Family Integrated Care (FICare) in Level II NICUs: An Innovative Program for Alberta

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Background

- Alberta has the highest rate of preterm birth in Canada
- The sickest preterm infants are admitted to a Level III NICU, but the vast majority are admitted to a Level II NICU and still require significant medical intervention
- Having a preterm infant can be an extremely stressful experience for most parents who are often lacking knowledge or confidence in caring for their babies
- The highly technological, critical care environment of Level II NICUs often results in parents becoming marginalized during this already stressful time
• Previous models of care that aim to include parents, such as *parental presence* and *family-centered care*, have had many challenges (Gooding et al., 2011)

• A model in Tallinn, Estonia, which actively integrated parents into their infants’ care, showed promise (Levin, 1994, 1999)
Previous FICare Studies

• Matched control pilot study in Level III NICU at Mount Sinai (Bracht et al., 2013; Galarza-Winton et al., 2013; MacDonell et al., 2013; O’Brien et al., 2013; Warre et al., 2014)
  ◦ Increased rate of weight gain and breastfeeding in FICare group
  ◦ Decreased parental stress in FICare group

• Cluster RCT in Level III NICUs across Canada
  ◦ To be completed in September 2015

• Mixed methods study in four Level II NICUs in Ontario (Shah et al.)
  ◦ Qualitative data collection in progress
  ◦ Next logical step is a cluster RCT in Level II NICUs in Alberta
FICare Level II Alberta Study

Primary Research Question:
Does FICare for preterm infants with primary admission to Level II NICU reduce hospital length of stay?

Method:
Cluster RCT in 10 Level II NICUs in Alberta
Theory of Change

**FiCare**

- Empowers parents to build knowledge, skill and confidence to care for their preterm infant
- Healthcare team and veteran parents are educators and coaches

**FACTORS**

- **INFANT**
  - e.g. Gestational Age, Apgar, Multiple Birth

- **PARENT**
  - e.g. Demographics, Mode of Delivery

- **STAFF AND UNIT**
  - e.g. Training, Years of Experience

**OUTCOMES**

- **INFANT**
  - ↓ LOS (Primary Outcome)
  - ↓ Nosocomial Infections

- **PARENT**
  - ↑ Confidence
  - ↑ Satisfaction with Care

- **STAFF**
  - ↑ Satisfaction (nursing, medical)

- **COSTS**
  - ↓ Direct Hospital Costs
  - ↓ Indirect Societal Costs

FICare
Milestones

2015
- March Ethics Submission
- May Informational Site Visits
- September FICare Training & Ethics Approval
- October Recruitment and Data Collection

2016
- Recruitment and Data Collection

2017
- December Data Analysis
- End-of-Grant Knowledge Translation
Group Allocation:

Dr. L. Palacios-Derflingher, Biostatistician
**Intervention Sites**

- Grey Nuns Hospital, Edmonton
- Misericordia Community Hospital, Edmonton
- Red Deer Regional, Red Deer
- Queen Elizabeth II Hospital, Grande Prairie
- South Health Campus, Calgary

**Comparison Sites**

- Chinook Regional Hospital, Lethbridge
- Medicine Hat Regional Hospital, Medicine Hat
- Peter Lougheed Centre, Calgary
- Rockyview General Hospital, Calgary
- Royal Alexandra Hospital, Edmonton
Questions?