Physiotherapy Staffing Recommendations for Neonatal Units in the United Kingdom

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Background

Recent advances in healthcare and technology have led to improvement in neonatal care, survival rates for children born preterm, and those born at term age who are sick. A comprehensive and collaborative approach to care is essential to improve outcomes and experiences for children and families on the neonatal unit and after discharge home.

Allied Health Professionals (AHPs) offer expert therapeutic contributions to neonatal care, with specialist expertise in their own individual disciplines. The early involvement of key AHPs enhances clinical effectiveness, impacts on length of stay, enhances therapeutic interventions, helps avoid complications and improves longer term neurodevelopmental outcomes (Doyle 2014).

Neonatal AHPs have many shared role objectives focussing on promoting and enhancing developmental, psychological and nutritional outcomes for infants through evidence-based therapeutic approaches to care. The first few years of a child's life are a critical time to promote health and well-being, with infants being particularly susceptible to the influence of their environment during this time.

Early identification of movement and developmental difficulties ensure the infant can receive diagnostic-specific early intervention and surveillance to optimise neuroplasticity and prevent further complications (Novak 2017). 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, Martin et al 2011).

Family Integrated Care (FiCare) interventions aim to promote a culture of partnership between families and staff (BAPM Framework, 2021). In addition, interventions to optimise neurodevelopmental outcomes for infants look collectively at the infant's experience of their environment (Soni et al 2021) and neuroprotective measures (Altimier et al 2016). Interventions supporting families to become knowledgeable and confident in caring for their baby are also led by AHP teams. Examples include; skin to skin contact, positioning and handling, infant communication, breast milk, breast feeding and nutrition, non-pharmacological methods of pain relief and reducing stress. The team can lead and facilitate a therapeutic approach to care to ensure infants, families and staff are supported to provide the best possible developmental environment for all infants; optimising short, medium and long-term outcomes.

Recognition of the need for Allied Health Professional (AHP) integration into clinical and network neonatal services has been highlighted over many years with the recent development of important workforce recommendations (See Table 1). In addition, NHSE

funding has led to the development of Neonatal Network roles for AHPs (2021) and supported growth of AHP services at unit level (2022).

Three year delivery plan for maternity and neonatal services (2023)	 2.6 It is the responsibility of trusts to undertake regular local workforce planning, where trusts do not yet meet the staffing establishment levels achieve fill rates by 2027/28 2.7 It is the responsibility of ICBs to commission and fund safe staffing across their system.
BAPM Quality Standards 2022	Section 7 Allied Health Professionals - detailed support of our professional neonatal physiotherapy staffing recommendations
GIRFT workforce report (2022)	Recommendation 2a - Match AHP, pharmacy and psychology workforce action plans against professional staffing standards, using GIRFT data where appropriate. Identify gaps and develop business cases to improve resourcing. Recommendation 2d - Ensure neurodevelopmental follow up clinics have appropriate AHP staffing and resourcing as recommended in the NICE guideline NG72
Implementing the recommendations from the Neonatal Critical Care Review (2020)	NHS Trusts should develop an AHP strategy as part of workforce planning which sets out the level and expertise of pharmacy and AHP required, the level currently available, and how any gaps will be filled ODNs, with support from NHS providers, Maternity Clinical Networks and LMSs should identify where action needs to be taken at ODN level and assist in directing resources to the appropriate places
THE BEST START A Five- Year Forward Plan for Maternity and Neonatal Care in Scotland (2017)	Best Start also recognised the important contribution that an effective and highly specialist AHP service can make to improve outcomes for high-risk neonates. The report recommended (see recommendation 47) that a framework for consistent and equitable speciality AHP support be provided for neonatal units. It was also recommended that a national Framework for Practice should be developed which outlines clear pathways for newborn care and also supports the development of consistent and equitable specialty AHP outreach support for local neonatal units from larger units.
Developmental follow- up of children and young people born preterm NG72 (2017)	Multidisciplinary teams delivering enhanced developmental support and surveillance for children born preterm should include at least one of occupational therapist, physiotherapist and speech and language therapist

Table 1 National documents with recommendations relevant to neonatal physiotherapy staffing

Physiotherapists have a key role within neonatal care and it is also recognised that all neonatal AHPs will be expected to have a range of common core skills with many shared strategies. Together AHPs provide a holistic approach to working with infants and families both on the neonatal unit and after discharge home (Barbosa 2013). A multidisciplinary model of teamworking is particularly economical and effective meaning that the different professions can work together to support infants and 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 purpose of this guidance is to give a baseline indicator based on professional consensus. This document can be used to support decision making at unit, LMNS, network and regional level.

Competence

In 2011, the Association of Paediatric Chartered Physiotherapists (APCP) published a competence framework for physiotherapists working within the neonatal field. This provided clear guidelines about the expected role, standards of performance, and the knowledge and skills required to achieve quality care in this specialist field of physiotherapy practice. This was superseded in 2020 with the publication of "Guidance for Good Practice for Physiotherapists Working in Neonatal Care".

The Guidance for Good Practice document states that the neonatal physiotherapist must possess advanced clinical competences to manage vulnerable infants with complex medical, physiological, and behavioural conditions.

It recommends that the neonatal physiotherapist should be at least Agenda for Change band 7 or 8a depending on the level of freedom to act autonomously and the knowledge, skill and experience required for the role. Given the complexity of infants cared for on a level 3 (neonatal intensive care) unit, a band 8a clinical specialist neonatal physiotherapist is expected in this setting. The Guidance for Good Practice 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, to minimise risk to infants who may potentially be 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, and rotational posts at Band 6 level are strongly recommended.

