

Barriers of Prevention and Education of Prostate Cancer in Rural America

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GENERAL INFORMATION:

What is the Prostate?

- A glandular organ in males that is located inferior to the bladder and on the originating end of urethra.¹
- A valuable aid in the genitourinary system, serving many functions including – production of semen, hormones (prostate specific antigen, i.e. PSA), and passive urine retention.¹

What is Prostate Cancer (CA)?

- A malignancy that is found in men, generally in 4-6th decade of life, which leads to global mortality increase. If detected early, mortality decreases.²

What are predisposing factors of Prostate Cancer?

- There are several risks for development of prostate CA, including: advanced age, genetics, diet, obesity and even race (>15% higher rate in African Americans).^{2,3}

What are signs and symptoms of Prostate Cancer?

- Patient presentations vary.
 - Early detection requires screening and is frequently asymptomatic.⁴
 - Late signs and symptoms are not limited to— regional lymphadenopathy, metastasis to other regions of body (MC lower back), elevated PSA.⁴

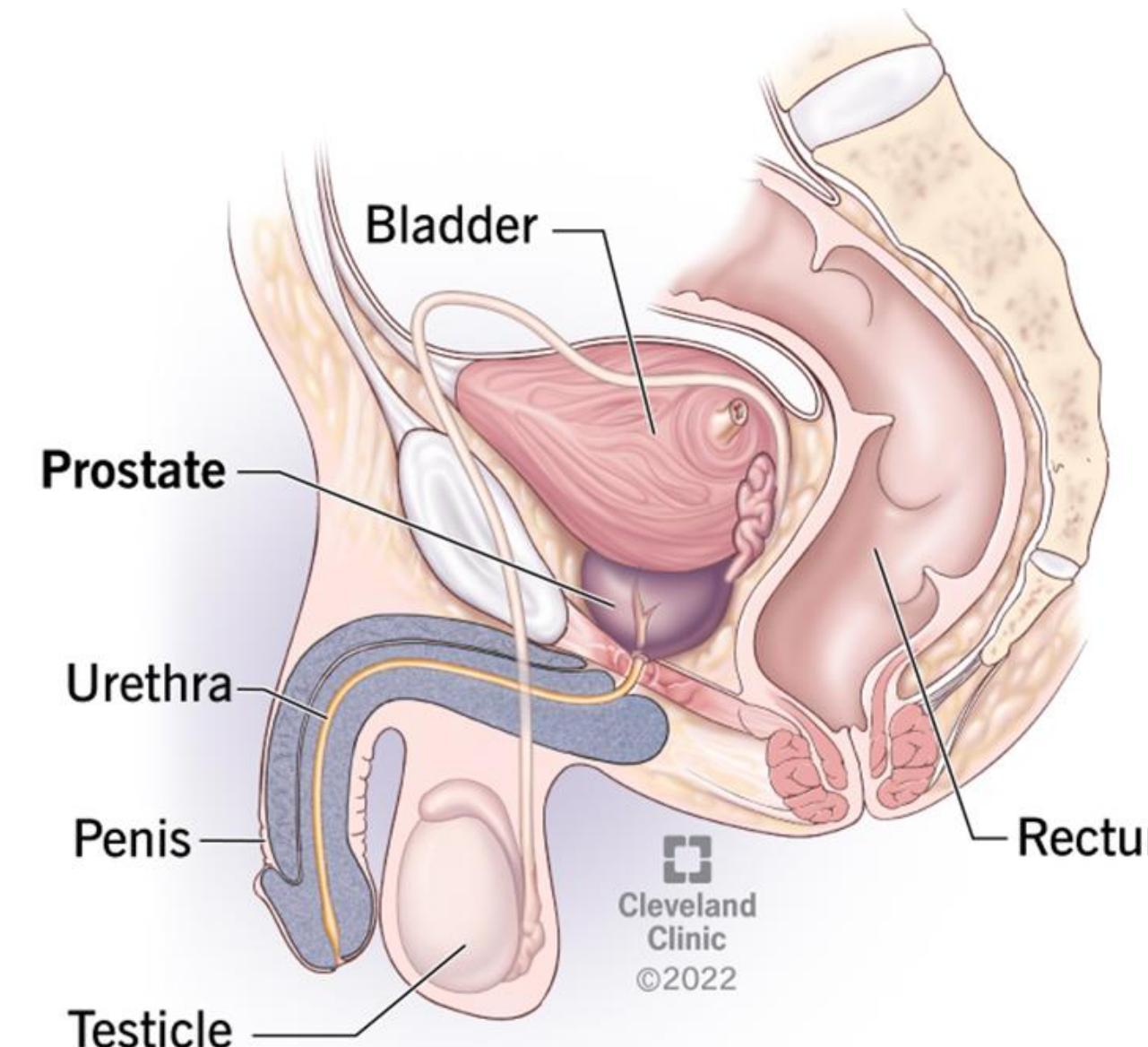


Figure 1 – Image of Prostate Anatomy⁵

RURAL VS URBAN DEFINITION AND RESOURCE COMPARISON:

What is a rural community vs an urban community?

The US Census Bureau defines rural as an area that is not urban. Urban is defined as $\geq 5,000$ people or $\geq 2,000$ housing units in defined region or area.⁶

