

Improving medication administration for patients with dysphagia

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BACKGROUND

- Dysphagia refers to difficulty swallowing usually resulting from a neurological or physical impairment of the oral, pharyngeal or oesophageal mechanisms¹. Dysphagia may affect swallow of food, fluids, secretions and medications.
- Altering solid dose formulations may render administration unlicensed and can adversely affect both patient (e.g. crushing of modified release tablets) and administrator (e.g. aerosolisation of hormonal or cytotoxic drugs).^{2,3,4}
- Medication administration in patients with dysphagia necessitates a multi-disciplinary approach with no one profession holding all necessary expertise.⁵

AIM and OBJECTIVES OF THE STUDY

- The aim of this study was to improve medication administration for patients with dysphagia.
- The objectives of the study included:
 - Establishment of an electronic referral system between Speech & Language Therapists (SLTs) and Pharmacists
 - To determine the effectiveness of this referral system in relation to number of days between initial SLT assessment and Pharmacist review and the percentage of optimally managed medication administration in line with best practice guidelines.

METHODS

- Baseline audit of practice of medication administration to patients with dysphagia (2016).
- Establishment of electronic referral from SLT to Pharmacy for patients with dysphagia (2017).
- Determining optimal medication administration as per best practice guidelines: (i) 'The NEWT Guidelines for Administration of Medication to Patients with Enteral Feeding Tubes or Swallowing Difficulties'⁶ and (ii) 'Handbook of Drug Administration via Enteral Feeding Tubes'⁷.
- Policy on Medication Management in Patients with Dysphagia written & circulated.
- Repeat audits of medication administration to patients with dysphagia on wards, and of SLT compliance in completing electronic referral were carried out 2 months (Aug 2017, n=14) and 12 months (Aug 2018, n=30) post implementation of electronic referral.

CONCLUSIONS and FUTURE WORK

- Implementation of SLT electronic referral to Pharmacy improved medication administration to patients with dysphagia hence increasing patient safety.
- Patients were reviewed sooner by Pharmacy when electronic referral was completed and a higher percentage of medications were optimally administered.
- A multidisciplinary team with good interprofessional communication is essential to improve medication administration to patients with dysphagia.
- The audit cycle continues with the aim of further improving patient care in this area.
- Future work will focus on identifying non-compliance with the referral system and identifying ways in which medication administration to patients with dysphagia can be further improved.

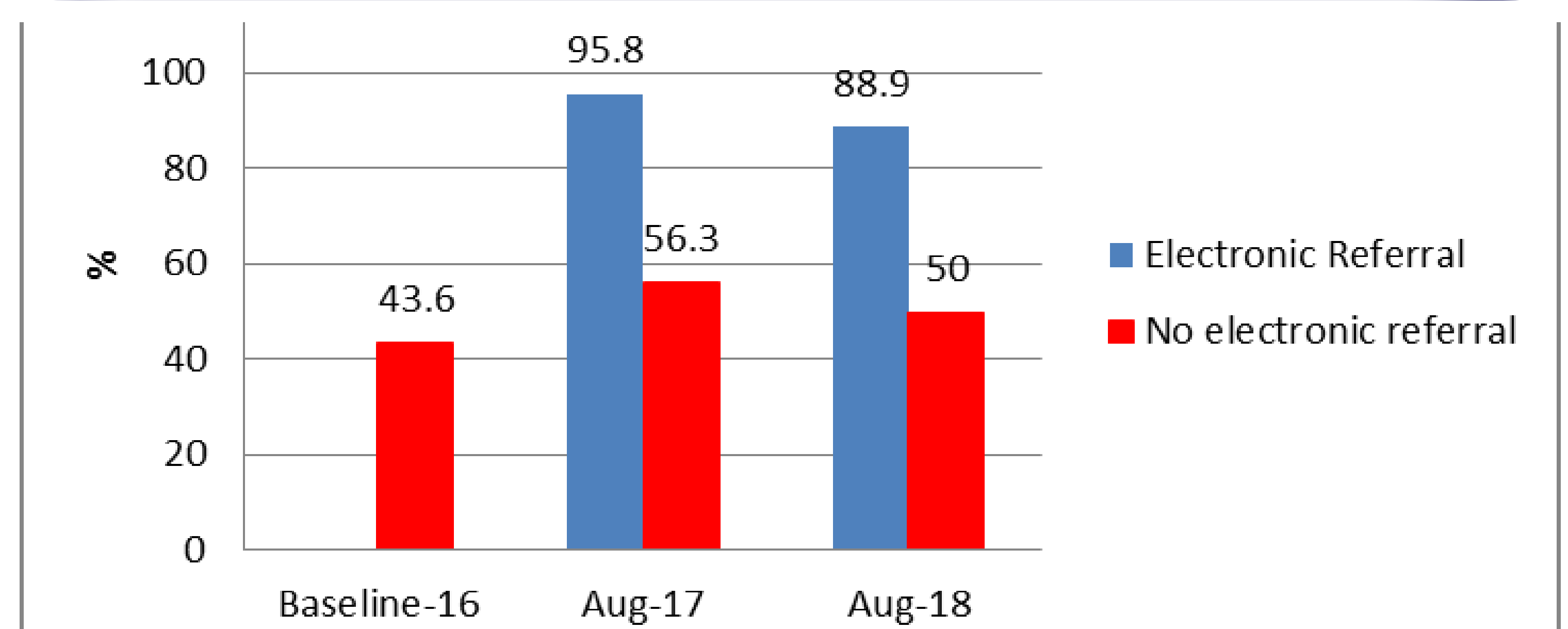
RESULTS

- Table 1 presents data on the median number of days from SLT assessment to Pharmacy review across the three timepoints of the study
- Figure 1 presents data on the median percentage of medications being optimally administered across the three timepoints.
- A significant increase was observed, from 44% to 86% post implementation ($p < 0.001$).
- Despite the implementation of the electronic referral system, not all patients were referred by SLT to pharmacy; 40% of patients requiring referral were only identified on day of the audit.

	Electronic referral sent to Pharmacy	No electronic referral
Pre electronic referral 2016	Not applicable	11 days
Two months post electronic referral 2017	2.5 days	7 days
One Year post electronic referral 2018	0 days	10 days

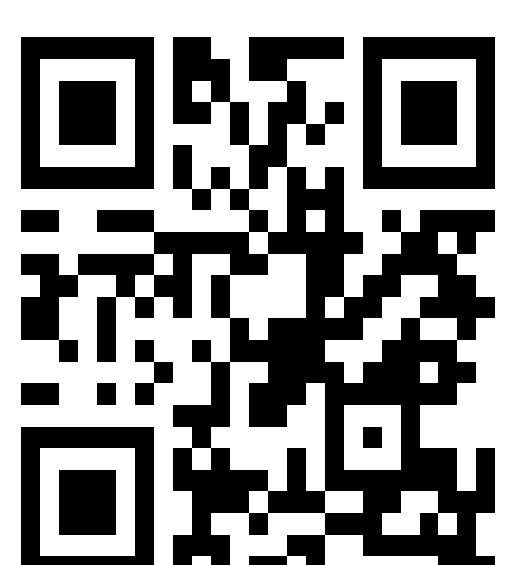
Table 1: Median number of days from SLT referral to Pharmacy review pre- and post-electronic referral system implementation

Figure 1: Percentage of optimally-administered medications to patients with dysphagia, pre- and post-electronic referral system implementation.



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