

Optimising multidisciplinary triage of head and neck cancer patients and their carers during chemoradiotherapy using technology: the “ScreenIT” system

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Background: Patients with head and neck cancer (HNC) undergoing chemoradiotherapy (CRT) experience a myriad of physical and psychological sequelae during treatment, requiring synergistic and comprehensive multidisciplinary care. With growing patient numbers and associated strain on finite allied health resources, routine screening using self-reported outcome measures has been proposed to enhance patient triage for face-to-face intervention. “ScreenIT” is a telepractice service model using an online system developed to screen swallowing/nutrition status in HNC patients and distress in both patients and their carers to enable timely identification of those requiring face-to-face management by speech pathology, nutrition and dietetics, occupational therapy and social work. This project aimed to evaluate the reliability and validity of the ScreenIT tools.

Methods: Cross-sectional cohorts of 100 HNC patients referred for speech pathology/dietetic (SP/DN) services during CRT, and 40 carers, were recruited. ScreenIT contained questions relating to side-effects, functional oral intake, weight, nutrition and distress (generic, mealtime specific distress and mask anxiety). Data from ScreenIT Patient/Carer tools were compared with subsequent blinded face-to-face assessment by SP/DN clinicians.

Results: Agreement analysis revealed good (>80%) agreement between the ScreenIT tools and clinician ratings. Highest agreement was observed for weight and oral intake measures. Distress rating via the ScreenIT tools enabled more sensitive detection of mild-moderate distress in both patients and carers compared to clinician judgement. Adoption of the ScreenIT service model was also instrumental to identifying new referrals to social work for distress management for both patients and carers in our facility.

Discussion: Findings suggest that the ScreenIT tools can provide valid detection of swallowing, nutritional and distress status in HNC patients and carers. The ScreenIT system, as delivered via a telepractice service model, has the potential to optimise patient triage and provide a clinical adjunct for synergistic multidisciplinary management of the HNC population during CRT.