

FUNDED BY:
CENTER FOR MEDICARE AND MEDICAID SERVICE

FACE TO FACE,
SHOULDER TO
SHOULDER:

PROSTATE
CANCER

SAT, NOV 5TH, 2022 I0AM-IPM



STUDY BACKGROUND AND WHY



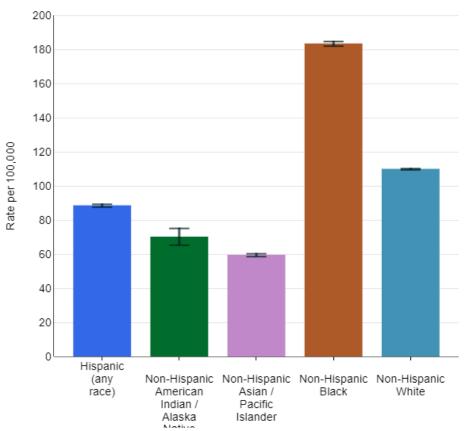
PROSTATE CANCER DISPARITIES

- AAs males have a higher incidence of PCa (168.8 per 100,000) compared to Caucasian males (95.3 per 100,000)
- AA males (12.3%) are more likely to present with a <u>clinically advanced stage /</u>
 aggressive PCa (aPCa) at <u>diagnosis</u> when compared to non-Hispanic Caucasian
 (6.3%) and Hispanic males (10.5%)
- Early screening for PCa improves chances for earlier stage diagnosis and reduces mortality but AA are less likely to have early screening performed



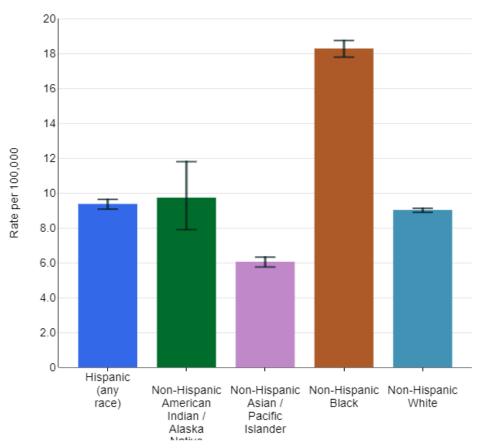
PROSTATE CANCER BY THE NUMBERS

Prostate SEER 5-Year Age-Adjusted Incidence Rates, 2015-2019 Male By Race/Ethnicity, All Ages, All Stages



Created by https://seer.cancer.gov/statistics-network/explorer on Mon Oct 31 2022.

Prostate SEER 5-Year Age-Adjusted Incidence Rates, 2015-2019 Male By Race/Ethnicity, All Ages, Distant



WHAT IS HEALTH DISPARITY?



- CDC defines health disparities as
 - Preventable differences
 - In the burden of disease, injury, violence, or opportunities to achieve optimal health
 - Experienced by socially disadvantaged populations
- Healthy People defines health disparities as
 - Particular type of health <u>difference</u>
 - Closely linked with social, economic, and/or environmental disadvantage

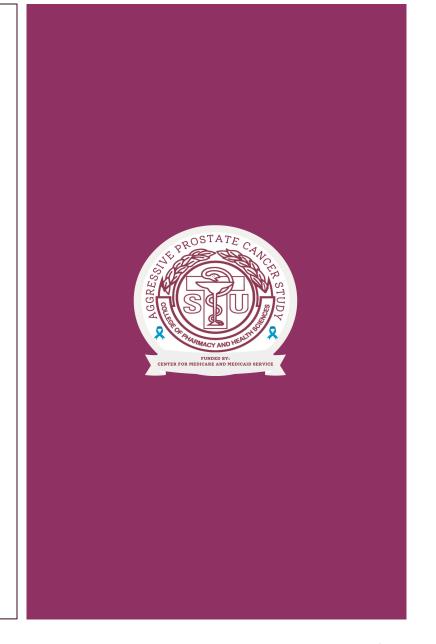
CDC. Health disparities. November 24, 2020. Accessed October 08, 2022. www.cdc.gov/healthyyouth/disparities/index.htm; Office of Disease Prevention and Health Promotion. Healthy People 2020. Updated February 6, 2022. Accessed October 8, 2022. www.healthypeople.gov/2020/about/foundation-health-measures/Disparities#:~:text=Healthy%20People%202020%20defines%20a,%2C%20and%2For%20environmental%20disadvantage

