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# **Review Article**

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Our experience of a speech and language therapist-led swallow disorder clinic

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#### **Abstract**

**Introduction.** Dysphagia can lead to morbidity including weight loss and aspiration pneumonia. Effective triage of patients and streamlining of pathways to expedite diagnosis and treatment is therefore imperative.

**Objectives.** The goals of this research were to measure the referral to treatment time for dysphagia patients in a newly established pathway and compare with existing UK national and local referral to treatment times, and to evaluate patient feedback.

**Methods.** Speech and language therapy advanced clinical practitioners were trained in nasendoscopy and assessment of swallow. Referral to treatment times were measured and patient satisfaction questionnaires completed.

**Results.** A decrease in triage to treatment time (from 24 to 6 weeks). Patients reported high understanding of the condition and minimal discomfort during assessments. Radiation exposure was reduced (2 per cent of patients undergoing soluble contrast swallows, previously 100 per cent). **Conclusion.** The new pathway expedites treatment and achieves high patient satisfaction. It empowers speech and language therapy in efficiently managing low-complexity cases and supports multidisciplinary care for dysphagia patients.

## Introduction

In March 2022 there were nearly 498 517 patients on the waiting list for ENT treatment to begin in the UK. Of these patients who were referred but had not yet completed their treatment, 55 per cent had been waiting for less than 18 weeks, and the average waiting time of those on the list was 15.8 weeks. The coronavirus disease 2019 (Covid-19) pandemic certainly contributed to the backlog of treatment, however since April 2016, the number of people joining the waiting list (referrals) has been higher than the number of people leaving the waiting list (treatments) in every month except one.

In order to reduce the length of a waiting list, it is important to find new ways of treating patients more quickly. A review of non-urgent patients referred to ENT in East Sussex Healthcare National Health Service (NHS) Trust with swallowing difficulties in 2015 (n = 68) showed they waited 24 weeks from start of referral to end of pathway, including any investigations. All of these patients were referred for a barium swallow.

#### **Methods**

A collaborative approach to pathway design, patient selection and measurement of effectiveness was undertaken. Speech and language therapy advanced clinical practitioners were trained and initially supervised by an ENT consultant in performing nasendoscopy. A clinical protocol was developed in which an ENT consultant would triage referrals directly into the swallow disorder clinic. This was run in parallel to an ENT consultant clinic to enable supervision as required, review images, organise radiological requests and support in complex treatment planning decisions.

A pre-clinic questionnaire was utilised to gather pertinent clinical information. On presentation, a detailed history of dysphagia-related symptoms was recorded, comprehensive oromotor examination performed followed by fibreoptic endoscopic evaluation of swallowing. This involved direct visualisation of functional swallow with a range of fluid and diet textures. Analysis of the swallow and diagnosis was completed and shared with the patient within the clinic, with visual biofeedback to support their understanding of their swallow function and any recommendations advised. Following the appointment, patient feedback was gathered via questionnaire.

The questionnaire collected after the fibreoptic endoscopic evaluation of swallowing asked patients to rate discomfort levels during fibreoptic endoscopic evaluation of swallowing and rate on a scale of 1 to 10 the level of understanding and confidence in managing their swallowing problems that the information provided by speech and language therapy practitioners during fibreoptic endoscopic evaluation of swallowing were able to give.

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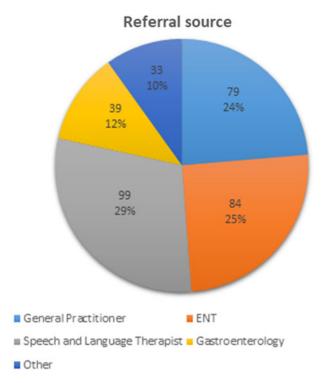
# Results and analysis

Since implementation of the clinic, between May 2016 and January 2020, 334 patients were triaged to the Swallow Disorder Clinic. Most referral sources were from secondary care services such as internal referrals from speech and language therapy, ENT and gastroenterology. Only 24 per cent were from general practitioners. (Figure 1). Patients waited an average of 41 days, 95 per cent confidence interval (CI) [38, 44] to access the Swallow Disorder Clinic after referral, essentially a triage to treatment time of six weeks.

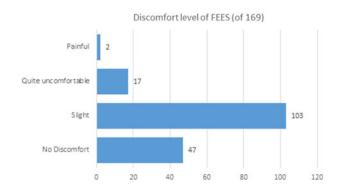
#### Patient feedback results

Of all patients undergoing fibreoptic endoscopic evaluation of swallowing who completed feedback forms, 172 of the forms were complete enough for inclusion in the study. Regarding the level of discomfort experienced during fibreoptic endoscopic evaluation of swallowing, 169 responses were recorded, 2 patients found it painful, 17 found it quite uncomfortable, 103 experienced slight discomfort and 47 experienced no discomfort (Figure 2). With respect to satisfaction with the level of information provided, 171 responses were recorded, the average score for this was 9.79 out of 10 (95 per cent CI [9.69, 9.89]). Regarding understanding of their condition following information provided, 167 responses were recorded, scoring an average of 9.18 out of 10 (95 per cent CI [8.98, 9.38]). Regarding the confidence to manage their own swallowing condition, the 165 responses were recorded, rating an average of 8.70 out of 10 (95 per cent CI [8.38, 9.02]).

Of the 335 patients referred to the Swallow Disorder Clinic, 295 attended clinic. All but nine patients had fibreoptic endoscopic evaluation of swallowing performed. Thirty-three patients demonstrated normal swallow, 142 had mild



**Figure 1.** Pie chart demonstrating sources of referrals to the service; n = 334.



**Figure 2.** Bar chart demonstrating number of individuals (*n* = 169) rating levels of discomfort of fibreoptic endoscopic evaluation of swallow. FEES = fibreoptic endoscopic evaluation of swallowing.

dysphagia, 98 had moderate dysphagia and 13 had severe dysphagia. For the 295 clinic attendees 184 onward referrals were made. The majority were referred onwards for ongoing speech and language therapy, whether in the community or hospital setting. Twenty-five patients were referred onto an ENT consultant clinic, 10 were referred to gastroenterology and 7 were referred for barium swallow. Therefore, 153 patients did not require further treatment and were discharged from this one-stop clinic.

## **Discussion**

We describe a one -stop approach to the assessment, diagnosis and initial management of dysphagia, which has the potential to reduce waiting times and is acceptable to patients and referers. Patients on the new pathway received considerably less ionising radiation in their workup. The previous local pathway for patients with swallowing disorders included an initial appointment in an ENT consultant clinic, request for outpatient barium swallow then further outpatient appointment with results for all patients. Of the 335 patients triaged to the Swallow Disorder Clinic, only seven were referred on for barium swallow.

Barium swallow is a useful diagnostic tool for assessment of oesophageal dysphagia, which is beyond the scope of fibreoptic endoscopic evaluation of swallowing. With appropriate history and triage, in which oesophageal dysphagia/obstruction can be ruled out, barium swallows can be avoided.

The Ionising Radiation (Medical Exposure) Regulations 2017 (SI 2017/1322) in regulation 11.1.b state that exposure may not be carried out unless it has been justified, prior to the exposure, by a practitioner who must ensure that there is a net benefit to the exposure.<sup>2</sup> The typical effective dose of radiation from a barium swallow study is 1.5 mSv, the equivalent of 75 chest X-rays or 8 months of background radiation.

The multi-professional framework for advanced clinical practice in England framework sets out a vision to develop the allied health professional workforce in a consistent way to ensure safety, quality and effectiveness.<sup>3</sup> An advanced clinical practitioner speech and language therapist with expert skills in dysphagia assessment, diagnosis and management, working in parallel with an ENT consultant provides the ideal rigor to support patients presenting with dysphagia who traditionally would have been seen by ENT alone. Although the evidence is sparse there is a longstanding relationship of joint working and speech and language therapy-led voice clinics. The published literature has demonstrated that as much as 81.3 per cent of voice patients referred do not require

ENT specialist interventions,<sup>4</sup> therefore tackling this could reduce the length of ENT waiting lists.

Speech and language therapists can be trained in advanced clinical practitioner roles to have the appropriate knowledge and skill to offer transformative change in healthcare pathways. Advanced clinical practitioner roles can improve opportunities for career progression, job satisfaction, recruitment and retention as well as driving improvements in health and wellbeing, restoring and maintaining financial balance and delivering high-quality service.

Evidence currently is sparse for parallel clinic collaborations between speech and language therapy advanced clinical practitioners and ENTs. Two Australian studies demonstrated improved pathways for patients presenting to ENTs with swallow and voice disorders with reduced waiting lists, minimal number of patients requiring ENT assessment or adverse incidents. <sup>5,6</sup>

We sought to implement the speech and language therapy-led pathway and evaluate its effect on waiting lists, improved safety through reducing unnecessary procedures and gather patient experience on its acceptability. When considering potential risks of commencing an alternative pathway, issues such as accountability, adverse incidents, skilled workforce, missed diagnosis and lack of acceptance from colleagues may be raised. Success factors for non-medical-led clinics have been identified.

