

# Occupational therapy and 24-hour posture management

## The issue

People who cannot reposition themselves are likely to have poor mobility and will spend most of their time in seated or lying postures. Poor postural management can reduce peoples' ability to take part in activities they enjoy and cause physical health problems. Social care occupational therapists (OTs) are seeing a growing number of people with complex seating needs, some of which appear to be due to poor positioning over a long period. It is important that OTs are familiar with current best evidence about how best to support them.

## What we wanted to find out

- What is effective in supporting adults who have complex postural management needs?
- What affects the provision and acceptability of 24-hour postural equipment?

## What we did

We searched CINAHL and Medline for reviews published since 2013 about posture management programmes, including about the provision of postural armchairs, wheelchairs, and night-time positioning systems. To make sure our information was up to date, we also searched for relevant single studies published since 2020. We also looked for relevant NICE and Public Health guidance.

## What we found

We found two scoping reviews,<sup>1,2</sup> a pilot study,<sup>3</sup> and a study exploring the use of 24-hour postural management and its impact on service users and carers.<sup>4</sup> One of the scoping reviews focused on people with complex physical disabilities<sup>1</sup> and the other was concerned with people with intellectual disabilities and severely impaired motor function.<sup>2</sup> The pilot study assessed the benefits of night-time postural positioning (NTPP) equipment for ten care home residents, and the exploratory study surveyed 96 occupational therapists and held focus groups with nine service users and carers. In 2018 Public Health England published guidance on postural care for people with learning difficulties at risk for body distortion.<sup>5</sup>

## What the evidence suggests

### Best practice

When in bed, alignment in a supine position is thought to be the best position to support uniform muscle function.<sup>1</sup> A person's night-time posture may also have an influence on how they can be positioned during the day.<sup>1</sup>

Taking a personalised approach to postural management and thinking about the 24-hours of a person's day is an important consideration when deciding which equipment to provide.<sup>3</sup>

Postural support and seating equipment, such as moulded inserts in wheelchairs, can benefit people's physical health and may increase their participation and performance in occupations<sup>1</sup>.

Care home residents found NTPP improved posture in sitting and the ability to sit out of bed, as well as positively influencing a person's sleep and pain levels.<sup>3</sup> Some 4 out of 10 people also reported an increased ability to participate in group activities<sup>3</sup>.

## The experiences of service users and carers

People were generally positive about the support offered by OTs, but some felt frustrated at a lack of interventions to *prevent* problems with posture occurring and the lack of options for night-time positioning. They were concerned about long waiting times for equipment and concerned that some equipment needs such as hoists and wheelchairs made accessing the community difficult. People also worried about getting stuck if equipment failed. They sometimes felt they were expected by carers to be the expert in their own positioning, and they were worried that incorrect care would affect their ability to go about their daily lives.<sup>4</sup>

### What do we know about acceptability of equipment?

It is important to service users and carers that equipment is usable and enabling.<sup>4</sup> However some NTPP equipment can be difficult to use and transport, and may also increase the need for overnight interventions due to repositioning needs.<sup>5</sup> People may abandon using equipment that is difficult to use.<sup>2</sup> Equipment can be uncomfortable and cause problems with temperature regulation,<sup>3,5</sup> or can be too restrictive.<sup>3</sup> All these issues can affect the occupation of sleep.<sup>5</sup> Appearance and texture can also affect how acceptable people find a piece of equipment.<sup>3,5</sup>

### Factors influencing OT practice

Survey respondents felt most knowledgeable about complex seating, and least about night-time positioning.<sup>4</sup> Limited experience of providing 24-hour postural management equipment was identified as a barrier to provision.<sup>4</sup> Other barriers identified were: a lack of the following: an agreed clinical pathway,<sup>1,4</sup> clinicians with specialist knowledge,<sup>1</sup> assessment equipment,<sup>4</sup> and assessment tools.<sup>2</sup> A lack of evidence in this area can make requests to fund equipment difficult due to the inability to justify.<sup>2</sup>