Social Determinants of Health



Social Determinants of Health Copyright-free







ABOUT THE STUDY

Aim I -

Identify the key elements associated with aPCa among AA males and create SDOH-based interventions to potentially reduce burden of aPCa among AA males

Aim 2 -

Development of SDOH-based interventions for aPCa among AA males through community based participatory research (CBPR)

Collaborator I -

Houston Methodist Hospital



Collaborator 2 -

Sankofa Research Institute and Community Workgroup



Collaborator 3 -

Community Advisory Board



Collaborator 4 –

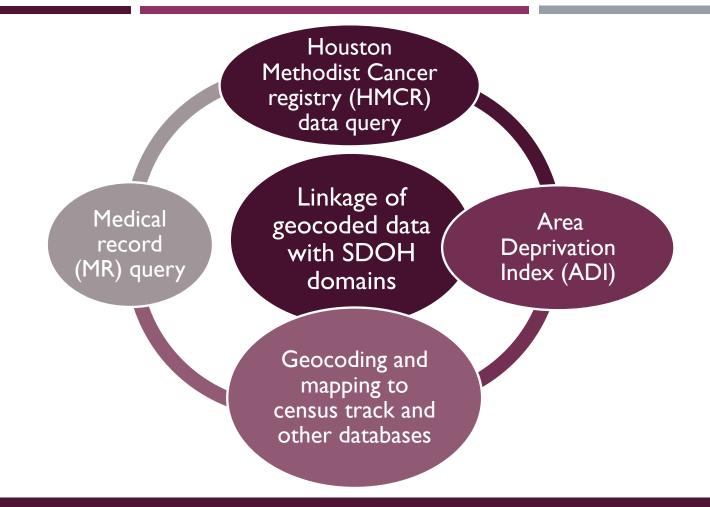
PharmD Interns





STUDY VARIABLES

- Timeframe: 2016 to 2021
- Population: African American Men with Prostate Cancer in Houston Methodist
 Cancer Registry
- Demographics: Age, race, ethnicity, zip code, marital status, insurance type, history of cancer, alcohol/tobacco use
- Prostate cancer related information: PSA, Gleason, stage
- Comorbidity and medications (previously reported to be associated with PCa)









STUDY TIMELINE

Sept 2020

IRB approval, Data extraction, Review, and Analysis

Sept 2022

Finalize study findings

March 2023

Present at health disparity conference, publication, final report to CMS











Sept 2021

Community Workgroup; Community

Advisory Board

Nov 2022

Community
Engagement
Conference to
share findings and
next steps





DATA FINDINGS



AGGREGATE DATA BY RACE 2016 TO 2021

	All Patients			African American only		
	No aPCa	aPCa	Total	No aPCa	aPCa	Total
2016	161	186	347	41	52	93
2017	260	267	527	60	85	145
2018	369	363	732	88	83	171
2019	432	414	846	116	91	207
2020	343	357	700	88	86	174
2021	149	208	357	30	46	76
	1,714	1,795	3,509	423	443	866



DATA SUMMARY AA (APCAVS. NO APCA) 2016 TO 2021

	Variables (n = 792)	10% Odds Ratio
I .	Age	1.043*** (0.012)
2	ADI State rank	0.884** (0.047)
3	Thiazide like diuretics	0.611** (0.125)
4	Angiotensin 2 receptor antagonist	0.698* (0.144)
5	Direct vasodilators	1.628* (0.437)

*** p<0.01, ** p<0.05, * p<0.1
Standard errors in parentheses

AREA DEPRIVATION INDEX (ADI)*





A neighborhood with a high ADI is considered economically disadvantaged

AA Men living in an economically disadvantaged neighborhood were more likely to have aPCa

Living in an economically disadvantaged neighborhood may increase the risk of developing aPCa**

