Fragile Infant Forums for Implementation of IFCDC Standards: Reflections from Gravens 2023

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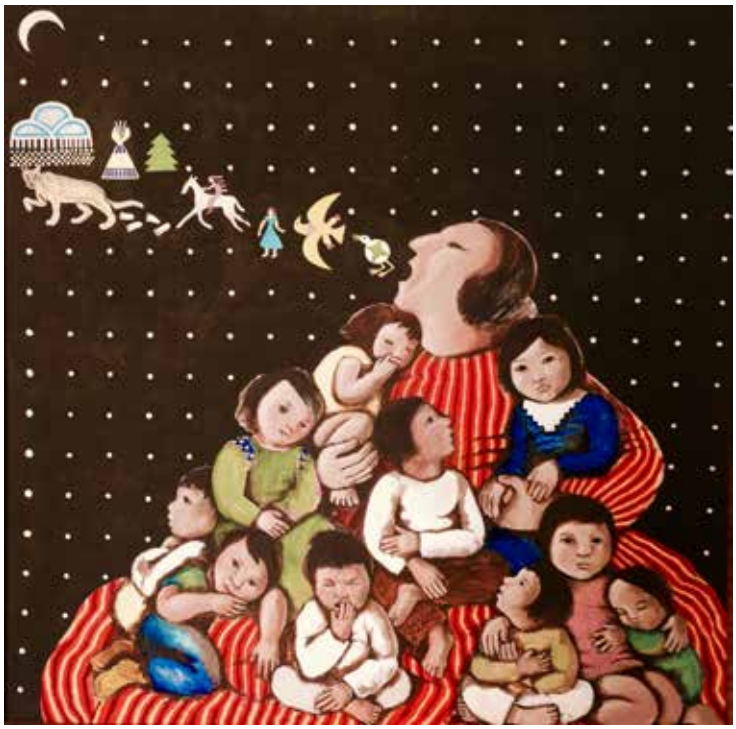

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Background and purpose of the Gravens workshop on IFCDC Standards implementation:

The recommended Standards, Competencies, and Best Practices for Infant and Family Developmental Care in Intensive Care (IFCDC) are based on the mounting evidence of the neuroprotective aspects of care and the importance of supporting infant and parent mental health. The standards provide essential evidence for achieving excellence in practice, including responsiveness to the baby's behavioral communication and keeping the nurturing relationship of the parent(s)/family as central to managing and delivering care.

"….the message and interaction of the baby and parents can no longer be viewed as "additional" or "optional," but should be integrated as an essential part of medical management, and caregiving for babies and their families." https://nicudesign.nd.edu/nicu-care-standards/introduction/

IFCDC principles cannot be operationalized without integrating systems thinking, as all policies and practices are only effective with supportive policies, procedures, and values. For every practice change, attention to how the system develops strategies to support and monitor healthy physiological and neurodevelopmental outcomes is necessary.

Increasing interest in implementing the IFCDC Standards has prompted efforts to integrate evidence-based practices nationally and internationally in NICUs. The Gravens 2023 workshop held in March offered an opportunity to examine several exemplars of IFCDC standard implementation using systems thinking.

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The following three national and international exemplars demonstrate many challenges in implementing standards, particularly during the recent pandemic. They also describe opportunities for systems-level collaborative work.

Exemplar: Ghent Belgium NICU, Geert Lingier, Head Nurse

The NICU in the University Hospital of Ghent - Belgium, is a level III-IV unit operating in a ward model with limited bedside space. Despite the limited area per bedspace, parents and siblings are always welcome. A subunit was recently put into operation where parents can be permanently present and actively involved in care according to IFCDC principles. The service will be integrated into a new hospital, and couplet care will be implemented.

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Implementation practices and outcomes during the COVID pandemic: When the COVID pandemic erupted in March 2020, our unit, like many other centers, faced many questions regarding babies and families being together. A task force was quickly developed and charged with addressing the frequently changing pandemic conditions. Many internal task force members represented pediatric, intensive care, and government settings. As guidelines

changed regularly, at least eight different internal versions of the recommendations were published, each based on evidence and in close consultation with the hospital's infection prevention department.

During the pandemic, policies and practices included having parents consistently welcomed in the department with kangaroo care and breastfeeding continuing unabated. For siblings and other visitors, especially during the peaks of the COVID waves, there were periodically some restrictions.

