

Collaborating to improve neonatal care: PARENTAL participation on The NEonatal waRd – study protocol of the neoPARTNER study



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Background

- During the hospitalization of an infant, the parental role alteration is challenged and physical and emotional closeness between parents and infants is impaired.^{1,2}
- Parental participation in medical rounds (Family Centered Rounds; FCR) can play a crucial role in empowering parents.³
- Involving parents in care with the Family Integrated Care (FICare) model can positively affect both parental and infant wellbeing.^{4,5,6} FCR forms a key element of FICare.⁷
- A paucity remains of randomized trials assessing the outcomes of FCR (embedded in FICare) in parents and neonates, and outcomes on an organizational level are relatively unexplored.
- Biological mechanisms (such as the stress response) through which a potential effect of FICare may be exerted are lacking robust evidence.

Aim

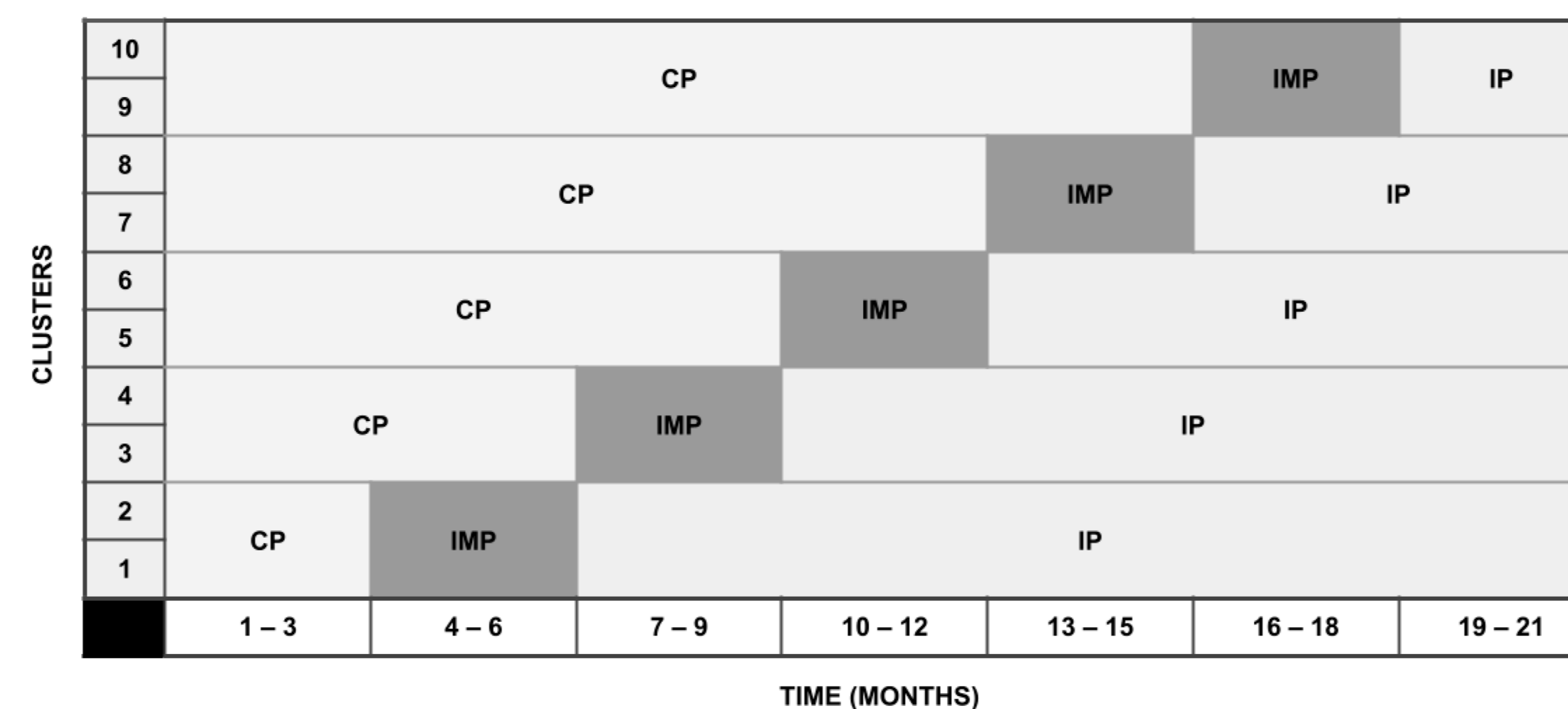
- To investigate the effect of the implementation of FCR, incorporated into the FICare principles, on parents, infants, healthcare professionals and organizations.
- To provide (experiences of) FICare material, adjusted to the Dutch setting, through a practical approach that can support other hospitals in the future.

Methods

Study design

Stepped wedge cluster randomized trial in 10 participating Dutch level 2 neonatal wards.

Figure 1 Visual overview of study design
CP = control period; IMP = implementation period; IP = intervention period.



Study population

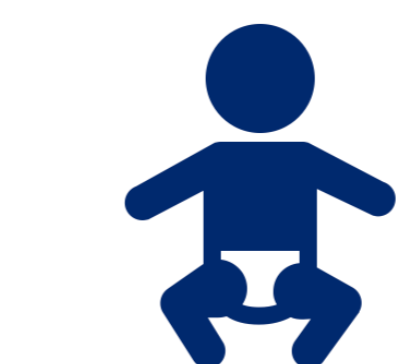
(Parents of) infants admitted to a level 2 neonatal ward for a minimum of 7 days. We aim to include approximately 600 parent/infant dyads. As of September 2023, 486 infants are included.

Healthcare professionals of the participating sites will be included throughout the course of the study.

Outcomes

Outcomes for parents and infants are measured at discharge. Healthcare professional's and organizational outcomes are measured at start, halfway through and at the end of the study.

Outcomes, continued



- **Parental stress at discharge** (*primary outcome*)
- Experiences: SDM, participation
- Parent-infant bonding
- (Mental) wellbeing*
- Medical consumption*
- Productivity costs*
- Saliva cortisol concentration
- Hair cortisol concentration
- Human milk: composition, immunoglobulins, cortisol
- Length of stay
- Growth
- Breastfeeding rates
- Glucocorticoid receptor methylation rates
- Saliva cortisol concentration
- Neurodevelopment*
- Medical consumption*
- Work engagement
- Job autonomy
- Shared decision making experiences
- Productivity costs
- Duration and frequency of (medical) rounds
- Parental presence at rounds
- Cost-effectiveness

* Measured at the infant's (corrected) age of 12 months.

**Expected end date of inclusions:
December 1st, 2023.**

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📄 <https://doi.org/10.3390/children10091482>
or scan the QR-code

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In collaboration with:

