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Implementing Infant Driven Feeding™ in the Level IV NICU: A Doctor of Nursing Practice Pilot Project

Shelly Frisco BSN, RN, CCRN, C-ELBW

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Problem

- **Preterm infants' physiologic immaturity leads to**:
- Feeding difficulties at equivalent term corrected age (Pineda et al., 2020)
- Delayed feeding independency achievement (Gianni et al., 2017)
- Prolonged hospital stay
- Adverse and stressful feeding experiences with negative effects well beyond hospital discharge (Shaker, 2013)

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Significance of Adverse Feeding Experiences

- The oral feeding interventions that have been used to feed infants in the level IV NICU at Ronald Reagan-UCLA hospital are volume-driven:
- **Volume driven feedings are associated with**:
- Increased stress on infants (McGrath & Braescu, 2004)
- Failure to consider preterm infants' physiologic maturity and skills (Lubbe, 2017)
- Slower progression to successful full oral feedings (Whetten, 2016).
- Increased pressure to discharge newborns without a developmentally supportive feeding approach (Jones, 2012).

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Significance of Adverse Feeding Experiences

- Current practice of initiating volume -driven PO feeding per cues for infants at 33 weeks postmenstrual age (PMA) and above:
- Is not individualized for the neurodevelopmental needs of the growing premature infant (Settle & Francis, 2019).
- 2019 NICU length of stay (LOS) data for infants 33 weeks and older indicates a prolonged LOS of 4 days, above the mean LOS within the California Perinatal Quality Care Collaborative (California Perinatal Quality Care Collaborative, 2019).

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Purpose

The purpose of this pilot project was to improve the experience of infants learning to feed in the level IV NICU by implementing an evidence-based feeding practice approach.

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Project Objectives: Patient

- Safely transition unit feeding practice to best evidence
- Support bedside caregivers in the new feeding practice methods
- Decrease LOS by at least 2 days among infants 33 weeks GA and older

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Project Objectives: Process

- Provide all bedside caregivers with formalized education of evidence-based feeding practice by June 30, 2020 (Whetten, 2016)
- Provide parental education on infant driven feeding practice (Fry et al., 2018)
- Weekly review of nursing documentation for infant driven feeding assessments

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Project Objectives: Short-Term

- Pilot infant will demonstrate safe feeding quality and adequate nutritional intake within project's first two weeks
- Parental education on infant oral feeding readiness as evidenced by documentation in parent education record
- Decreased LOS by 2 days within 1 month of pilot implementation

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Project Objectives: Long-Term

- Length of hospital stay for infants feeding with the IDF™ method will decrease by four days, within three months of the pilot.
- All infants at 33 weeks gestational age and above meeting the criteria will be fed using the IDF ™ model within six months of implementation.
- Feeding practice surveys will indicate positive improvement in feeding culture for IDF ™, within three months of the pilot implementation.
- IDF ™ practice education will be included with other annual competencies implementation.

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Environmental Context

- **Mattel Children's Hospital**
- **131 bed inpatient hospital within Ronald Regan-UCLA hospital, located in Los Angeles, California**
- **Rated as one of the top 5 U.S. hospitals, magnet certified, and designated breastfeeding baby friendly**
- **22-bed level IV NICU with on-site ECMO program, congenital cardiac program, head/body cooling program**
- **Major referral center for high-risk mothers and newborns**

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Environmental Context

Interdisciplinary team includes:

- **13 primary rotating neonatologists**
- **108 registered nurses**
- **10 NNPs**
- **Rotating neonatal fellows and residents**
- **Two lactation consultants**
- **Three occupational therapists**
- **Three physical therapists**
- **Two discharge coordinators**
- **Two social workers**
- **Registered dietician**
- **Unit nursing director and two assistant directors**

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Framework

- The Plan-Do-Study-Act (PDSA) model was used to guide the evidence-based practice pilot project in the level IV NICU (Institute for Healthcare Improvement, 2020).
- The steps in the PDSA cycle for this project were:
- (1) Plan the test or observation, beginning with one neonate, including a plan for collecting data
- (2) Do- try out the test on a small scale
- (3) Study- set aside time to analyze the data and results
- (4)Act- refine the change based on what was learned from the test