- Flexible Endoscopic Evaluation of Swallowing is within the scope of practice for speech and language therapy with expertise and specialist training in the United Kingdom
- A similar speech and language therapy led pathway for patients with dysphagia and dysphonia in Australia in the published literature has shown safe, effective and beneficial changes to ENT service delivery.
- With appropriate training and clinical governance, advanced clinical practitioner speech and language therapy can diagnose and manage low complexity dysphagia.
- This pathway demonstrates a reduction of referral to treatment time, reduced ionising radiation and good patient experience.

Who performs fibreoptic endoscopic evaluation of swallowing is a contested issue globally. Royal College of Speech and Language therapists affirmed that fibreoptic endoscopic evaluation of swallowing is within the scope of practice for speech and language therapy with expertise and specialist training. In some countries it may be a joint role between speech and language therapists and laryngologists (e.g. US, Canada, Japan and South America). Phoniatricians, usually ENT physicians, take the lead in some countries (e.g. Germany, Italy, Spain and Egypt), or it may be the neurologist who takes the lead. Whilst the physician has an advantage of being the most qualified to relate dysphagia to an underlying medical problem, the speech and language therapist has the broadest knowledge of swallowing and its disorders. Speech and language therapists are able to offer differential diagnoses and management including postural adaptations, texture modifications, therapeutic interventions and behavioural treatments, which is often the first line of treatment.

### **Conclusion**

This pathway transformed the service to provide a more holistic approach, dramatically reducing waiting times and referral for unnecessary procedures. The one-stop clinic provides timely, detailed swallowing assessment, and improved

communication with immediate advice, biofeedback and therapy. This pathway enables speech and language therapists to develop their advanced skills and allows low-complexity cases to be managed away from oversubscribed consultant clinics. This approach supports innovative practice and improves pathways whilst not affecting their productivity.

This pathway offers a quality, holistic, patient-centred approach to multidisciplinary management of swallowing disorders with shared leadership in a cost-effective and evidence-based framework. The disciplines of speech and language therapy and ENT compliment perfectly to ensure timely and accurate diagnosis and onward referral to specialities (i.e. neurology and voice therapy), which may not have traditionally been identified. Speech and language therapists developing advanced practice roles, traditionally reserved for medical consultants, create opportunities for a new, innovative, fluid workforce.

#### **Future considerations**

Patient experience data gathered in this study looked at patient comfort during fibreoptic endoscopic evaluation of swallowing, assessing speech and language therapists' skills in endoscopy, and whether information provided increased understanding and confidence in managing patient swallowing difficulties. Future research would be beneficial to determine benefits of this model compared to traditionally led ENT models. Areas for further evaluation could include (1) longitudinal follow up to assess if patients bounced back for the same issue to ENT or any other service or primary care; (2) the benefits of a speech and language therapist-led combined voice and swallow parallel clinic; (3) The role of a speech and language therapists as first-contact practitioners in suspected cancer patients presenting with voice and/or swallowing difficulties; and (4) perceptions of the ENT/speech and language therapy workforce on this combined parallel-model approach.

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**Competing interests.** The authors declare none.

#### References

- 1 NHS England. Consultant-led Referral to Treatment Waiting Times Data 2021–22. In: https://www.england.nhs.uk/statistics/statistical-work-areas/ rtt-waiting-times/rtt-data-2021-22/ [03 October 2023]
- 2 UK Statutory Instruments. The Ionising Radiation (Medical Exposure) Regulations 2017. (SI 2017/1322). In: https://www.legislation.gov.uk/uksi/ 2017/1322/made [03 October 2023]
- 3 NHS England. Multi-professional framework for advanced clinical practice in England. In: https://advanced-practice.hee.nhs.uk/multi-professional-framework-for-advanced-practice/ [03 October 2023]
- 4 Carding P. Voice pathology clinics in the UK. Clinical Otolaryngol 2003;28:477–8
- 5 Seabrook M, Schwarz M, Ward EC, Whitfield B. Implementation of an extended scope of practice speech-language pathology allied health practitioner service: an evaluation of service impacts and outcomes. *Int J Speech Lang Pathol* 2017;21:65–74
- 6 Payten CL, Eakin J, Smith T, Stewart V, Madill CJ, Weir KA. Outcomes of a multidisciplinary ear, nose and throat allied health primary contact outpatient assessment service. Clinical Otolaryngol 2020;45:904–13
- 7 Langmore SE. History of fiberoptic endoscopic evaluation of swallowing for evaluation and management of pharyngeal dysphagia: changes over the years. *Dysphagia* 2017;32:27–38