Physiotherapy in Transitional Care

Neonatal Transitional Care services

BAPM produced a framework in 2017 for Neonatal Transitional Care (NTC). Transitional care supports a model of care where mothers can be the primary caregiver to keep mothers and babies together, for babies that have additional needs but do not need admission to the Neonatal Unit (NNU).

NTC is defined in the BAPM framework as "care additional to normal infant care, provided in a postnatal clinical environment by the mother or an alternative resident carer, supported by appropriately trained healthcare professionals". Infants that meet criteria for NTC include:

1. From Birth:
    a. Gestational age 34-35+6 weeks who do not meet criteria for intensive or high dependency care
    b. Birth weight >1600g and >2000g who do not meet criteria for intensive or high dependency care
    c. Risk factors for sepsis requiring IV antibiotics but clinically stable
    d. Congenital anomaly likely to require tube feeding
    e. At risk of haemolytic disease requiring immediate phototherapy
2. Additional care needs developing on the postnatal ward or at home:
    a. Inability to maintain temperature following an episode of rewarming and despite skin to skin contact and/ or adequate clothing
    b. Stable baby who has developed/ or been identified as having risk factors for sepsis requiring IV antibiotics
    c. Inability to establish full suck feeds; predicted to require 3 hourly NG tube fees
    d. Significant neonatal abstinence syndrome requiring oral medication or additional feeding support
    e. Haemolytic disease requiring enhanced phototherapy and/ or assessment of serum bilirubin 4-6 hourly
3. Babies readmitted from the community:
    a. Excessive weight loss and/ or poor suck feeding requiring complementary NG tube feeds
    b. Haemolytic disease requiring enhanced phototherapy and/ or assessment of serum bilirubin 4-6 hourly
4. Babies 'stepping down' from the NNU:
    a. Corrected gestational age >33 weeks and clinically stable
    b. Current weight >1600g and maintaining temperature
    c. Monitoring of vital signs required no more frequently that 3 hourly
    d. Tolerating 3 hourly NG tube feeds and maintaining blood glucose
    e. Stable baby with sepsis requiring ongoing IV antibiotics
    f. Continuing phototherapy when serum bilirubin has stabilised following IV immunoglobin or exchange transfusion
    g. Additional needs (e.g. NG feeding, home oxygen) rooming in before discharge
    h. Palliative care when parent/ carer doing most of the care

Role of the neonatal physiotherapist in NTC

NTC service delivery varies across hospitals with regards to location, facilities, criteria and staffing structure therefore discussions around physiotherapy provision for transitional care should be individualised to each hospital. Physiotherapy Staffing Recommendations for Neonatal Units in the United Kingdom (APCP, 2023) recommend up to 0.05 WTE per transitional care cot should be considered dependent on service delivery.

Authors: Maria Furtado & Anna Lukens (Lead Physiotherapists, London Neonatal ODN)
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Neonatal physiotherapists have specialist skills to support the neurodevelopment for high risk infants who may be admitted to transitional care, as well as provide education and support around universal practices such as Family Integrated Care and Developmental Care. Family centred care is integral within NTC, keeping mothers and babies together and ensuring parents are partners in care (APCP 2023).

Specialised	**Neurodevelopmental / Neurological** Infants with neurodevelopmental or neurological concerns that no longer require high dependency or intensive care management but have additional needs prior to discharge home. This may include infants with brain injuries (such as HIE, IVH grades III/IV, stroke), atypical tone, congenital or genetic diagnoses that may impact on their development, or significant neonatal abstinence syndrome. ○ Specialist assessments to identify any potential early difficulties and form part of an overall developmental picture of an infant ○ Individualised early intervention programme, including advice regarding tone management, positioning, etc. ○ Education and support for MDT management ○ Discharge planning, including onward referral for community physiotherapy support following discharge **Palliative care** Infants on palliative pathway where parents are independent with cares prior to discharge home. ○ Assessment and support for positioning and handling for comfort. **Musculoskeletal / Orthopaedic** Infants with congenital musculoskeletal or orthopaedic conditions such as Obstetric Brachial Plexus Palsy (OBPP), Congenital Talipes Equinovarus (CTEV), scoliosis, Developmental Hip Dysplasia (DDH), etc. ○ Assessment and early management advice ○ Identification for referral to specialist services
Targeted	**Neurodevelopmental / Neurological** Infants that meet "at risk" criteria for neurodevelopmental or neurological difficulties, managed on transitional care unit as no longer require high dependency or intensive care. This may include infants born very preterm (<32/40), with IUGR, or other comorbidities. ○ Standardised assessments and individualised advice to support neurodevelopment ○ Safe sleep guidance and support for discharge with consideration of onward referral to community physiotherapy support if required **Feeding support** Infants where suck feeding can be challenging due to postural instability, tone or motor difficulties. ○ Work alongside the MDT to provide appropriate positioning and motor strategies to support suck feeding and energy conservation
Universal	**Family Integrated Care** ○ Supporting with training and education to parents, carers and staff on family integrated care principles for optimising neurodevelopmental outcomes **Developmental Care (including safe sleep)** ○ Involvement in promotion of developmental care principles to optimise neurodevelopment in the late preterm infant ○ Advice and education on promoting optimal developmental environment including neuroprotection for the late preterm infant ○ Staff education regarding developmental care strategies, recognising neurodevelopmental difficulties, optimising neurodevelopmental outcomes **Neurodevelopment** ○ Access to assessment and early intervention for any infant at risk of

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	neurodevelopmental difficulties on the neonatal unit ○ Contribution to information for all users in TC to optimise development e.g. safe sleep, early developmental input for the late pre-term **Quality Improvement/ Benchmarking** ○ Contribution to quality improvement projects specific to support for the late preterm infant on transitional care ○ Able to gather appropriate data to benchmark physiotherapy services within transitional care

BAPM: A Framework for Neonatal Transitional Care; October 2017
APCP: Physiotherapy Staffing Recommendations for Neonatal Units in the United Kingdom; July 2023
APCP: Guidance for Good Practice for Physiotherapists Working in Neonatal Care; 2020

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