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Methods and Implementation

- The pilot IDF ™ project was conducted in the level IV NICU with the following methods:
- (a) initial staff education
- (b) creation of an interprofessional team
- (c) designation of infant driven feeding (IDF™) champions
- (d) creation of electronic health record documentation
- (e) intervention
- (f) reeducation throughout the duration of the project
- (g) patient-family education

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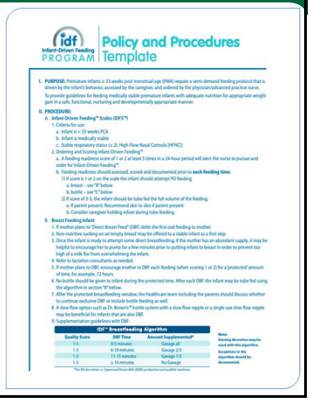
Implementation

- The IDF™ program was developed to:
- Provide guidelines for feeding medically stable premature infants
- Provide a semi-demand feeding protocol that is driven by the infant's behavior, assessed by the caregiver, and ordered by the advanced provider (Ludwig & Waitzman, 2007).
- Dr. Brown's Medical acquired the IDF ™ program in 2018


idf Infant-Driven Feeding PROGRAM Policy and Procedures Template

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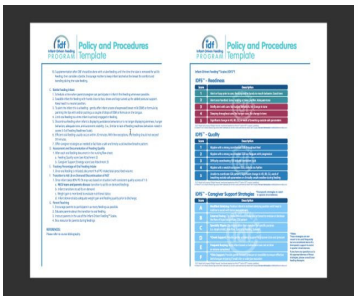
Implementation

- Daily monitoring of pilot infant's percentage of oral feeding intake out of total ordered volume, weight gain, and feeding quality scores, within the first two weeks.
- Weekly chart audits, over a three - month period, that assessed weight gain, IDF™ assessment scores, time to achieve PO AD LIB, and NICU LOS
- No PHI was collected for this pilot quality improvement project.


idf Infant-Driven Feeding PROGRAM Policy and Procedures Template

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Budget

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Item		Cost
In-kind		
Shelly Frisco RN, BSN, Project leader	275 hrs @ $70	$19,250
In-kind total		$19,250
Direct		
Labor and wages		
NICU unit director	3 hrs/month x 13 @ $68	$2,652
NICU IDF champions	1 hr/month x 6 mon x 16 @ $50	$4,800
IDF educational module	143 users x $ 75	$10,725
IT support to upload module in Cornerstone	75 hrs x $31	$2,325
IT support to upload Epic with IDF scales	2 hrs/month x 5 @ $38	$380
Mandatory education time for IDF module	136 RN x 4 hrs @ $50 = 4 OTs x 4 hrs @ $43 = 2 LCs x 4 hrs @ $37=	$27,200 $688 $444
Total labor and wages cost		$68,464
Materials		
IDF laminated tip sheets	$20 x 18	$360
Laminated IDF reference cards	$ 20 x 40	$800
IDF educational poster	$20 X 3	$60
IDF parent education materials	$20 x 50/month	$1,000
Paper	$6/ream of 500 pages X 3	$36

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Results

Weight gain during pilot:

- **Average daily weight gain for all infants during pilot**
- **Average daily weight gain during NICU LOS**

Average daily weight gain on IDF	Average daily weight gain total LOS
21 grams a day	21 grams a day

Average time to achieve full feeds

- **Average time to reach PO AD LIB during IDF™ protocol**
- **Average time per literature for healthy preterm infants**

Time to reach PO AD LIB	Average time per literature (Jones, 2012)
15 days	12 -14 days

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RESULTS

Human milk in NICU all patients

•Six-month pre-IDF baseline

12/31/19	1/31/20	2/28/20	3/31/20	4/30/20	5/31/20
75%	55.2%	55.2%	58.1%	43.3%	26%

Breastfeeding and Human milk on IDF™

•% of infants breastfeeding as first PO feeding

•% of infants on human milk on IDF™ in NICU

•% of infants discharged home on human milk

Breastfeeding as first PO feed	Human milk while in NICU	Discharged home on human milk
42%	75%	78%

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Results

NICU LOS

- **Pre-IDF™ LOS 33 wks and >**
- **Local benchmark LOS**
- **NICU LOS all pilot infants**
- **NICU LOS pilot infants 33 wks and above**

2019 NICU LOS 33 wk and above	2019 CPQCC LOS 33 weeks and >	LOS for all pilot infants	LOS for pilot infants 33 weeks and above
26 days	22 days	38 days	24.7 days

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Process and Outcome Analysis

- Pilot infants demonstrated adequate weight gain on IDF™ (Gomella, 2013).
- Use of human milk in NICU increased 23% above the 6-month pre-implementation baseline with IDF™ method.
- Time to achieve full oral feedings did not show a decrease in concordance with prior studies on IDF™ method.
- LOS for infants 33 weeks and older decreased by 1.3 days below pre-implementation baseline, yet still 2.7 days above benchmark (CPQCC, 2019).
- Oral feeding practice surveys given to nursing, OT, and lactation staff indicate positive improvement in the NICU feeding culture for IDF™.

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Implications

- **Three-month IDF™ pilot improved the experience of infants learning to feed through**:
- Increased lactation support for NICU mothers
- Increased use of human milk for NICU patients
- Staff education of evidence-based feeding practices
- Successful interprofessional collaboration to implement IDF™
- Decreased LOS for infants 33 weeks and above
- Unit feeding culture transitioned to IDF™ practice
- Successful incorporation of IDF™ practice into unit feeding policy and guidelines

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Recommendations

- Develop targeted interventions for specific alterations of preterm infants' feeding performance.
- Include IDF™ practice education as annual mandatory competency to support sustainability.
- Expand IDF™ education for maternity/postpartum nurses.
- Research is needed to empirically validate IDF™ method and inform oral feeding initiation practice.

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References

- California Perinatal Quality Care Collaborative. (2019). Length of stay among regional Los Angeles hospitals for infants 33 weeks gestational age and above. California Perinatal Quality Care Collaborative. https://www.cpqcc.org/
- Fry, T., Marfurt, S., Wengier, S. (2018). Systematic review of quality improvement initiatives related to cue-based feeding in preterm infants. *Nursing for Women's Health*, 22 (5), 401-410.
- Gianni, M., Sannino, P., Bezze, E., Plevani, L., Esposito, C., Muscolo, S., Roggero, P & Mosca, F. (2017). Usefulness of the Infant Driven Scale in the early identification of preterm infants at risk for delayed oral feeding independency. *Early Human Development*,115, 18-22.
- Gomella, T.L. (2013). *Neonatology: Management, Procedures, On-Call Problems, Diseases, and Drugs* (pp.98). McGraw Hill Education.
- Jones, L. (2012). Oral feeding readiness in the neonatal intensive care unit. *Neonatal Network*, 31 (3), 148-155.

23

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References

- Ludwig, S. & Waitzman, K. (2007). Changing feeding documentation to reflect infant-driven feeding practice. *Newborn and Infant Nursing Reviews*, 7 (3), 155-160.
- McGrath, JM. & Braescu, AV. (2004). State of the science: Feeding readiness in the preterm infant. *Journal of Perinatal and Neonatal Nursing*, 18 (4), 353-368.
- PDSACycle (2020). http://www.ihi.org/resources/Pages/Tools/PlanDoStudyActWorksheet. asp
- Pineda,R., Prince, D., Reynolds, J., Grabill, M. & Smith, J. (2020). Preterm infant feeding performance at term equivalent age differs from that of full- term infants. *Journal of Perinatology*, 40, 646-654.
- Settle, M. & Francis, K. (2019). Does the Infant-Driven Feeding method positively impact preterm infant feeding outcomes? *Advances in Neonatal Care*, 19 (1), 51-55.

24

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References

- Shaker, C.S. (2013). Cue-based co-regulated feedings in the neonatal intensive care unit: Supporting parents in learning how to feed their preterm infant. *Newborn & Infant Nursing Reviews*, 13 (1), 51-55.
- UCLA Mattel Children's Hospital Facts. (2020). https://www.uclahealth.org/mattel/about-mattel-childrens-hospital-ucla
- Whetten, C. (2016). Cue-based feeding in the NICU. *Nursing for Women's Health*, 20 (5), 507-510.

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Impact of Infant Driven Feeding™ on the Cost of Feeding Supplies

Amanda Geringer BSN-RN
NICU Staff RN
Sanford Children's Hospital

1

Conflict of Interest

- No conflicts of interest to disclose.

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Background

Infant Driven Feeding Program™

- Purchased program with staff education and other tools
- Comprehensive feeding approach
- Incorporates neuro-development
- Cue based feeding
- Infant assessment
- Care giver interventions

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Background

IDF™ underlying concepts:

- infants can provide reliable cues to indicate readiness to feed
- infants can progress with feeding safely and effectively when their cues are followed
- feeding beyond engagement is unsafe

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Purpose

The IDF™ program does require a financial investment and ongoing commitment.

- Executive Director requested a study to determine cost savings on feeding supplies after implementation of the program to offset the costs.

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Research Hypothesis

Infants fed using the Infant Driven Feeding™ Model will have lower feeding supply costs than infants fed with a Provider Driven Feeding order.

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Goal

- Document savings on feeding supplies.
- Offset the financial investment for the program.

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Methods

Quasi-experimental - retrospective study

2 Cohorts:

PDF (Provider Driven Feeding)

IDF™ (Infant Driven Feeding™)

Two 8 month study periods

Feb – Sept 2017 & 2018

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Feeding Supplies

- NG's sizes 5fr and 8fr
- Feeding extension tubing

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Data Sources

Supply Chain – feeding supply costs

Patient Census Dashboard - Length of Stay and Gestational Age

No patient records were accessed.

This was deemed non human subjects research.

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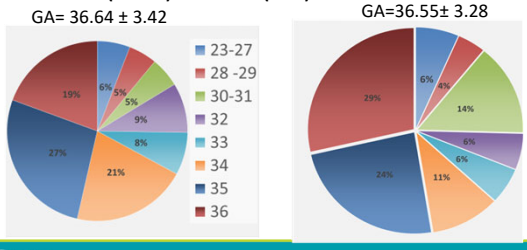
Gestational Age

PDF **(N=578)** **P=(0.55)** IDF™ **(N=526)**

GA= 36.64 ± 3.42

GA=36.55± 3.28



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Results

- Cohort PDF
  - Monthly average feeding supply costs
    $4,661.42 ± $531.30
- Cohort IDF™
  - Monthly average feeding supply costs
    $3,680.75 ± $782.41

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Feeding Supply Cost Savings

Infant Driven Feeding™ Cohort

- Total Savings per month: $980.67
- Savings per 8 month period: $7,845.31
- P= 0.0001

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Average Length of Stay

PDF	**IDF™**
Average LOS	**Average LOS**
17.15 ± 11.26 days	**15.32 ± 10.02 days**

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Census Impact

- There were 1858 fewer patient days.
- Impacted unit census by 6 patients per day.

This impacts:

- Budget
- Nurse satisfaction
- Staffing

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Discussion

Implementation of IDF™ requires culture change, medical record alignment, physician champions to ensure the success of IDF™.

Ensuring ongoing investment and training.

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Conclusions

- IDF™ has reduced the cost of feeding supplies.
- The cost savings did offset the expense of the training.
- Infants in the IDF™ Cohort have a shorter length of stay which has clinical significance.

