

A literature review on multi-professional collaboration for preventing pressure ulcers in patients with complex postural needs and contractures.



Eva Harris
Tissue Viability Nurse Specialist, Team Lead HCRG Care Group Swindon,
Southwest Region Wound Care Lead NHS England Southwest



Danielle Base
Clinical Director/Specialist Occupational Therapist
and Moving and Handling Practitioner

Background

Working with patients, who have complex postural need and pressure damage can create multiple challenges for the patient and clinicians managing them. Atypical postures include limb contracture, pelvic / shoulder rotation and obliquity, curvature and scoliosis which includes reduced range and fixation (Skalsky & McDonald, 2012)¹. Local data suggests 30% of harm develops on patients with complex posture (NHS Trust 2023)².

Although pressure damage can develop on any bony prominence there are areas considered higher risk. Patients who have complex posture however, do not always follow these expected patterns and therefore increases the need for a collaborative approach.

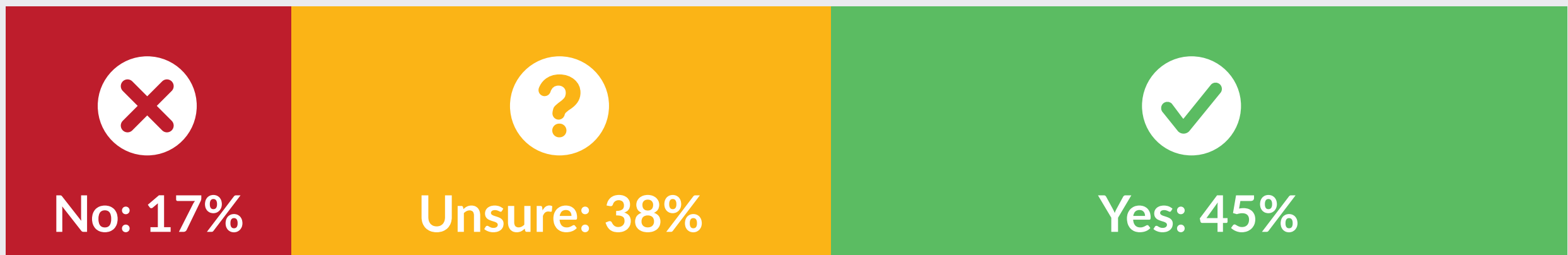
There is no local specialist service to support these patients from a multi-disciplinary (MDT) approach and when a local survey was conducted, knowledge, skills and experience were limited.

Questionnaires were sent out across the healthcare community to Acute & Community services, Nursing Home and Care Homes including: nurses, therapist and care managers. 128 responses were received, out of the 128 clinicians only 45% were aware of what a joint contracture was, the remaining responding with 'no' or 'unsure'. (Table 1)

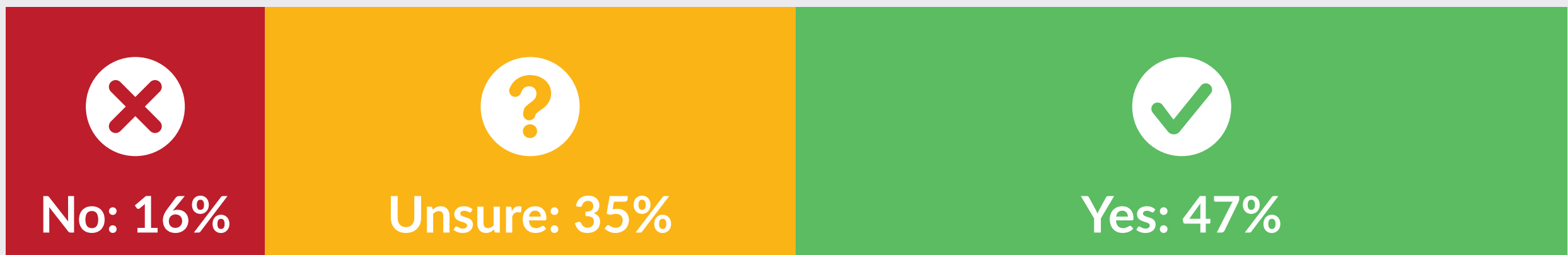
Participants were also asked if they were aware of the impact of a joint contracture on an individual. Similarly only 47% responses were 'yes' again the remaining respondents were no (16%) or somewhat/unsure (35%). (Table 1)

Table 1 Questionnaire responses (n=128)

What is a joint contracture?



Aware of its impact?



This feedback highlighted the lack of knowledge and experience of clinicians which will have a knock on effect to collaborative working to support patients with atypical posture.

To explore further a literature review was conducted to explore the MDT approach for complex posture and pressure ulcer prevention and management.

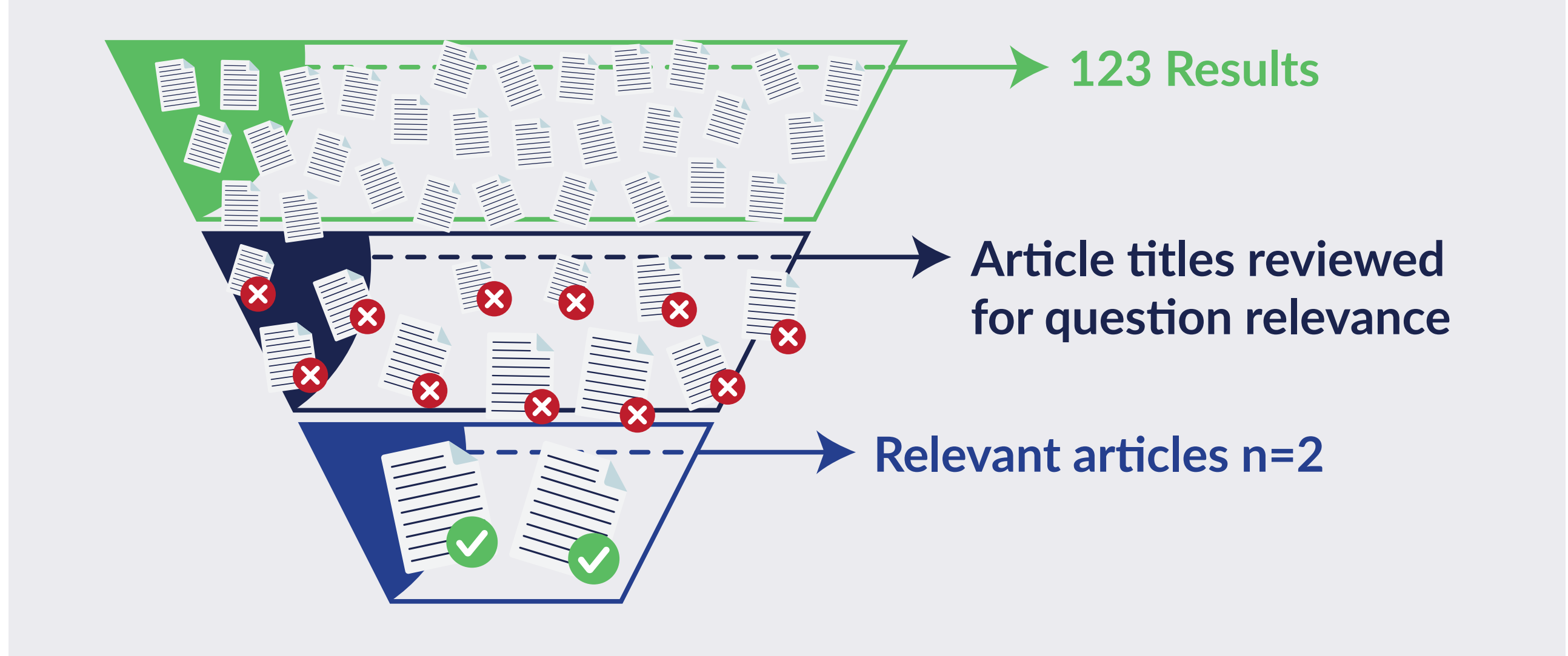
Method

A literature review was conducted using a data base search to include **Pubmed, Cinahl, Embase, Google Scholar** for relevant articles using key words and date parameters of 2015-2025. In addition, specific Occupational Therapy (OT) journals were also reviewed for articles supporting a collaborative approach to pressure ulcer prevention in this cohort of patients.

Results

The search resulted in 123 results (Fig.1 Prisma diagram). On review, 2 were relevant to the search question and parameters. Although several studies discussed the benefits of MDT or collaborative working for patients with wounds, none focused on the specific collaborative approach of **Tissue Viability service, Nursing, Physiotherapy, Occupational Therapy, Carers or the patient**, in providing interventions supporting atypical posture, pressure ulcer prevention/management and 24-hour posture.

Figure 1 - Prisma Diagram



The results suggest that the field of 24-hour posture is typically driven by Occupational Therapy. A lack of standardised pathways and funding streams to support care was also identified.

This search identified 123 manuscripts via boolean operators across several databases relevant to health and social care from the past 10 years. Of these only two were partially relevant to the question, demonstrating a lack of research into the collaborative approach to 24-hour posture management.

Conclusion

The benefits for collaboration in other areas are well documented but were limited in this literature review. Further research needs to be undertaken to support MDT approach to 24-hour postural management and the prevention or treatment of pressure damage to develop an agreed framework for this approach.

Other key recommendations include the development of a multi-professional training program to raise awareness of the needs of patients with atypical posture and how we can support the prevention and management of pressure damage.

The development of a validated risk assessment tool would enable early identification of risks for contractures and postural change which would support a proactive preventative approach.

The development of a collaborative best practice document or framework would highlight the importance of MDT working, funding considerations, roles and responsibilities and support clinicians to implement joint working in order to improve patient outcomes.

¹ Skalsky, A. J., & McDonald, C. M. (2012). Prevention and management of limb contractures in neuromuscular diseases. *Physical medicine and rehabilitation clinics of North America*, 23(3), 675–687. <https://doi.org/10.1016/j.pmr.2012.06.009>

² NHS Trust (2023). Local Pressure Ulcer Data and Narrative [Confidential Document]

Summary

Background

- Patients with **complex postural needs** (e.g. joint contractures, scoliosis) are at high risk of developing pressure ulcers
- Local NHS data shows that **30% of harm** in this group is related to posture-related complications
- There's **no specialist MDT service** in place locally, and a survey found limited clinician knowledge regarding joint contractures.

Survey Findings (128 clinicians)

- Only **45% knew about joint contractures**
- Only **47% understood the impact** of joint contractures on patients
- Results demonstrate **lack of awareness in this field and highlight a need for training and collaborative working.**

Literature Review

- Search across 123 sources yielded only **2 relevant studies**
- While MDT benefits are well-documented in wound care, **none addressed a full collaborative approach** (TVN, OT, Physio, Nurses, Carers, and Patient) for postural management
- 24-hour postural care is **mainly led by Occupational Therapy**
- There is a **lack of standardised care pathways and funding.**

Conclusions & Recommendations

- More research is needed regarding **MDT approaches to 24-hour posture care**
- Development of a **multi-professional training programme to improve awareness**
- Creation of a **validated risk assessment tool for early intervention**
- Development of a **collaborative best practice framework to define roles, funding and improve outcomes.**