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The COVID screening policy consisted of testing all outborn babies or if the mother, who was systematically screened at delivery, had a positive COVID PCR test. Parents were only required to be tested in case of COVID symptoms, and there were no requirements for vaccination. There was a vaccination rate of more than 95% among staff members, and there were COVID outbreaks consistent with the pandemic surges.

Since the start of the pandemic, 1800 patients have been admitted to the NICU at UH Ghent with years with positive COVID PCR tests in only eight patients. Seven positive samples were detected in outborn babies and children outside the unit. Only one patient acquired the infection on the unit, linked to a positive test of his mother, who was also symptomatic. The baby who tested positive was born at 25 weeks and required some respiratory support (CPAP) to be restarted; however, not necessarily linked to the COVID infection.

Evidence versus emotion:

Not all neonatal units in Belgium followed a similar policy. Very often, strict rules were imposed on parents on the advice of infection prevention services; reduction in being with their baby, less frequent kangaroo care, and restrictions on breastfeeding. These rules were often motivated by emotion, general global panic, and less by evidence. The results of these policies implemented IFCDC principles at a low priority during the pandemic.

Based on our experience, frequent adjustments to the available COVID evidence resulted in minimal COVID-positive PCR testing in our patients. It resulted in the continued application of IFCDC principles, where parents were continuously involved in caring for their babies in much the same way as before the pandemic. Our approach consistently puts evidence at the forefront, as the IFCDC Standards describe. Our practice appeared to have been correct.

Among many other lessons, the COVID pandemic taught us that the maximum pursuit of scientific evidence in our care is the optimal approach. The IFCDC standards can be seen as a handhold in the permanent search for evidence-based practice, particularly emphasizing seeing parents as primary caregivers for their babies.

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Exemplar: New Zealand NICU, Dale Garton, Nurse Manager

To achieve a persistent change in the culture of care in the Auckland, New Zealand NICU toward implementing the IFCDC standards, the multidisciplinary NICU team and the organizational 'system' needed to improve family integration into their baby's care. Developmental care (DC) practices already employed by staff and therapists could be termed, at best, as a *generalist approach.* The approach depended on individuals' skills and knowledge rather than agreed standards of care supported by Clinical Guidelines, audits, and outcomes. In the past few years, there have been no real efforts towards significant change despite a core staff experiencing educational approaches such as the Family and Infant Neurodevelopmental Education (FINE).

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Implementation during the COVID-19 pandemic:

The healthcare climate was demanding during this time, as there was a global pandemic, and staff turnover was at an all-time high. However, during the demands of COVID responsiveness, staff were challenged to become more resourceful, resilient, and agile resulting in opportunities to introduce change.

In 2021 there was also a momentous overhaul to the New Zealand Healthcare system, providing a solid foundation for integrat-

ing whānau into NICUs. The healthcare changes meant that all 20 District Health Boards throughout New Zealand (regional) were abolished and replaced with one healthcare entity called - Te Whatu Ora, which partnered with Te Aka Whai Ora **(**Maori Health Authority)**.** Te whatu ora in the Maori language interprets as '***the weaving of wellness.'*** This new system in healthcare demanded actions to be delivered as agreed in Te Tiriti o Waitangi, a founding document signed between the British crown and Maori people in 1840.

Culturally appropriate systems-level changes:

Using the IFCDC principles, particularly Recommendations for Best Practices in Systems Thinking https://nicudesign.nd.edu/nicu-care-standards/ifcdc--recommendation-for-best-practices-in-systems-thinking/, we developed an approach titled "Whānau Haumaru Kotahi (Family Integrated Care)." The word whānau is Māori, the indigenous peoples of Aotearoa (New Zealand). Whānau translates as 'family,' but its meaning is more complex. It includes physical, emotional, and spiritual dimensions and is based on whakapapa (descendants).

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The Te Tiriti o Waitangi underpinning principles of partnership, participation and protection are sustained by the IFCDC standards and competencies. This synergy enabled us to translate the importance of integrating whānau in a way that made sense in Te Whatu Ora (New Zealand healthcare system). Our collaboration with whānau can be best described using the Māori word whanaungatanga. This word is defined in the Māori dictionary as "a relationship through shared experiences and working together which provides people with a shared sense of belonging."'