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Limitations

- Small focus study in one unit in the upper Midwest
- One indicator of severity of illness
- Assumption of equal cohorts
- Short time period
- Did not data validate with medical record data due to focus of request by executive director

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Implications for Practice and Future Research

- Nursing
  - Impacts to nurse/patient work load
  - Quality of time spent with infant
- Readmission
  - Late feeding failures
- Breast feeding rates
- Surgical gastrostomy tube placement

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Financial Disclosure

- No funding was received for this project.
- The facility purchased a licensed commercial product in order to implement IDF™.

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Acknowledgements

- Bette Schumacher MS RN CNS, Principle Investigator
- Elizabeth Jeanson PT DPT DCS NRMC CNT
- Kristine Randall BAN RN CCRN-Neonatal

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The Effect of Infant Driven Feeding™ On Long-Term Feeding Success and NICU Length of Stay

(IRB 16.2374)

Renee Bloom MSN, RN, RNC-LRN, RNC-NIC

Presented to Dr. Brown's Medical

Dec 14, 2022

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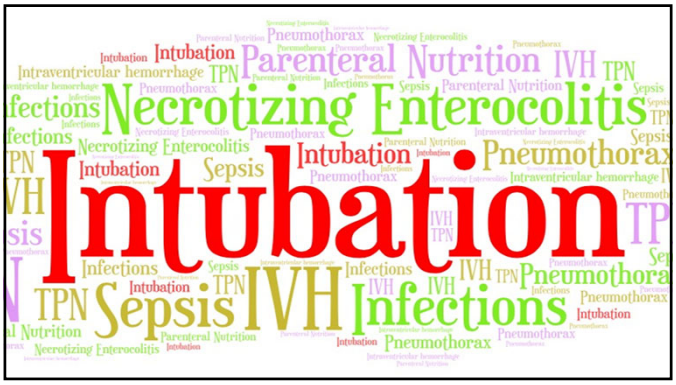

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- The Sucking Reflex disappears around 3 months
- Suck, Swallow, Breathe- highly coordinated sensorimotor experience

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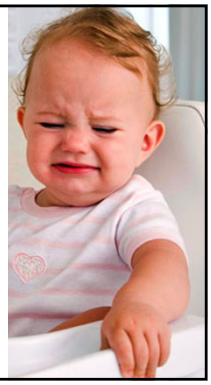
Feeding Problems

- Low appetites
- Use of external rewards for eating
- Coaxing during mealtimes
- Oral motor dysfunction and avoidance behavior
- Vomiting
- Long duration at mealtimes



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IFOH Developmental Care Committee
Launched IDF™
January 2016

5

INOVA

Research Team

- Renee Bloom MSN, RN , RNC-NIC, RNC-LRN
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Statistician

- Audra Gollenberg PhD

Acknowledgements

- Joycelyn Cudjoe, PhD, RN
- Mary Ann Friesen PhD, RN, CPHQ

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Review of Literature

- At **three months** the suck reflex disappears. Feeding problems common throughout childhood. Avoidance, vomiting and coaxing are present during meals. The use of rewards and oral motor disfunction are seen.
- **Thirty percent** of preterm infants are underweight in childhood.
- **Fifty-two percent** of premature infants never experience BF (breastfeeding) in the NICU. Only 27 % BF at discharge. There is a sharp decline in the rate of BF in the first few months after discharge.
- **Skin to Skin** improves BF rate.
- **Susan Ludwig/Kara Ann Waitzman create IDF**: an oral feeding program based on developmental cues.

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Aim of Study

- To compare different feeding practices at 2 Inova Institutions (NICUs):
  - Traditional vs Infant Driven Feeding™

Hypothesis

- IDF™ protocol in the NICU will result in more successful breast feeding at discharge
- Shorter length of stay
- Shorter times to full feeds
- Fewer feeding problems after discharge

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Measurements

- **Short-Term Feeding Outcomes**
  - Rate of breastfeeding at discharge
  - Gestational Age at which full oral feedings are achieved
  - Length of Stay
- **Long-Term Feeding Outcomes in the first year of life**
  - Feeding problems
  - Breastfeeding success rates at 3, 6, and 12 months