OTs who undertook postural management more often reported more confidence in all relevant skills, including assessment, intervention, carer education and providing written advice.<sup>4</sup> Together with experience, adequate post-graduate training was identified as something that helped OTs to implement 24-hour postural management.<sup>4</sup>

### Quality and completeness of the evidence

On balance, we are reasonably confident that we have included the current best evidence on this topic. However this evidence is limited, and some is of poor quality. The included reviews were intended to 'scope' the evidence available in this area rather than to assess the effectiveness of different approaches or equipment. The small pilot study was funded by a manufacturer of night-time sleep systems. It is hard to know whether the findings will apply more widely.

### Implications for practice

The paucity and quality of research means we should be cautious about how we use it to inform our decisions. However, the negative effects of gravity on body structures are well understood<sup>1,5</sup> and this understanding supports the need for interventions to address this.

### Prevention

A preventive approach, including early assessment, and an approach that considers both day and night-time needs could reduce the need for further specialist equipment.<sup>1,4</sup>

OTs should consider using postural support and seating equipment to increase participation in meaningful activities.<sup>3,5</sup> Good positioning may also reduce respiratory problems in people with multiple learning disabilities.<sup>5</sup>

## Training

Social care OTs would benefit from training in postural management and in the provision of suitable equipment<sup>1,2,3</sup> to ensure they are safe and effective practitioners. Checklists or screening tools would help OTs to identify needs.<sup>1,2</sup>

Formal carers, including care home staff, would benefit from training in using postural support equipment and in positioning techniques.<sup>1,2,3</sup> Informal carers would also benefit from education and support in this area.

## Service provision

To reduce confusion and prevent gaps in service provision, service leaders and commissioners across health and social care should clarify the roles of health and social care practitioners in postural care management of people in the community. For people with complex needs such as respiratory and tissue viability concerns, social care OTs need timely access to specialist physiotherapists and pressure care specialists to support a multidisciplinary approach to reducing risk of harm and arranging the most effective option for the service user.

Service leaders across health and social care should support increased communication and skills sharing when working with people with complex postural support needs. The Principal OT Network may be well placed to lead in developing a remit for the role of social care OTs in this area. A dedicated posture management service for example may meet this need.<sup>1</sup>

Equipment manufacturers should also work with service users and carers to make their equipment more acceptable.<sup>3</sup>

## Further information

Mencap provide services for people with a learning disability. They have resources to support understanding of postural care: <https://www.mencap.org.uk/learning-disability-explained/profound-and-multiple-learning-disabilities-pml/pml-postural-care>.

NHS Scotland has produced a Learning booklet on protection of body shape: [https://www.nes.scot.nhs.uk/media/dzwncusg/postural\\_care\\_learning\\_byte.pdf](https://www.nes.scot.nhs.uk/media/dzwncusg/postural_care_learning_byte.pdf)

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## References

<sup>1</sup>Osborne, L.J., Gowran, R.J. & Casey, J. (2023) Evidence for 24-hour posture management: A scoping review, *British Journal of Occupational Therapy*, 86(3): 176–187

<sup>2</sup>Robertson J, Baines S, Emerson E, et al. (2018) Postural care for people with intellectual disabilities and severely impaired motor function: A scoping review, *Journal of Applied Research in Intellectual Disabilities*, 31(Suppl. 1): 11–28.

<sup>3</sup>Stephen,s M., & Bartley, C. (2020) Use of night time positioning equipment in care home residents with postural asymmetry: a pilot study, *Nursing Older People*, 32 (3): 17-24.

<sup>4</sup>Stinson, M., et al. (2021) Current clinical practice in 24-hour postural management and the impact on carers and service users with severe neurodisability, *British Journal of Occupational Therapy*, 84(6): 355-365.

<sup>5</sup>Public Health England: Postural care and people with learning disabilities: guidance <https://www.gov.uk/government/publications/postural-care-services-making-reasonable-adjustments/postural-care-and-people-with-learning-disabilities#fn:2>