Implementation of IFCDC practices and progress:

To implement Whānau Haumaru Kotahi (Family Integrated Care), we reviewed the IFCDC standards and competencies--well supported by strong evidence-based references. Most research was carried out in other parts of the world and different healthcare systems, so we needed to find a way to adapt and translate them for NICU whānau in New Zealand.

Implementing Whānau Haumaru Kotahi has included in-house orientation and staff training and supporting them financially to participate in the online FINE training. Quality cycles have been initiated to measure success or to re-evaluate. Progress has been slow but consistent, hampered by the ongoing challenge of staff turnover and the necessary COVID response in New Zealand that had a significant impact in 2022. To date, the IFCDC standards and competencies are utilized and include Te Tiriti o Waitangi principles to measure progress.

Exemplar: Loma Linda University Raylene Phillips, Medical Director NICU, Loma Linda University Hospital, Murrieta

Our experience has taught us that the level of support from NICU and hospital administration is directly related to the success of our Neuroprotective Infant and Family-Centered Developmental Care (IFCDC) program. Strong NICU Director support protected time for a developmental care nurse and encouraged an active committee of nurses, therapists, and physicians who worked on QI projects to improve IFCDC.

Systems and management change:

Effects on implementation:

Without administrative support for IFCDC and when nursing management changed, the developmental care nurse no longer had protected time, NICU nurses were assigned to general pediatrics, and pediatric nurses unfamiliar with the importance of IFCDC were assigned to the NICU. The IFCDC program was heavily impacted as many gains in positioning and handling, infant-led feeding, parent-infant interactions, and other important aspects of IFCDC were lost.

The impact of COVID-19 on IFCDC implementation:

The COVID-19 pandemic brought another blow to IFCDC when parental presence was severely limited in the large Level 4 NICU of our regional children's hospital. The administration chose to ignore a recommendation by our state Public Health Department that during the pandemic, parents of NICU and PICU patients be allowed to be present at their child's bedside together, allowing support to each other during the family's NICU crisis. However, administration at the small Level 2 NICU community hospital, never restricted parents from being with their babies.

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During the pandemic, the World Health Organization identified the danger in separating newborns from their parents and the safety of keeping them together under most circumstances https://news.un.org/en/story/2021/03/1087442#:~:text=The%20UN%20World%20Health%20Organization%20%28WHO%29%20on%20Tuesday%2C,by%20keeping%20them%20together%20to%20ensure%20skin-to-skin%20contact. In our larger NICU, only one parent was allowed at their baby's bedside for a short time each day. If they left the unit for any reason (for food or restroom), they

were not allowed to return that day. The cost to babies deprived of their parent's presence during this time is incalculable, and the trauma for parents was significant.

Support for IFCDC Before and During the Pandemic

Both before and during the pandemic, an important strategy for effective change has become apparent. Implementing any change towards IFCDC must not only focus on the NICU but should incorporate the people making decisions that affect how we care for babies and families in intensive care. Administrators' and managers' decisions affect financial resources for space and equipment, time given to NICU staff for education, and appropriate staffing. More importantly, their decisions ultimately affect the rights of parents to be present in the NICU with their babies and the rights of babies to be with their parents.

Implementing guidelines and practices must include strategies to engage leadership and hospital officials, including how to explain in evidence-based ways why IFCDC is so important for the short-term and long-term outcomes of the preterm and sick babies in our care.

Integration of the IFCDC Standards: Next Steps

We thank these national and international contributors for our understanding of the intricacies of implementing the standards, reminding us that considerations for cultural, epidemiologic, and financial influences will influence their application. It also reminds us that the best implementation involves not only staff and managers but also administrative and policy experts.

In the future, the IFCDC panel will address two significant efforts:

- The IFCDC Standards request that clinical providers, caregivers, parents, family members, and administrators, nationally and internationally, send feedback, recommendations, and potential revisions. Please see the "Proposal to Revise" form at the website https://nicudesign.nd.edu/nicu-care-standards/ .
- Ongoing Fragile Infant Forums for the Implementation of Standards (FIFI-S) will assist intensive care leaders and teams develop theoretical and applied approaches to assuring systems thinking, practice change, and better baby and family outcomes. The next FIFI-S virtual Forum will be held on September 28 and 29, 2023. For more information, please contact Joy Browne joy.browne@cuanschutz.edu.

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