^{* -} ADI data collected through census track/Zipcode and not individual patient report

** - Hypothesis generated by our data that would need to be confirmed against the existing literature/validated in future studies

MEDICATIONS – THIAZIDE AND THIAZIDE-LIKE DIURETICS*#



AA Men taking thiazide-like diuretics were less likely to have aPCa

Use of thiazide-like diuretics may protect against developing aPCa**

*- Medication data collected from individual patient report in medical record

#- Thiazide and thiazide-like diuretics used to treat hypertension. E.g. Hydrochlorothiazide. Sometimes called "water-pill" ** - Hypothesis generated by our data that would need to be confirmed against the existing literature/validated in future studies

MEDICATIONS – ANGIOTENSIN 2 RECEPTOR ANTAGONIST *#



AA Men taking angiotensin 2 receptor antagonists were less likely to have aPCa

Use of angiotensin 2 receptor antagonists **may protect** against developing aPCa**

*- Medication data collected from individual patient report in medical record

#- Angiotensin 2 receptor antagonist used to treat hypertension. E.g. Losartan, valsartan, Olmesartan

** - Hypothesis generated by our data that would need to be confirmed against the existing literature/validated in future studies

MEDICATIONS – DIRECT VASODILATORS *#



AA Men taking direct vasodilators were **more likely** to have aPCa

Use of direct vasodilators may increase the risk of developing aPCa**

*- Medication data collected from individual patient report in medical record

#- Direct vasodilators used to treat hypertension. E.g. Hydralazine

** - Hypothesis generated by our data that would need to be confirmed against the existing literature/validated in future studies



FINDINGS FROM COMMUNITY COLLABORATION

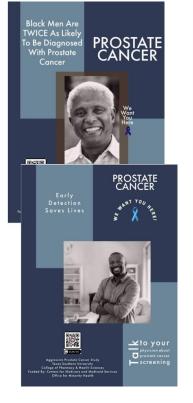


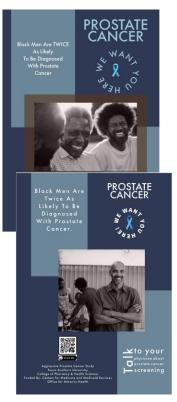


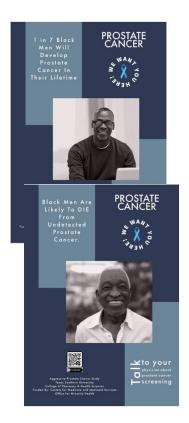
COMMUNITY WORKGROUP

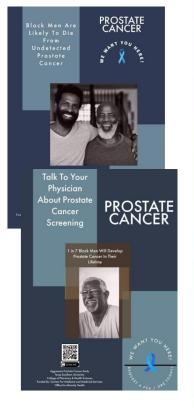
COMMUNITY ADVISORY BOARD

AWARENESS, ADVOCACY, AND ACTION











EARLY DETECTION SAVES LIVES

Be proactive about prostate cancer

PROSTATE CANCER





1 IN 7 BLACK MEN WILL **DEVELOP PROSTATE** CANCER IN THEIR LIFETIME

TALK TO YOUR PHYSICIAN ABOUT PROSTATE CANCER SCREENING



Establish Prostate
Cancer Screening
and Prevention
Center

Establish We Roar Against Prostate Cancer Funds

New Infrastructure





Optimize website with community friendly information/ FAQs

Flyers and educational materials

Engage advocates, partners, and individuals



- Address access to care and health disparity
- Community trust building
- Mobile health coach
 - Mammogram suite
 - Primary care suite
 - Community/research engagement suite
 - · Tele-health ready





Engage mass, print, and social media platforms

ON-GOING EFFORTS ON ADVOCACY AND ACCESS TO PROSTATE CANCER SCREENING





CALL TO ACTION COMMITMENTS

- Disseminating prostate cancer educational materials among their respective circle of influence
- Sign up for TSU mobile health coach to provide prostate cancer screening
- Prostate cancer education event or webinar
- Promote Prostate cancer and health education events
- Donate to support We Roar Against Prostate Cancer funds
- Other





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