RURAL RESOURCES

Less access to:

- Healthcare professionals (facilities, specialists and, resources).
- Education and screenings.
- Cultural motivation (Cynicism and distrust in health institutions).

URBAN RESOURCES

More access to:

- Healthcare professionals (facilities, specialists and, resources).
- More publicity and attention to educational resources and clinics/screenings.

CONTINUED SPECIFIC HEALTH: (POPULATION WHOLE)

Main Barriers of Prostate Cancer Acknowledgement

- The topic of prostate health is considered sensitive or taboo to patients.
- Lack of education of prostate cancer as a risk to overall health/well-being.
- Limited access to specialty healthcare services, i.e. Urology and Oncology.
- Lack of trust in the healthcare system within the community/culture.

BARRIER 1 – PROSTATE HEALTH IS A “SENSITIVE TOPIC”

- This is regarded as a sensitive topic for most males. Men tend to take conversations about their general health through a skeptical lens...making conversations about the prostate nuanced and challenging for both patient and provider.⁷
- It has been reported that men can view this conversation as uncomfortable or embarrassing, *I think it goes back to that manhood type thing for the most part, we are uncomfortable discussing, talking about and deny it...*⁴

- Quote from patient in study, Oliver 2007⁴

BARRIER 3 – LIMITED ACCESS

- Most counties in the US do not have appropriate specialist care, i.e Oncologist and Urologist.⁹

