East of England Neonatal ODN
(Hosted by Cambridge University Hospitals)

1. Infant and Family Centred Developmental Care Toolkit: Introduction.

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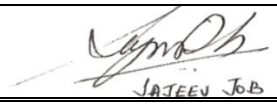
Used by: This toolkit is intended for all healthcare professionals and staff working within the neonatal unit. The principles outlined should also be shared with parents, supporting a collaborative approach to caring for premature or unwell infants.

Key Words: Infant and Family Centred Developmental Care (IFDC/IFCDC), Neonatal Integrative Developmental Care Model Preterm infants, Neurodevelopment, Neuroprotective care, Behavioural cues, Environmental modification, Parent involvement, Skin-to-skin care, Developmental outcomes.

	Contents	**Date of Ratification**	**Registration No:**	**Review due:**
1	Introduction and Frameworks for Practice	March 2025	**NEO-ODN-2025-28**	March 2028
2	Individualising Care- Behavioural Cues	September 2025	**NEO-ODN-2025-27**	September 2028
3	Partnering with Families	March 2025	**NEO-ODN-2025-30**	March 2028
4	Healing Environment	September 2025	**NEO-ODN-2026-3**	March 2028
5	Skin to Skin	March 2026	**NEO-ODN-2026-4**	March 2029
6	Positioning and Handling	December 2025	**NEO-ODN-2025-32**	December 2028
7	Minimising stress and pain	June 2026 (pending)		
8	Safeguarding Sleep	June 2026	**NEO-ODN-2026-17**	June 2029
9	Protecting Skin	December 2025	**NEO-ODN-2025-33**	March 2028
10	Optimising Nutrition	March 2025	**NEO-ODN-2025-34**	March 2028
Approved by:	Neonatal Clinical Oversight Group	Clinical Lead	Sajeev Job	

Audit Standards: Refer to specific audits for related ODN guidelines and sections of the toolkit.

Purpose: To provide clinical guidance and resources to supports consistent delivery of Infant and Family Centred Developmental Care (IFDC) practices across the Network. *(The toolkit should be used alongside published BAPM Developmental care guidance, pending.)* The care interventions/recommendations presented in this guideline are not intended to be prescriptive, but to support health care professionals to deliver individualised, age-appropriate developmental care within their own area of practice.[13]

Neonatal caregivers should seek further specialist support from the multidisciplinary team if required.

How to use this Toolkit:

This toolkit, compiled for the East of England Neonatal Network, has been organised using the structure of the Neonatal Integrative Developmental Care Model- a holistic and multi-professional framework which highlights the overlapping elements of IFDC and Neuroprotective measures.

Evidence and resources have been collated to provide ease of access and the promotion of additional guidelines to support practice. For example, the Optimising Nutrition section provides an outline of the current evidence and links to relevant the East of England ODN nutrition and feeding guidelines.

Introduction

Advancements in neonatal care have significantly improved the survival rates of preterm infants. As neonatal technology, medical practices, and care protocols have evolved, infants born as early as 22 to 24 weeks of gestation are increasingly surviving. Recent data indicates that approximately 7.9% of live births in England and Wales were preterm in 2022, marking an increase from 7.5% in 2021. [1] This upward trend has been observed since 2020, reversing a period of consecutive decreases.[2]

Despite these improvements, infants born extremely preterm, particularly those born before 28 weeks, remain at heightened risk for serious complications, including brain injuries, respiratory problems, and long-term developmental delays. Recent reports indicate that compared with their peers born at term (≥37 weeks),even children born moderately or late preterm are at higher risk of neurodevelopmental disabilities, with impaired cognition, impaired language and motor function, lower social-emotional competence, and higher risk of poor school performance. This presents significant consequences for neonatal medicine, public health and education services. [3]

The expected environment of the developing foetus is characterised by a supported flexed posture; containment, limited light and noise exposure, protected sleep cycles and unrestricted access to their mother. This positive sensory environment is crucial for

optimum brain development. In contrast, the neonatal unit presents many developmental challenges.

