

# Physiotherapy Staffing Recommendations for Neonatal Units in England

September 2018

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## Background

In the past neonatal care has concentrated on improving survival. As more babies are surviving we are now striving for high quality outcomes and these cannot be achieved by medical and nursing staff alone. Essential contributions are made by allied health professionals (AHPs) with specialist expertise in their discipline for optimising care to and improving outcomes for high risk neonates. The vulnerability and complexity of preterm infants demands a multi-disciplinary approach to neonatal care to ensure outcomes are optimised (Doyle et al 2014). The early involvement of key professions in the care and management plans enhances clinical effectiveness, impacts on length of stay, enhances therapeutic interventions, helps avoid complications and improves longer term neurodevelopmental outcomes. Early diagnosis of motor problems ensures the infant can receive diagnostic-specific early intervention and surveillance to optimise neuroplasticity and prevent complications (Novak 2017). Neuroscience evidence indicates that brain development and refinement of the motor system continue postnatally, driven by motor cortex activity. Early active movement and intervention are essential because infants who do not actively use their motor cortex risk losing cortical connections and dedicated function (Eyre 2014, Marin et al 2011).

The NHS England Critical Care Review Group found that most neonatal units had some input from AHPs as recommended in the Department of Health Neonatal Toolkit (2009). Some were happy with their level of service but many had concerns about the provision of these services. It is also essential that AHP services accessed by neonatal teams have appropriate training and expertise in neonatal practice, and at present this is not always the case.

Whilst neonatal physiotherapists have carved out a key role for delivering input to this patient population, it is also recognised that all neonatal healthcare professionals will be expected to have a range of common core skills and there will be considerable professional overlap (Barbosa 2013). This is an advantage in the delivery of neonatal care. A multi-disciplinary model of team-working is particularly economical and effective when working with infants who have a relatively uncomplicated range of abilities compared to adults. This means that the different disciplines can agree to share and overlap core skills in order to simplify services for families. Although different professional roles may overlap, each profession brings to those roles their own perspectives and skills which adds a richness of knowledge and experience to the team. The range of practice for each profession will be influenced by the presence or absence of other allied health professionals and the skills they bring to the team.

There is now a need for more detailed recommendations on AHP staffing ratios for neonatal units across the country, as highlighted by the NHS England Neonatal Peer Review process, to assist with commissioning of new roles to ensure we can continue to strive for excellence in neonatal outcomes. This document will aim to specifically address physiotherapy staffing recommendations for neonatal units. The safety and effectiveness of services and patient care however, is influenced by far more than staffing numbers alone. Changes to patient need, service delivery model and skill mix have a big impact on the staffing required. A focus on a staffing number also detracts from the importance of a focus on the quality of patient outcomes. The National Quality Board (2017) states “There is no evidence base to support a specific ratio: instead staffing requirements should be decided using patient acuity and dependency data alongside throughput and the skills and experience of the wider multi-professional team”

It is important to note that because the evidence-base for staffing levels is not strong in this area, the purpose of the guidance is to give a baseline indicator based on professional consensus. This guidance should be used as a steer for local decision making, whilst considering the influence of a number of factors including case-mix, complexity, service delivery, community and acute models of care and workforce capacity. In each locality, the actual requirements could be higher or lower, and the questions below should help to clarify this further.

## Competence

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In 2011, the Association of Paediatric Chartered Physiotherapists (APCP) published a competence framework for physiotherapists working within the neonatal field, to provide them with clear guidelines about their expected role, standards of performance, and the knowledge and skills required to achieve quality care in this specialist field of physiotherapy practice.

The competence framework was developed on the basis of the results of peer-reviewed published work reporting practice-based competences, evidence based guidelines, and recommendations and input from a wide variety of key professional bodies and stakeholders.

The document states that the neonatal physiotherapist must possess advanced clinical competences to manage vulnerable infants, with complex medical, physiological, and behavioural conditions, who may inadvertently be harmed through examination and intervention procedures.

It is recommended that the neonatal physiotherapist should be at least Agenda for Change Bands 7 or 8 depending on the level of freedom to act autonomously and the knowledge, skill and experience required for the role. It also states that the NNU is not an appropriate setting for the entry-level graduate, physiotherapist generalist, or physiotherapy assistant to work independently without adequate supervision, in order to minimise risk to infants who may be potentially unstable. Sequenced, gradual entry to neonatal care for Band 5/6/7

physiotherapists who already have some paediatric experience is advised with individualised clinical education, observation and supervision by a clinician experienced in neonatal care. This is also important for sustainability and succession planning within the workforce. There are currently a number of short courses run by the APCP Neonatal Committee which provide a basic introduction to physiotherapists working with the neonatal population. In response to the new staffing level recommendations, this group will be carrying out a review of continued professional development opportunities available for physiotherapists working within neonatal care, with a view to formalising and standardising this training.

## Benchmarking

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In 2017, a benchmarking survey was carried out by Emma Foulerton and Chris Jarvis to look at current AHP provision in neonatal units across England. The recent neonatal Peer Review process identified a number of serious concerns regarding poor AHP provision. Existing data does not appear to represent the disparity in services that are provided, and those which are funded. The driver for the benchmarking project was to understand the current level, funding and quality of provision, in order to inform the development of future guidelines and recommendations.

78% of all AHP respondents reported current levels of provision are insufficient to run a service and only 19% of responding units have a funded physiotherapy service. The results also showed there is significant disparity in the access and quality of AHP services. There is a considerable reliance on “goodwill gesture” which is unsustainable. This approach lacks standardisation and staff delivering an un-funded service are less likely to be specialists in their field, and do not reach the standards required by existing publications.

This guidance aims to address these issues by providing robust staffing recommendations for neonatal physiotherapists working in the neonatal setting.

## Staffing Considerations

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When planning staffing levels for neonatal physiotherapy, the following should be taken into consideration:

(**NICU** – Neonatal Intensive Care Unit, **LNU** – Local Neonatal Unit, **SCU** – Special Care Unit)

	NICU tertiary	NICU	LNU	SCU
Size of unit	✓	✓	✓	✓
Specialist services involvement eg cardiac, surgical, neurology, cooling centre	✓			
Provision of full service i.e. respiratory, MSK, orthopaedics, neurology, neurodevelopmental	✓	✓	✓	
Role of PT in provision of developmental care	✓	✓	✓	✓
Oncall/weekend respiratory service provision	✓	✓		
Skill mix within team e.g. provision for multiple PTs at different bands	✓	✓	✓	
AHP provision on unit	✓	✓	✓	✓
Lead unit within ODN - network support considerations	✓	✓		
Neurodevelopmental follow up clinics	✓	✓	✓	✓

### Size of Unit

The WTE ratio per cot will help determine the physiotherapy staffing requirement based on the number of cots on the unit.

### Specialities involved

Units with specialist input e.g. cooling centres, surgical centre, specialist neurology services etc are likely to have patients with higher acuity and more complex therapy needs.

### **Provision of a full service**

If all aspects of neonatal physiotherapy service provision e.g. respiratory, MSK, orthopaedics, neurology, neurodevelopmental etc are to be covered by the neonatal therapist a higher WTE will be required compared to if some aspects of service provision are already provided by existing posts.

### **Respiratory physiotherapy service provision**

If the unit currently has a weekend/oncall service, then time needs to be allocated for appropriate training for staff on the rota. For units that do not have a physiotherapy-led out-of-hours service, consider the time required for appropriate training for nursing staff to ensure the safe delivery of this service.

### **Skill mix**

For all units, it is important to consider skill mix within provision to raise awareness of neonatal Physiotherapy and upskill the next generation of neonatal physiotherapists. It is also important that there is adequate skilled cover for leave.