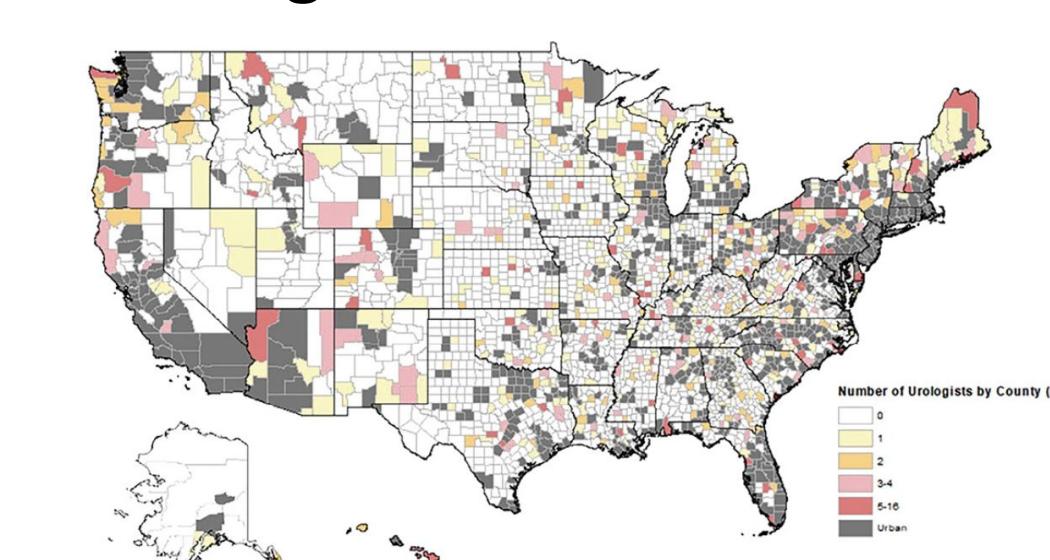


Figure 2 – Distribution of rural urologists by county (2020)¹⁰

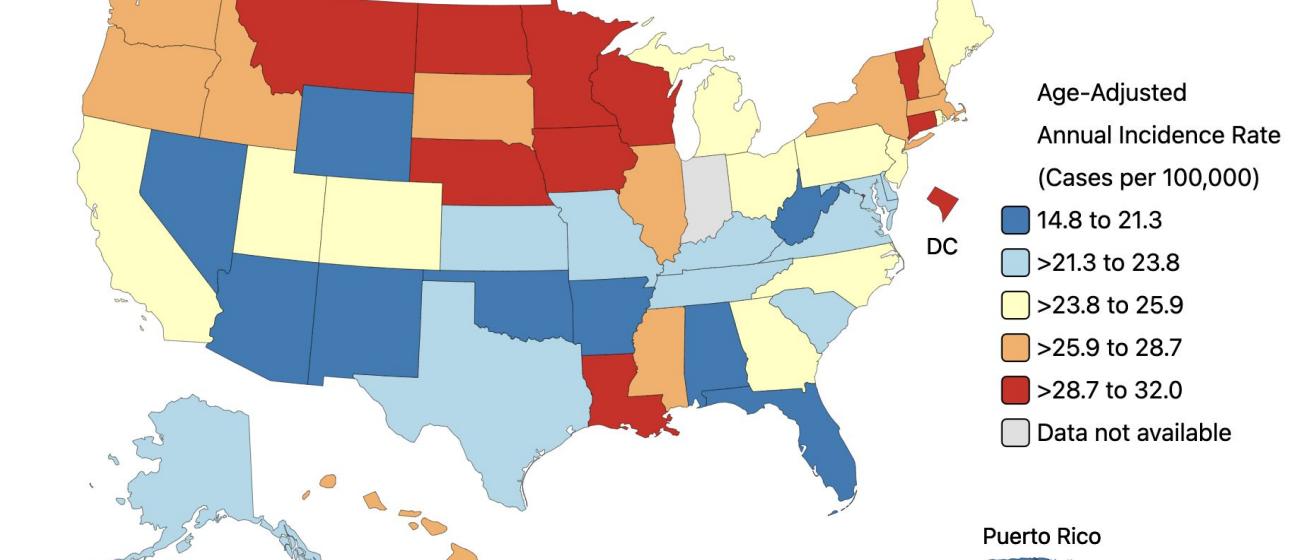


Figure 3 – Incidence rates of last stage prostate cancer in the US¹¹

“Barbershops are an ideal setting to reach older African-American men in rural areas where there is a shortage of health care providers and limited health information about cancer screenings for African-American men. Barber health advisors might play a significant role to increase informed decision-making among their customers by encouraging them to have a conversation and ask questions during their medical visits with a family physician”

- Quote from patient in study, Luque 2015

BARRIER 2 – KNOWLEDGE/EDUCATION

- A study in a rural area in the US showed that approximately 40% of men did not know the resources available to them.⁸
- Lack of patient centered education limits:
 - Implementation of prevention strategies.⁸
 - Recognition of early signs and symptoms, in turn reducing proper care in a timely manner, including referrals to specialists.

BARRIER 4 – LACK OF COMFORT AND TRUST:

- Fear in the healthcare system is a barrier for most patients, especially men.⁴ Specifically, those at greater risks, i.e. African American population, often due to historical lapses in ethical practice (ex. Tuskegee Syphilis Study).⁷
- Patients to make justifications for not seeking medical care until they feel that it is necessary, which is often too late for preventive efforts, leading to discovery in late-stage disease.⁴

Distribution of level of trust adults had in doctors and other health care providers to do what is right for them and their community in the U.S. as of August 2023, by race

