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



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Acknowledgement

Alberta Innovates – Health Solutions, Partnership for Innovation in Health Services Research



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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

Background continued

- Previous models of care that aim to include parents, such as parental presence and familycentered 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

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

FICare

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

OUTCOMES

INFANT

- ↓ LOS (Primary Outcome)
- ↓ Nosocomial Infections

PARENT

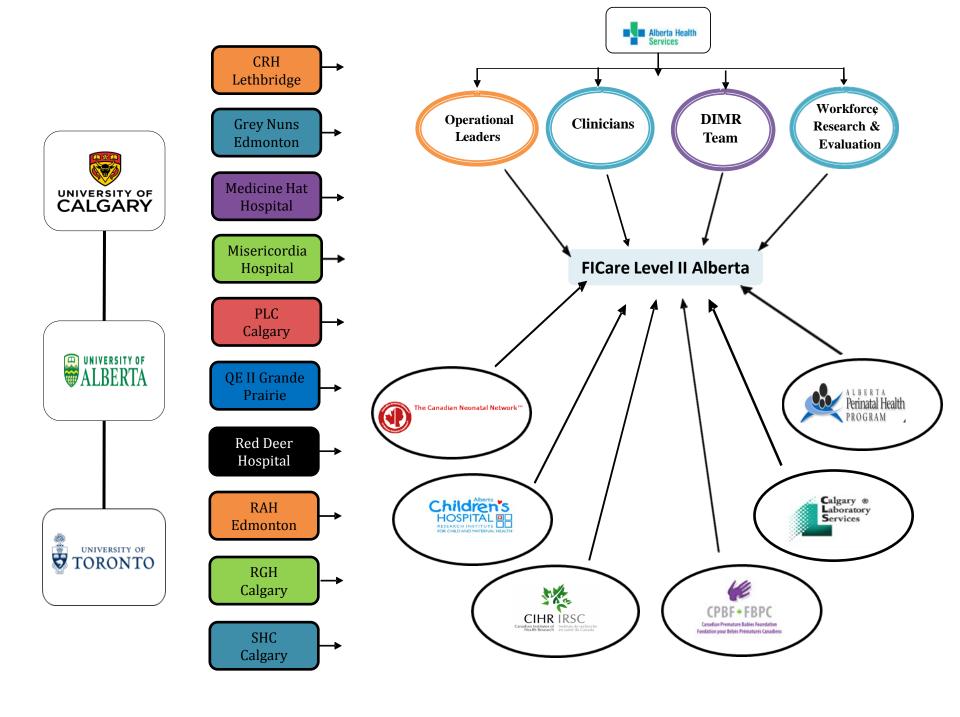
↑ Confidence ↑ Satisfaction with Care

STAFF

↑ Satisfaction (nursing, medical)

COSTS

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



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?