NHS England have funded the development of e-learning modules for neonatal AHPs with specific modules for physiotherapists to support education in this specialist field. The modules are available to access on the eLearning for Healthcare (eLfH) platform and are free for those in UK. The APCP offers face to face study days to consolidate this online learning.

Neonatal Physiotherapy Career Progression

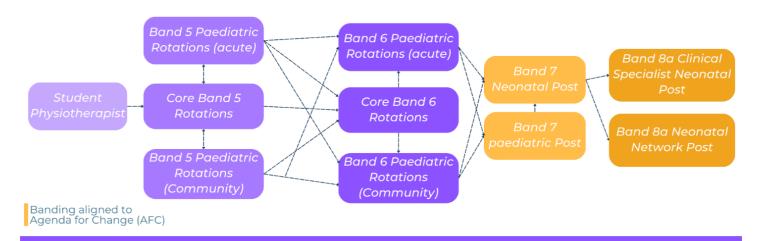


Figure 1: Neonatal Physiotherapy Career Progression

Service provision

Neonatal Services differ from adult and paediatric provision. Services are designed to meet the needs of every infant cared for on the neonatal unit and do not rely upon individual referral. Universal services are required to support embedding principals of care that optimise outcomes for all infants. Targeted services identify groups for whom specific pathways are relevant. Specialised services are required for infants with complex needs who require individualised care plans. See Figure 2: Embedding an AHP team.

Provision of a holistic neonatal physiotherapy service

It is important that all aspects of neonatal physiotherapy service provision are considered when establishing services, and holistic care needs of the baby are met e.g. respiratory, musculoskeletal, orthopaedics, neurology, neurodevelopmental etc. Posts should not be split to have different therapists delivering different specific aspects of care — all education available to neonatal physiotherapists supports this holistic delivery and should be reflected in job descriptions for these roles.

Occupancy

In many professions, particularly nursing, it is important to look at occupancy when reviewing workforce planning. For physiotherapists working in neonatal care, occupancy rarely reflects workload. Physiotherapists will support universal, targeted, and specialised services, which means regardless of the number of babies occupying the cots on the unit, many contacts and interventions will require the same time commitment. For example, provision of regular consistent parent teaching programme, wider involvement in MDT education structures, review and management of resources and equipment stores. In addition, demand for physiotherapy assessment and intervention in neonatal care can vary and is not determined by acuity or dependency. In order to maintain specialist skills and competency of individual therapists, and support sustainability of services, protected time for each post as recommended is essential.

Embedding an AHP Team



Figure 2 Embedding an AHP team

Recommendations

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

WTE per cot	0.05
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NICUs (level 3) should have a dedicated neonatal clinical specialist physiotherapist (band 8a) plus a rotational band 6 post. Larger units may also require support at a band 7 level.

LNUs (level 2) should have a dedicated neonatal physiotherapist (band 7 or 8a) with specialist neonatal training (part-time or full time depending on unit size and demand). Protected time to include band 6 rotational posts should be encouraged.

SCUs (level 1) should have designated time of a neonatal physiotherapist (band 7) with specialist neonatal training (part-time or full time depending on unit size and demand).

Transitional care (TC) cots are an established part of many neonatal services in the UK. Service configuration and delivery (in terms of caseload and criteria for transitional care services) are highly variable. Up to 0.05WTE per TC cot should be considered with specific attention to the set up of the unit, number of TC cots, criteria for transitional care and service expectations.

Depending on the unit size and local geography, it may be worth considering services being delivered over a wider footprint e.g. multiple units per hospital trust, or Local Maternity and Neonatal Systems (LMNS).

All neonatal physiotherapists must have access to appropriate clinical supervision and engage with support from their local neonatal network AHP leads. It is also important that undergraduate physiotherapists have exposure to the neonatal unit to support our growing workforce in this field. This may be part of paediatric placement opportunities, or consideration of AHP-wide placements on a neonatal unit.

Neonatal and High-Risk Neurodevelopmental follow-up service

Infants identified as high-risk for neurodevelopmental impairment will be eligible for surveillance by a neonatal physiotherapist as part of a wider MDT follow-up programme. Any infants meeting the criteria will be screened along their journey up to 2 or 4 years — according to NICE guidelines (NG72, 2017). Consultation and advice regarding promoting infant development should be provided within the follow-up clinic model, as well as expert screening for emerging neurodevelopmental concerns.

Any infants identified to have neurodevelopmental impairment should be referred to community services for early intervention but should also remain on the surveillance pathway until 2 or 4 years.

Local arrangements for a multi-disciplinary follow-up clinic will need to consider the numbers of infants and children eligible for follow-up and the structure of clinic, therefore dictating the number of clinics required per week.

It is recommended that 0.15WTE band 7/8a neonatal physiotherapist per half day clinic is required in order to meet both the clinical and administrative need. If the clinic is therapy led, this will require a band 8a physiotherapist.

Per half day follow-up clinic	0.15 WTE
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Network Role

It is essential when planning physiotherapy services to a specific neonatal unit to look at the unit as part of the relevant locally managed operational delivery network (ODN). A neonatal network physiotherapist offers support for complex clinical decision making, facilitating peer supervision, education, research and workforce planning but wouldn't provide a direct clinical service as a part of this role.

Workforce requirement will depend on the size of the network. 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.

Per 10,000 births across network	0.2 WTE
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APCP Neonatal Committee

On behalf of the Association of Paediatric Chartered Physiotherapists and endorsed by the Chartered Society of Physiotherapy and British Association of Perinatal Medicine



