

## Main Article

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## Abstract

**Background.** Balance dysfunction and vestibular conditions are major problems requiring significant resources. There is significant national and international variation in management pathways for such patients.

**Methods.** This paper outlines a collaborative project run by the ENT department and two vestibular rehabilitation trained physiotherapists to establish a clinic to manage patients referred to ENT with vestibular and/or balance complaints. As part of a six-month pilot, two physiotherapy-led balance clinics were provided per week.

**Results.** A total of 159 new patients were seen, with only 15 needing ENT consultant input. This led to the successful creation of substantive posts; the clinic has seen 698 patients in its first two years.

**Conclusion.** Patient outcomes and experience have been positive, and accompanied by reduced waiting and in-service times. The authors discuss some of the pitfalls, challenges and opportunities of developing this type of clinic.

## Introduction

Dizziness, balance dysfunction and vestibular conditions are a major problem, causing significant distress<sup>1–4</sup> and requiring significant resources.<sup>5,6</sup> Across Europe, there are a wide range of services delivering vestibular rehabilitation, within different specialisms, led by different professions, but such services have been identified as hard to access in the majority of cases.<sup>7</sup> This diversity of specialisms within which vestibular rehabilitation was being delivered was also reflected in a UK study,<sup>8</sup> that study highlighted some areas of poor implementation of best practice, and noted a trend that working in a specialist vestibular service enhanced evidence-based awareness.

Locally, our experience reflected this somewhat patchy provision of vestibular rehabilitation, with no established pathway for managing patients identified or referred with dizziness and/or balance complaints. As such, vestibular rehabilitation was delivered inconsistently across a number of settings, namely a community falls and rehabilitation service, musculo-skeletal physiotherapy, ENT consultant clinics and neurology consultant clinics. Patient access to vestibular rehabilitation was thus determined mainly by chance access to a vestibular rehabilitation trained therapist within the aforementioned areas, or individual clinicians' awareness of such therapists working locally.

Furthermore, for those patients being seen within ENT, the traditional medical model was associated with considerable waits for consultant review, limited appointment times and long intervals between appointments. Existing pathways for patients with complex dizziness were often ill-defined, with patients sitting between ENT and neurology departments. This complex patient group often benefits from a holistic approach, encompassing tailored treatment programmes, lifestyle optimisation, psychological support and education, alongside a wider medical management plan.<sup>9–11</sup> Consultant appointments are frequently not conducive with the time required for this multifactorial optimisation programme.

In order to try and address this, a collaborative project was launched by the ENT department and two vestibular rehabilitation trained physiotherapists, working within the community falls and rehabilitation service. The aim was to demonstrate the case for a physiotherapy-led balance clinic, which have been shown to be an effective way to manage patients referred to hospital-based ENT clinics with dizziness and balance problems.<sup>12,13</sup> The longer-term view was to develop an independent prescriber role within these clinics, similar to that outlined and which has proved effective in reducing onward referrals.<sup>14</sup>

## Materials and methods

Training was undertaken to provide parity between the diagnosis and management processes between the lead physiotherapists and ENT medics.<sup>15</sup>

A six-month pilot was agreed, providing two physiotherapy-led balance clinics a week. Patient referrals to ENT were triaged by ENT consultants. Those patients identified as

**Table 1.** Exclusion criteria for physiotherapy-led balance clinic

Tinnitus management referral
Unilateral hearing loss with no vertigo or balance deficit
Ear discharge
Referrals for tympanic membrane rupture
Syncope
Identified cholesteatoma
Obvious non-vestibular condition on referral

having problems with balance and/or vertigo, who were not excluded because of red flags (Table 1), were seen by a physiotherapist for a comprehensive bedside vestibular assessment (detailed in the Results section), and, where indicated, a tailored treatment plan was developed.

There were fortnightly supervision sessions with the ENT consultants, to allow discussion of complex cases, queries or reviews around areas such as medication or further investigations to be completed. The clinics ran alongside existing consultant sessions within the ENT department, allowing ad hoc liaison and/or review of patients attending the physiotherapy-led balance clinics by ENT medical teams, if required or indicated. The department also has on-site audiology provision, allowing tympanometry and audiograms to be completed.

## Results

The results of the pilot were positive: 159 new patients were seen, with only 15 needing an appointment with an ENT consultant, 11 of which were for non-vestibular problems. The median wait for a clinic appointment was 62 days, significantly lower than the wait time for a consultant appointment.

New patients received an hour-long slot, allowing for an in-depth history, physical examination comprising a neurological screen, oculo-motor assessment, and bedside vestibular function tests including positional testing. Outcome measures completed were: the Modified Clinical Test of Sensory Integration in Balance – both time and sway scoring elements; Dynamic Visual Acuity Testing; Timed Up and Go with Dual Task; and the Dizziness Handicap Inventory. A local patient experience questionnaire was also completed. Additionally, sessions incorporated tailored treatment programmes, an explanation of the patients' condition and treatment approaches, and discussion of lifestyle optimisation;<sup>10</sup> there was also the opportunity for patients to ask questions. This extra time was beneficial in helping patients understand their symptoms, begin to develop proactive management strategies and discuss co-morbid anxiety (common with symptoms of dizziness and imbalance). Each patient set individual goals linked with their jointly agreed treatment plan. Follow-up appointments were 30 minutes long, allowing for a review of progress, with updates or progression of their plans as indicated, and repeated assessment of outcome measures.

Ninety-eight per cent of the patients who completed their treatment improved in one or more of the outcome measures outlined above, with 65 per cent improving in four or five out of the five outcome measures completed. All 18 cases of benign paroxysmal positional vertigo were successfully treated. Patient satisfaction with the service was extremely positive.

This pilot provided the data for a business case to be submitted to create substantive posts, which led to the creation of a 0.8 whole time equivalent band 7 post, providing four

clinics a week, commencing in October 2020. The two therapists who ran the pilot were recruited to this post as a job-share.

In the first two years of the clinic running, 698 new patients were seen, with 59 (8.45 per cent) requiring face-to-face review with an ENT consultant. It is worth noting that this figure does not account for all ad hoc reviews by on-site ENT medical staff, however these numbers are small. A total of 1471 follow-up sessions have been delivered, with positive outcomes seeing 86.5 per cent of patients improving or scoring ceiling scores in two or more outcome measures.

The demographic details of the clinic showed an average patient age of 62.25 years (range, 17–95 years), consisting of 70.8 per cent females (494 out of 698) and 29.2 per cent males (204 out of 698). Median wait time for an initial appointment is currently 63 days, with a median treatment duration of 75 days. This demonstrates a significant reduction in the waiting time for input, as well as a shorter time within the service, albeit often with more intensive input, with three to four sessions typical within that time.

Developments to the clinic since its inception have included the addition of the FRAX® Fracture Risk Assessment Tool<sup>16</sup> for the assessment of attendees aged over 60 years, who are not already receiving treatment for osteoporosis. This follows a review of our caseload, which revealed that 58.3 per cent of attendees were aged 60 years or over. Such patients potentially sit in two elevated risk groups: higher risk of bone health problems<sup>17,18</sup> and higher risk of falls due to vestibular dysfunction.<sup>19–22</sup> Such proactive identification implements good practice,<sup>23</sup> potentially provides additional benefit to both patients and health and social care resources, and fits in well with the Make Every Contact Count approach outlined by Health Education England.<sup>24</sup> Of 129 patients who completed the FRAX Fracture Risk Assessment Tool, 5 (3.88 per cent) scored as high risk, 48 (37.21 per cent) as intermediate risk and 76 (58.91 per cent) as low risk.

Nominated ENT consultant slots have been created, which therapists can book patients directly into for medical review, reducing delay and allowing multi-disciplinary team (MDT) discussion of management plans.

## Discussion

The process of developing this clinic has been challenging, but ultimately rewarding. Despite having confidence in the validity and effectiveness of the model, as previously detailed,<sup>12–15</sup> the local commissioning requirement for data from a local pilot took a significant amount of time. Unfortunately, this seems a familiar story across the National Health Service (NHS), which likely stops many projects in their tracks, despite significant evidence already being out there.

From our experience, there were strategies (detailed below) that helped us eventually establish the clinic: finding an ally, engaging the MDT, seeking opportunities to present the proposal, considering patients' experiences and having patience.

Finding an ally – having an enthusiastic person to share the process with can be invaluable. There will inevitably be highs and lows, successes and failures, and this reduces the risk of the project derailing. This ally could be a colleague within the department, in another department, in another Trust or someone in a special interest group (e.g. Association of Chartered Physiotherapists in Vestibular Rehabilitation). When a project aligns with your passion, setbacks can feel personal, so sharing that load can be key.

Engaging the MDT – delivering a vestibular rehabilitation clinic requires multi-disciplinary collaboration. Building links early on can lead to the development of good working partnerships, and shape the service in a way that works for all stakeholders as well as patients.

Seeking opportunities to present – most NHS Trusts will have events highlighting clinical developments, training and awards; the proposed service should be presented at as many of these as possible. National days such as Allied Health Professions Day can also be an opportunity to highlight your proposal. Such events can provide an opportunity to articulate your vision for a service and the benefits it can bring. They are often attended or viewed by those who may be involved in reviewing business cases further down the line, so it is an opportunity to lay some educational groundwork for the service.

Patient experience – ensure this is considered and captured. Services are nothing without patients, and their voices add real strength to any service proposal. Gathering patients' stories can demonstrate the impact at a human level and can often be fed directly into Trust board meetings, again highlighting the benefits and raising the profile of the service.

- Dizziness, balance dysfunction and vestibular conditions are a major problem, with inconsistent pathways and services delivering vestibular rehabilitation
- A physiotherapy-led balance clinic with ENT consultant and audiology support can provide effective management for a significant proportion of these patients
- Such clinics provide positive clinical outcomes, reduced wait for input and reduced time within the service
- Clinic patients include adults at risk of bone health problems; incorporating bone health assessment can be a useful addition to a holistic evaluation
- Establishing such clinics can be challenging when navigating governance structures and fostering new, collaborative models of care

Patience – understanding the mechanics of business case approval, where some are only reviewed on a monthly basis, can mean that requests for further information, suggested revisions and so on, cause significant delays to a decision. Try to avoid setting overly optimistic or unrealistic time scales, as this can be disheartening.

## Conclusion

There is significant evidence to suggest that physiotherapy-led balance clinics are both clinically effective and allow better utilisation of MDT members' clinical time and skills. Despite the existing evidence base, including the recent recognition of vestibular screening and assessment by the National Institute for Health and Care Excellence<sup>23</sup> and the World Guidelines for Falls Prevention,<sup>25</sup> obtaining backing to set up such clinics remains a challenge. The current economic climate means this is likely to remain the case for some time. Nonetheless, patiently pursuing the goal, understanding the system and how to navigate it, and continuing to bang the drum for wider recognition of vestibular rehabilitation services can be a fruitful and rewarding task. These services are on an upwards trajectory, and on-going collaboration and support will hopefully deliver great quality, cost-effective care for those with vestibular disorders.

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**Competing interests.** None declared

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