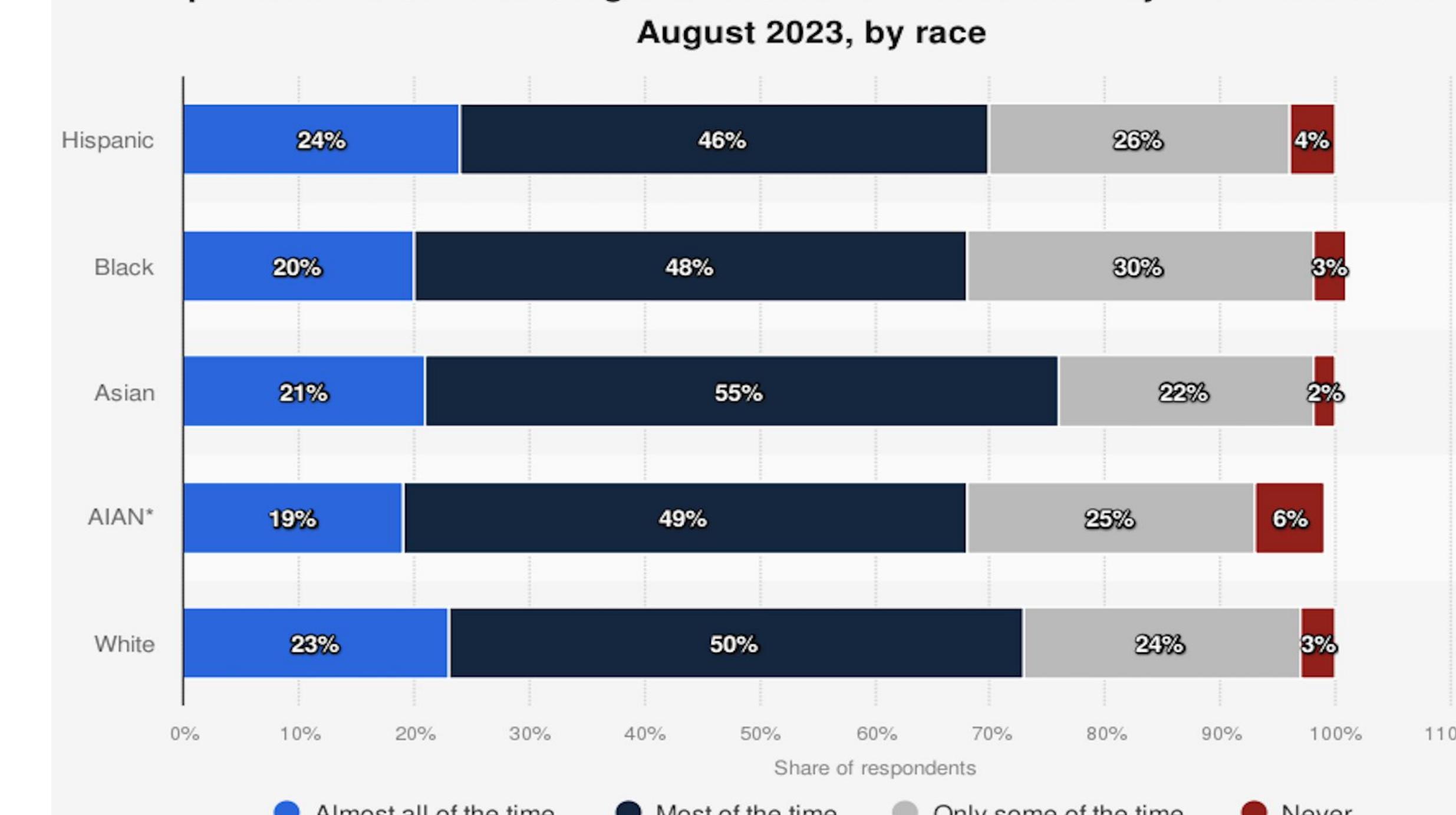


Figure 4 – Level of trust in adult patients with their healthcare provider by race¹²

INTERVENTIONS FOR IMPROVEMENTS:

• Seek NIH/NSF or Rural Target Grant Funding

- Goal – Conduct a 10-year observation and survey focusing on:
 - Observation using medical records for trends: Patient participation in healthcare for screening, examination, follow-up and treatment patients' awareness of risks of developing disease, recognition of symptoms, means of detection, knowledge of treatment options and risks for delays.
 - Survey of patient awareness of the risks, knowledge of resources and outcomes.

• Recruitment:

- Local preventive family and internal medicine practices for medical records, PH/CMS reporting of demographics/data
- Survey (qualitative data) focusing inquiry: Knowledge, Confidence, Compliance, and Outcomes.

• Objective Data Collection:

- Prospectively collect data for measures of detection and treatment outcomes, following trends with initiatives/implementation.

Outreach:

- Open forums in community centers, consistent with diverse cultural focus. Using healthcare teams to aide in building relationships, trust, and patient engagement.
- Provider workshops raising awareness of barriers to patients and community, with support for patient centered education and resource extension (CMS Rep)
 - Provider/Community recruitment and engagement.
 - Focus on education & advocacy, including “winning hearts and minds”.

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