Implementation of Patient Reported Outcomes in Head and Neck Squamous Cell Carcinoma: A Prospective Study

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Background: Head and neck squamous cell carcinoma (HNSCC) is the seventh most common cancer in the United States and can often lead to high symptom burden, financial strains, and a diminished quality of life after treatment. The use of patient reported outcome (PRO) tools convey an improvement in quality of life, survival, and satisfaction in care for several cancer patient populations, and is understudied in HNSCC phases of surgical treatment. This prospective cohort study seeks to integrate a validated PROs survey into the clinical workflow of a high-volume academic center, with aims to assess implementation for HNSCC patients undergoing advanced-stage surgery at Indiana University.

Methods: Participants between ages 18-85 with a new or regionally recurrent HNSCC diagnosis undergoing surgery were recruited. Patients undergoing adjuvant therapy or treatment for any other cancer diagnosis were excluded except local therapy for non-melanoma skin cancer. The validated PRO EORTC-QLQ30 and EORTC-H&N43 surveys were provided using a REDCap questionnaire in-person, via email, or telephone at the initial visit and at 0- to 30-days post-operation. Demographic and oncologic data were collected alongside PROs to aid patient surveillance.

Results: From May to July 2025, 27 patients were recruited and filled out baseline surveys, and 2 patients have completed post-operative surveys thus far. At baseline, 77.2% report pain, 77.2% report difficulty swallowing, 52.7% report problems eating, 57.9% report difficulties speaking clearly, and 65% of all patients expressed worry about future health.

Conclusions and Potential Impact: HNSCC patients experience a variable range of symptom severity prior to surgery. Pending additional patient recruitment and post-operative PRO completion, this pilot study will continue to improve our understanding of PROs' impact on survivorship care for the HNSCC patient population and further enable precision survivorship to identify at-risk patients for adverse outcomes.