### **Outpatient clinics**

Consider if these clinics are covered by acute or community therapists, and what AHP representation is within these clinics (refer to NICE Guidelines). These may include high risk neurodevelopmental follow up clinic, and any specialist neonatal neurology clinics etc.

### **AHP provision on the unit**

Look at skill mix of AHP team on the unit. Utilise all professions and consider how occupational therapist and physiotherapists in particular can work alongside each other to deliver appropriate neurodevelopmental input and well as utilise their own specialist set of skills.

### **ODN support**

Consider the role the therapy team may need to play in providing support to other units within the local operational delivery network (ODN) (see Network Role section within this document). If units are looking to increase physiotherapy staffing, it is imperative that the network role is in place first to provide expert support, education and training.

## Recommendations

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Following a review of current published documents pertaining to neonatal AHP staffing levels, our own service benchmarking and peer consensus, our staffing ratio recommendations are as follows:

Staff grade	WTE per cot
7/8a	0.03-0.05

Tertiary NICUs should have a dedicated neonatal Physiotherapist (band 7 or 8a depending on level of autonomy and extent of role provided) plus a band 6 (where higher staffing levels are required). This role may include time allocated for network role (see relevant section below).

NICUs should have a dedicated neonatal Physiotherapist (band 7 or 8a) plus a band 6 (where higher staffing levels are required)

LNUs should have designated time of a Physiotherapist (Band 7 or 8a) with specialist neonatal training (part-time or full time depending on unit size and demand).

SCU should have designated time of a Physiotherapist (Band 7 or 8a) with specialist neonatal training (part-time or full time depending on unit size and demand). It may be worth considering a split post with two different hospitals within a network, or as additional funding for the network lead to cover smaller units if it is not feasible to cover locally with appropriately trained staff.

All neonatal physiotherapists must have access to appropriate clinical supervision (whether internal or external).

The calculation's viability was checked by members of the APCP Neonatal Committee, alongside the available benchmarking data and it was felt the above ratios were accepted as an appropriate amount of physiotherapy input.

## Neonatal and High Risk Neurodevelopmental follow up

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Neonatal physiotherapy will be required for specialist and detailed assessment of infants attending neonatal and high risk neurodevelopmental follow-up services as outlined in the NICE quality standard published in 2017.

Consultation and advice regarding promoting infant development will be provided within the follow-up clinic model, as well as expert screening for emerging neurodevelopmental concerns.

Depending on the numbers for follow up and the structure of clinic, it is recommended that 0.15WTE Band 7/8a neonatal physiotherapist per half day clinic is required. This should be delivered by a physiotherapist with appropriate neonatal expertise

## Network Role

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It is essential when planning physiotherapy services to a specific neonatal unit to look at the unit as part of the relevant locally managed ODN. Workforce figures should include an additional time allocation for a band 8a clinical lead for physiotherapy across the Network. Many units, especially SCU's, have no physiotherapy provision at all, and those that do, often have only 'ad hoc' input, not designated funded hours. This therefore means that the physiotherapists inputting into these units may not have the necessary expertise when treating this patient population, and have less opportunity to maintain their competencies.

A Network post would involve individual complex patient support, clinical supervision, travel to local units and on-going support and education of unit physiotherapists over and above that provided at unit level, but wouldn't provide a clinical service where none is funded (unless this was negotiated with separate additional funding). The post would be best placed in a NICU, where the post holder would have clinical hours, and likely to be the lead unit within the ODN.

Workforce requirement will depend on the size of the Network and the amount of physiotherapy time and expertise in other units. Through peer consensus and expert consultation, 0.2wte band 8a Specialist Neonatal Physiotherapist for every 10,000 births within the network would be a justifiable recommendation for staffing this network role.

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*On behalf of the Association of Paediatric Chartered Physiotherapist Neonatal Committee and endorsed by the Chartered Society of Physiotherapy.*

