com/articles/pcan201732</u>) slide 18
- Pritchard et al. 2016. Inherited DNA-Repair Gene Mutations in Men with Metastatic Prostate Cancer, The New England Journal of Medicine (<u>https://www.nejm.org/doi/full/10.1056/nejmoa1603144</u>) slide 21, 31
- Warren, F. 2021, The link between prostate cancer risk & a healthy lifestyle, Oncology Times (https://journals.lww.com/oncologytimes/fulltext/2021/05200/the_link_between prostate_cancer_risk____a_bealthy 15 aspx) slide
- times/fulltext/2021/05200/the_link_between_prostate_cancer_risk___a_healthy.15.aspx) slide 19
 Mucci et al. 2016, Familial Risk and Heritability of Cancer among Twins in Nordic Countries Slide 15
- Petrucelli et al. 2023. BRCA-1 and BRCA2-Associated Hereditary Breast and Ovarian Cancer, GeneReviews [Internet], <u>https://www.ncbi.nlm.nih.gov/books/NBK1247/</u> slide 19
- Understanding Cultural Diversity in Healthcare, The 4 C<u>'s, https://ggalanti.org/the-4cs-of-culture/</u> slide 32





Links & Guidelines

- American Urological Association early detection of prostate cancer guidelines 2018 https://www.auanet.org/guidelines-and-quality/guidelines/prostate-cancer-early-detection-guideline
- Black Physicians' Association of Ontario <u>https://bpao.org/</u>
- Cancer Care Ontario hereditary testing eligibility
 <u>https://www.cancercareontario.ca/en/guidelines-advice/types-of-cancer/70161</u>
- Canadian Cancer Society <u>https://cancer.ca/en/about-us/prostate-</u> cancer?gclid=EAIaIQobChMI3omm9O7IggMVkzutBh241gTpEAAYASAAEgIMjvD_BwE
- Canadian Urological Association PSA Screening Pocket Guide 2022 <u>https://www.cua.org/program/12149</u>
- Community Health Centres (Ontario)
 <u>https://www.health.gov.on.ca/en/common/system/services/chc/locations.aspx</u>
- European Association of Urology prostate cancer guidelines
 <u>https://uroweb.org/guidelines/prostate-cancer</u>
- Movember <u>https://ca.movember.com/</u>
- National Comprehensive Cancer Network Prostate Cancer Guidelines V4. 2023 (login required: https://www.nccn.org/guidelines/guidelines-detail?category=1&id=1459
- Ontario Health Genetics Clinic Directory https://www.ontariohealth.ca/genetics-clinics
- Princess Margaret Cancer Centre https://www.uhn.ca/PrincessMargaret/Clinics/Prostate
- Taibu https://www.taibuchc.ca/en/
- The Walnut Foundation https://thewalnutfoundation.com/



