

AHNS Cancer Prevention Service Community Service Awards Application

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Title: Electronic delivery of educational materials for the head and neck cancer discipline

Background: Head and neck cancer represents a disease type affecting a broad spectrum of patient types and demographics and requiring what is commonly believed to be one of the most advanced and comprehensive multidisciplinary oncologic practices. Though prolongation of life is the obvious goal, improvement of quality of that life in this challenging cancer site is an increasing focus of many centers and is increasingly becoming critical to reimbursement. Given the wide sweeping effects that cancer treatment of the head and neck can have on our patients, initiatives directed at improving quality care delivery at each level of care is paramount. Further, given the historical propensity to this cancer subsite affecting those of lower socioeconomic status, and with substance-related disorders, attention to these sensitive populations is also critical.

At its core, patient education for cancer care is essential. Making patients informed consumers of their own disease processes facilitates improved engagement in the treatment process and ultimately increases compliance. For head and neck cancer specifically, improved compliance to reduce treatment delays, complete care, and properly manage treatment sequelae is the backbone of quality care delivery. Patients and providers must recognize the complexity of head and neck cancer surgery and/or non-surgical treatment and its effects on numerous anatomic sites with variable degrees of morbidity. We must also know our audience; our patient population encompasses many low-income, disabled, and minority groups. In order to better educate, and subsequently serve this population, we must direct our initiatives to techniques appropriate for this audience.

The potential for considerable morbidity related to head and neck cancer treatment is high. Both surgical and non-surgical treatment techniques require careful attention and prophylactic measures to prevent untoward outcomes. In this light, we are obligated to study and academically contribute to, and employ measures to prevent treatment-related morbidities. More simply stated, we as quaternary care oncologists must offer and investigate both novel traditional therapies. We are not only the “present” treatment for our patients, but we are the future.

Methods: This project will serve as a one year pilot for educational and quality initiatives across the head and neck cancer treatment discipline, specifically oral cavity cancer screening, education, and awareness. Comprehensive educational materials are lacking for the head and neck cancer site. An educational program will be developed including information relative to early exam and symptoms sides, screening measures, treatment strategies (surgical and non-surgical treatment) alternatives to traditional therapy, side effects, and support resources. Specific emphasis will be placed on creating materials at a 2nd-grade reading level, utilizing custom graphics and evidence-based teaching methods to improve comprehension. The educational program will be delivered across an interactive multimedia platform with functionality to disperse materials in an environmentally friendly for at home reference. Support for administration provided by institution staff, medical students, and volunteer researchers. Separately funded request for project assistant already submitted through institutional philanthropic funds. Pre- and post- educational surveys will be administered, as well as quality of life and outcome related data analyses. This will also serve as an opportunity to assess for improvement compliance and engagement in lower socioeconomic patients.

Overall goals and objectives of the program:

- Development of educational platform for each head and neck anatomic subsite (for example oral cavity (lip, buccal, tongue), larynx, neck dissection, oropharynx, salivary gland, trachea) to explain basics of anatomy and function; screening tools for at home exam and symptom screening, guide patients through their anticipated surgery and post-operative recovery; guide patients through primary versus adjuvant therapies. Delivery of program via interactive multimedia platform
- Development of enduring custom educational materials
- Identify effectiveness of educational platform using perception driven surveys administered before and after the educational experience
- Study compliance and quality outcomes across socioeconomic classes based on subscribed intervention (enhanced recovery, educational program, social services)

Budget:

- Equipment \$1500
 - Portable computing device ie laptop, pocket touchpad
- Supplies
 - Custom graphics/illustrations \$750
 - Print/Copy/Marketing Materials \$500
 - Online materials provided by base institution
- Contractual Cost \$5,000
 - Part-time project assistant
 - Aid provided by contracted clinical staff, medical students, volunteer research
 - Regional and institutional philanthropic grant for support staff pending

In order to support the delivery of the educational platform via an interactive multimedia platform, we will require touchpad devices ie Ipad for in-person patient contact. Further, this will also permit virtual education ie wifi calls, FaceTime, for remote teaching. In addition, an additional computing device ie laptop may be required for materials development and management, HIPPA compliant document storage, and data entry and analyses.

To create patient centered tools tailored to our lower socioeconomic population, the creation of custom graphics/cartoons to explain the anatomy, physiology, anticipated surgery, wounds, and post treatment expectations will be necessary. In order to copyright protect these images for our center, for potential use in future marketing campaigns, additional funds may be necessary (include under miscellaneous). Finally, inevitably funds related to print materials will be required.