**Virtual Informational Program to optimize Oral Cancer Screening in our community (VIPOCS)**

**The team:** Providers from divisions ofHead and Neck surgery, Oral and Maxillofacial surgery, Dentistry, Oral Pathology, Radiation Oncology, and Medical Oncology

**Background**: Oral squamous cell carcinoma (OSCC) is a common malignancy, ranking 6th amongst most common cancers globally making up for 48% of all head and neck cancers1. OSCC is a heterogenous mucosal disease comprising of primary tumors including those arising from buccal mucosa, maxillary and mandibular alveolus, tongue, palate, and lip1,2. Smoking, chewing betelnut and tobacco, and alcohol use are directly associated with OSCC3 but there is a growing population of young adults, mostly females who have no tobacco or alcohol use history who are being diagnosed with OSCC4. Risk factors such as dental trauma, and mouthwash use have been implicated but definitive evidence for the association is lacking4.   OSCC is a challenging disease from multiple standpoints- it often results in severe, rapidly progressive symptoms; frequently metastasizes to lymph nodes and distant sites, and prognosis/patterns of spread are unpredictable5. Pre-cancerous lesions and early-stage oral cancer carry excellent prognosis, but 5-year relative survival rates drop to 40-60% for locoregional disease. Unfortunately, >60% of oral cancers are diagnosed late (stage III and IV)5.

Given the easy access for exam and early detection, it is disconcerting to see oral cancers frequently diagnosed in later stages. While a multitude of reasons have been proposed as likely reasons for late presentation, lack of awareness, financial concerns and misconceptions about risk factors, lack of access to medical care, especially during challenging times such as the current COVID pandemic, are some of the most notable reasons6.

**Target population**: Northwell Health is one of the largest and busiest providers of head and neck cancer care in the entire New York metropolitan region, caring for patients in all five boroughs of New York City, Long Island, Westchester, and Connecticut. The target population will be adults over the age of 18 in the greater New York Metro area, who are express interest in this initiative and sign up for the free virtual webinar, which will be available on demand.

**Methods**: Every year, the speech and hearing center at Northwell Health hosts free oral cancer screening in the Spring. Unfortunately, due to COVID pandemic, we have not conducted this case-finding event over the last 2 years. Utilizing the well-established Northwell Health outreach program, we propose to reach to subjects and providers such as internists, dentists, dental hygienists, and ENT specialists in the community through a free on-demand webinar aimed at disseminating knowledge about oral cancers, risk factors, it’s occurrence in subjects with no risk factors, self-examination techniques and importance of timely seeking of medical help when symptoms or signs of concern are noted. We will provide an easy access number for people who express interest in speaking with a head and neck cancer professional and arrange for a timely appointment in office as deemed necessary. Webinar can be accessed free upon registration and will be available to subjects on our website for viewing at their convenience.

**Assessment of outcomes**: We will assess success of our intervention based on the following

1. Feasibility of conducting a virtual on-demand webinar

2. Acceptability and interest in the webinar, as gauged by the number of registrants.

3. Number of subjects who reach out to the help line

4. Percentage of patients who present with early stage (LN negative disease) after the production of webinar (intervention) as compared to historical institutional data.

**Estimated cost**: $5000

**Other funding**: Institutional support

**Expected impact on community health**: Presentation at precancerous or early stages of oral cancer, which in turn is expected to result in improved outcomes and survival. Furthermore, with this platform we expect that patients find easy and direct access to our head and neck cancer providers, decreasing delays in diagnosis and treatment. If successful, this platform can have a huge impact on oral cancer detection, treatment and ultimately outcomes.

**Innovation**: Oral cancer, due to virtue of its location should be amenable for early detection. Several barriers exist as detailed above. To the best of our knowledge, a virtual intervention such as the one proposed above has not been evaluated before.

**References**:

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