

Significance

Jacob A. Clarke et al. found in their 2020 study that Black patients with head and neck cancer, specifically those living in rural areas, have decreased overall survival and the survival differences by rural versus urban status are greater among Black patients than White patients. Their study identified at least six factors that result in later head and neck cancer diagnoses and worse survival outcomes. My research community project aims to address these factors in measurable ways and create a curriculum that can be offered to these vulnerable communities to allow earlier head and neck cancer diagnoses and improve survival. While Black patients are disproportionately affected by head and neck cancers, otolaryngology is not immune to its own disparities as well. Only two percent of otolaryngologists are Black and as a future practicing Black otolaryngologist myself, I look forward to using my unique background to help care for this vulnerable population from which I came.

Methods/Innovation

The research project will take place as a community event in late Summer 2025 that will consist of a free head and neck cancer screening as well as an opportunity to participate in my research project that involves using a novel learning aid mnemonic to increase medical literacy in head and neck cancer symptoms and when one should seek medical attention. Historically, Black communities have found safety in churches and community centers. My project uses a mnemonic that offers a familiar term to equip this vulnerable community with knowledge of concerning physical exam findings and symptoms that could ultimately save their lives. Although my project is geared towards the underserved Black community, my hope is this will prove to be an effective education tool for any community that faces barriers to medical care. A pre and post survey will be conducted to assess the efficacy of this new tool.

Rationale

Each numbered item is what Clark et al. lists as possible factors that result in later head and neck cancer diagnosis and worse survival outcome in Black patients. The proposed solutions are how I aim to use this community project to combat these barriers:

1. Mistrust in healthcare system (historical racism, fear of discrimination)

Proposed solution: Physicians, advanced practice providers, nurses, and medical students with similar cultural backgrounds as the target community will lead the charge during this community screening alongside medical professional allies from other cultural backgrounds. This will include partnering with the Student National Medical Association chapter at the University of Alabama at Birmingham (UAB), an organization geared towards increasing the pipeline for underrepresented minorities within medicine.

2. Medical illiteracy

Proposed solution: Education on physical exam findings will be provided with the aid of pictures/photos minimizing written words. The mnemonic used for the novel education tool is a term the Black community uses often and one I predict will be easy to remember.

3. Decreased Clinic Visit/cancer screening numbers

Proposed solution: Increase community screenings and/or empower citizens to perform head and neck self-exams during showers (similar to breast and testicular exams). My goal is to lead three head and neck cancer community screenings before completing residency.

4. Smoking and Alcohol cessation

Proposed solution: Our dedicated Head and Neck tobacco cessation specialist will be at the community screening to provide education, counseling, and resources to pursue tobacco cessation.

5. Under-Insured

Proposed solution: Our dedicated Head and Neck case manager and social workers will be at the community screening to provide education and resources on how to supplement/cover medical, transportation and other associated costs.

6. Lower Income

Proposed solution: Our Head and Neck cancer case manager and social workers will also provide education on subsidized programs, food stamps, and other associated resources.

Anticipated Outcomes

1. Using a community education session and health screening, participants will better understand concerning signs and symptoms of head and neck malignancies and have a lower threshold to seek medical attention.
2. Participants will have the knowledge through visual aids and mnemonics to screen themselves and educate others in their communities about symptoms or physical exam findings that require medical attention.
3. Participants will feel more comfortable pursuing medical care locally or through UAB since we will provide care during the community screening that is compassionate, honoring, and empowering.
4. Statistical analysis will show the novel education aid is an effective tool to educate a community, and therefore may later be used widely across many communities

Estimated Cost

After the first Summer 2025 Head and Neck Community Screening, my goal is to have two additional annual screenings before I complete residency. The prices below reflect the estimated costs of one community screening, with items 6-10 not having to be replenished each screening after their initial purchase.

1. Gas for medical professionals, case managers, social workers, and other team members to travel to and from rural communities: \$500
2. Mnemonic Posters to post on walls of churches and community centers: \$300
3. Signage: Promotional posters and handouts to advertise community screenings: \$300
4. Refrigerator Mnemonic Magnets for communities to keep in their homes as a visual aid: \$300
5. Printed handout education materials for case management, social work, and tobacco cessation specialist: \$300
6. Otoscope x 5: \$150
7. Hand gloves for PPE: \$200
8. Tongue depressors for oral exams: \$40
9. Hand sanitizer for patient and personal safety: \$60
10. Box of 125 face masks x 2: \$20

Total: \$2170

Other Funding

1. UAB Department of Otolaryngology Research Grant Award: \$4000

Thank you very much for your consideration.

Sincerely,
Edward Harris, M.D.