CONFERENCE ABSTRACT

An interprofessional collaboration between nurses and speech therapists to detect dysphagia early in an elderly hip fracture population

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Introduction: Pneumonia and pulmonary aspiration are significant sources of mortality and morbidity following a hip fracture, with swallowing pathology being among the root causes of these complications. The speech therapist is primarily responsible for the assessment and intervention of patients with swallowing dysfunction. However, limited healthcare resources make it difficult for all hip fracture patients to have their swallowing assessed by a speech therapist upon admission before given any oral intake. Given that nurses are in earlier contact with patients, a partnership between speech therapists and nurses is essential to detect dysphagia early among elderly patients with hip fractures.

Practice change implemented, aim of change, and targeted population: The speech therapists developed a formal dysphagia screening protocol adapted from the standardised swallowing assessment (SSA) and Burke Dysphagia Screening Test (BDST), and trained nurses within the Hip Fracture Unit (HFU) to conduct bedside swallowing screening, take initial management decisions, and refer appropriate cases to speech therapists for formal assessment. The aim is to equip nurses to perform routine bedside screening of dysphagia for all newly admitted patients and quickly establish if they are safe for oral intake.

Stakeholders and timeline: This project is an integrated care effort by the speech therapists and nurses, with support from the geriatricians. Training was initiated in October 2014, and took place over one month. When HFU officially opened on November 2014, trained nurses are expected to conduct bedside swallowing screening for all patients admitted into HFU - upon admission as well as postsurgical intervention using the standardized dysphagia screening protocol.

Highlights: There are a number of benefits to this collaboration namely: (1) A decrease in the number of patients with no or inappropriate feeding restriction imposed when they were at risk of aspirating; (2) A decrease in the number of patients kept nil-by-mouth unnecessarily; (3) An improvement in the quality of referrals to the speech therapy department for specialist assessment.
Of the 668 patients admitted into the HFU from January 2015 to October 2016, we managed to achieve a low pneumonia incidence of 1.5%. This finding demonstrates that our project is successful in promoting safe eating and swallowing among our patients.

**Sustainability:** The dysphagia screening protocol is embedded in the integrated hip pathway, and is ongoing to date. Speech therapists continue to work closely with ground nurses following training. Nurses can notify the speech therapists for a possible reassessment of swallow function should they identify new swallowing problem among patients. Moving forward, there are plans to extend collaboration between the nursing and speech therapy departments to geriatrics nurses outside of HFU given that dysphagia is a common problem among elderly patients in general.

**Transferability:** It is possible to replicate this model of care elsewhere with the dysphagia screening protocol developed to improve outcomes of frail elderly with hip fractures.

**Conclusions and discussions:** Bedside swallowing assessment has proven to be a valuable early screening tool for dysphagia and aspiration risk. By introducing a sharing of professional responsibility between speech therapists and nurses, an efficient and effective dysphagia service can be provided to the acute hip fracture elderly. Strong interdisciplinary collaboration between the nursing and speech therapy departments has helped to promote safe eating and swallowing in a vulnerable population, and enabled more appropriate use of specialist skills.

**Keywords:** dysphagia; bedside swallowing screening