Infants and parents are physically separated for long periods, which alone is challenging for the developing brain and can impact on both infant and parent well-being. [4]

Premature birth disrupts the typical trajectory of brain maturation. Infants are born before their brains have fully developed the structures and networks needed for optimal functioning, making them particularly vulnerable.

During a period of rapid brain development infants are repeatedly exposed to essential, yet stressful, experiences which makes them vulnerable to neurological changes and damage, thus influencing developmental outcomes.

Health care professionals are challenged to provide care which is responsive to an infant's immediate medical needs whilst proactively mitigating the impact on long-term outcomes. Frameworks of practice have been developed to incorporate such care strategies to reduce toxic stress [8,9] and promote neurological and psychological development.

Frameworks for practice

The **'Infant and family-centred developmental care' (IFCDC)[7]** is a descriptive term for a framework of newborn care that incorporates the theories and concepts of neurodevelopment, neuro-behaviour, parent-infant interaction, parental involvement, breastfeeding promotion, environmental adaptation, and change of hospital systems. It is based on the leading-edge work of Als [5] and her colleagues in the NIDCAP Federation International (NFI) and Brazelton and on the World Association for Infant Mental Health Declaration of Infants' Rights. [5,6,7]

IFCDC incorporates key themes:

- Behavioural observation
- Adaptation of caregiving (including reduction of stress and pain)
- Environmental modifications
- Parent participation.

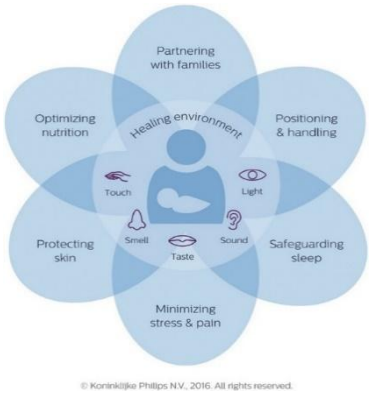
While there are standard operating procedures (SOP) and guidelines for specific medical procedures and processes. IFCDC relies on reading the baby's behaviour within the context of their gestational age, medical status, family availability and neurodevelopmental expectation. Thus, it moves away from the use of gestational age based protocols and rather considers the unique individuality of each infant and their family.[10]

It is expected that all Neonatal clinical staff should receive specific training on Infant and Preterm Behaviour, individualising care and developmentally supportive approaches and as part of their core learning provided either as part of a unit teaching programme or within specialist training [12]. *(See Individualising Care- Behavioural Cues section)*

The Neonatal Integrative Developmental Care Model [11]

The Neonatal Integrative Developmental Care Model, outlines seven core measures for neuroprotective family-centred developmental care of premature infants, and is a framework that guides clinical practice in many neonatal intensive care units (NICUs) around the globe.
The Neonatal Integrative Developmental Care Model utilizes neuroprotective interventions as strategies to support optimal synaptic neural connections, promote normal neurological, physical, and emotional development and prevent disabilities.
Skin to Skin Care (SSC) is central to the model and considered the foundation for care of infants in the NICU.
The mother(parent)/child dyad is the centre of the lotus surrounded closely by symbols representing various aspects of the *Healing environment,* highlighting the physical, extra-uterine environment in which the infant now lives, the significance of the developing infant's sensory system, and the influence of people (patient, family, and staff) who help to create a healing environment for hospitalized infants and their families.
The seven neuroprotective core measures, depicted as overlapping petals of a lotus are:

1) Healing environment
2) Partnering with families
3) Positioning & handling
4) Safeguarding sleep
5) Minimizing stress and pain
6) Protecting skin
7) Optimizing nutrition.



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Exceptional Circumstances Form

Form to be completed in the **exceptional** circumstances that the Trust is not able to follow ODN approved guidelines.

Details of person completing the form:	
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