

Multidisciplinary Oral Cancer Screening at Mollie Wheat Memorial Rural Health Clinic

Developed by: Emily Chestnut, Victoria Snook, Janice L. Farlow, MD, PhD

Objectives

To conduct a robust interprofessional education event on oral health and cancer screening for future rural medical and dental providers while bringing permanence to an annual oral cancer screening event in a clinic for a critically underserved rural community.

Target Population

Mollie R. Wheat Memorial Clinic primarily serves Terre Haute, a semi-rural community in west Indiana. Terre Haute experiences a 17% poverty rate (12.4% national average) and a tobacco smoking rate of 24% (4% higher than the state average and 7% higher than the nationwide average). The area also has an estimated physician-to-community member ratio of 1:1,495. There is currently one practicing otolaryngologist who serves 58,000 people. Mollie R. Wheat Memorial Clinic serves an estimated 400 patients per year, with 97% of patients being uninsured or enrolled in Medicaid.

Background

In April 2024, a joint educational in-service day and free community oral cancer screening was held at Mollie Wheat Memorial Clinic. Led by Indiana University School of Medicine (IUSM) faculty, 24 medical students attended an in-service that provided a review of the rural patient population, instructions for oral cancer screenings, and an overview of the pathology and treatment of oral cancers. We also discussed the causative role that human papillomavirus (HPV) has in the development of oropharyngeal cancer and how it can be mitigated by vaccination with Gardasil-9. Following the educational luncheon, an oral cancer screening event was held at Mollie Wheat Memorial Clinic, a student-run clinic affiliated with IUSM. Students assisted with oral cancer screenings, charting, discharging patients, and setting up follow-up appointments when indicated for a total of 23 patients. Trainees uniformly stated that the experience was very educational and would participate in future similar initiatives.

Methods

Phase I: Educational In-Service

An educational in-service will take place at Indiana University School of Medicine, led by otolaryngologists and dentists. Attendees will include IUSM students, oncology providers from Union Hospital, otolaryngology providers from IU Health, and a local dentist. The session will cover a review of the patient population for the upcoming follow-up screening event, guidelines for conducting oral cancer screenings, and an overview of oral cancer pathology.

Phase II: Oral Cancer Screening Event at Mollie Wheat Memorial Clinic

Mollie Wheat Memorial Clinic primarily serves uninsured/underinsured patients with approximately 25 patients seen in a 5-hour period. The clinic has confirmed its willingness to host another free oral cancer screening day that otolaryngologists and dentists would facilitate. These providers would be examining patients alongside medical students, teaching them how to perform oral cancer screenings and promote tobacco cessation to patients, as well as debriefing each case. As an addition to this year's screening day, the Mollie Wheat Memorial Clinic vaccination initiative has offered to provide the Gardasil-9 adult vaccination series at a reduced cost to uninsured patients during the screening. Financial support from this grant would be utilized to eliminate this cost to the patient should they choose to be vaccinated. Patients will be given the opportunity to meet with a clinic social worker who can provide tobacco cessation products, such as nicotine patches and gum, at no cost. At the end of each patient's visit, they will receive

a take-home bag filled with educational brochures about oral cancer pathology and prevention, SPF chapstick and lotion, toothbrushes, toothpaste, and floss.

Anticipated Outcomes/Impacts

Patient Outcomes

Hosting an oral cancer screening event at Mollie R. Wheat Memorial Clinic would allow a critically underserved population at high risk for current or future oral cancer development to receive preventative health care screening, vaccination, and smoking cessation resources at no cost to them. Promoting the event through the clinic's social media and community flyers could also increase awareness of the clinic and its primary care services, reaching individuals who may not have previously known about these resources.

Learner Outcomes

Both the preliminary in-service and the screening event will allow students to experience patient care from a multidisciplinary approach. We expect 25 interprofessional students to participate, the majority of whom will return to rural communities to practice primary care. Students will explore the roles that different providers have in patient care and how a team approach can advance the care provided. Additionally, students will develop a better understanding of oral cancer screening, prevention, and pathology that can be applied in their future medical careers.

Estimated Cost

At an estimation of 30 patients, the approximate cost breakdown is as follows:

- \$400 for take-home bags that patients will receive after their oral cancer screening: informational patient hand-outs, SPF chapstick, lotion, toothbrushes, toothpaste, and floss.
- \$600 for purchasing 10 three-dose schedules of Gardasil-9 vaccines for the oral cancer screening day through the Mollie Wheat Memorial Clinic vaccination initiative

Conclusion

If awarded, this grant will further strengthen the development of a comprehensive interprofessional education event that will enrich the training of future medical providers and improve oral health care for an underserved community. Additionally, the success of this screening will bring further permanence to an annual oral cancer screening event through Mollie Wheat Memorial Clinic and lay the foundation for future head and neck cancer awareness and outreach in this geographic area.