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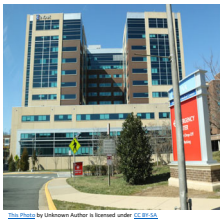
Study Design

- Study Type: Non-Randomized Prospective Study
- Setting: Inova Fair Oaks Hospital (IFOH) and Inova Children's Hospital
- Duration of Study: 36 months. Parents will complete a survey at 3, 6, and 12 months after the subjects are discharged from the NICU
- Number of subjects: 99 total subjects (49 from ICH and 50 from IFOH)



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IRB Approval

- IRB Approval IRB 16.2374
- Original Approval: August 19, 2018
- Amendment to include IFMC L.J. Murphy Children's Hospital : March 11, 2019

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Inclusion/Exclusion Criteria

- **Inclusion:** All babies born at IFOH and ICH at Gestational Age 28-33.6 weeks during the 2-year enrollment period
- **Exclusion:** Surgical cases, genetic cases, malformations such as cleft lip/palate, neurological/feeding issues including infants with G-tubes, necrotizing enterocolitis (NEC), significant intraventricular hemorrhages (IVH), congenital heart disease (CHD), neonates for adoption, language barrier (Non-English or Non-Spanish speaking), neonates born to minors or incarcerated women

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Study Methods

Identify NICU admissions between gestational ages of 28.0 and 33.6 weeks at birth at both institutions

No experimental changes to care

Continue established feeding practices at both institutions

Informed consent obtained prior to discharge

Data obtained via survey at 3, 6, and 12 months

Control group: Inova Children's Hospital

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Enrollment IFOH

Start Date: 8/14/2019
End Date: 1/25/22
Total Sample - 50

Enrollment Fairfax L.J. Murphy Children's Hospital

Start Date: 8/14/2019
End Date: 3/19/21
Total Sample - 49

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Preliminary results are very promising

- Breastfeeding success in hospital, after discharge, and long term
- Length of stay
- Days to full feeds
- Earlier gestational age to full feeds
- Feeding problems

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References

Browne J, Ross E. Eating as a neurodevelopmental process for high-risk newborns. Clin Perintol. 2011:38:731-473.

Cero N, Zeunert S, Simmer KN, Daniels LA. Eating behavior of children 1.5 – 3.5 years born preterm: Parents' perceptions. J. Paediatr Child Health. 2003:38:72-78.

Forgada-Guex M, Pierrehumbert B, Borghini A, Moessinger A, Muller-Nix C. Early dyadic patterns of mother – infant interactions and outcomes of prematurity at 18 months. Pediatrics. 2006:118: e107-e114.

Pineda R. Direct breast-feeding in the neonatal intensive care unit. : is it important? J Perinatal. 2011:31:540-545.

Ludwig SM, Waitzman KA. Changing Feeding Documentation to reflect Infant-Driven Feeding Practice. Newborn and Infant Nursing Reviews. 2007: 155-160.

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Dr Brown's Medical™

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The Infant-Driven Feeding™ Program: The Evidence that will Change your Feeding Practice

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Amanda Geringer, BSN, RN
Renee Bloom, MSN, RN, RNC-NIC, RNC-LRN
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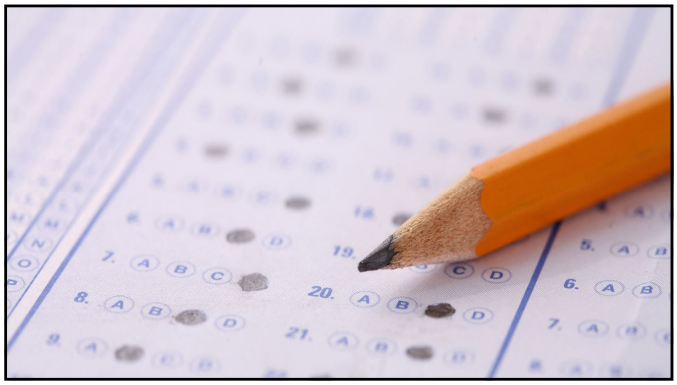

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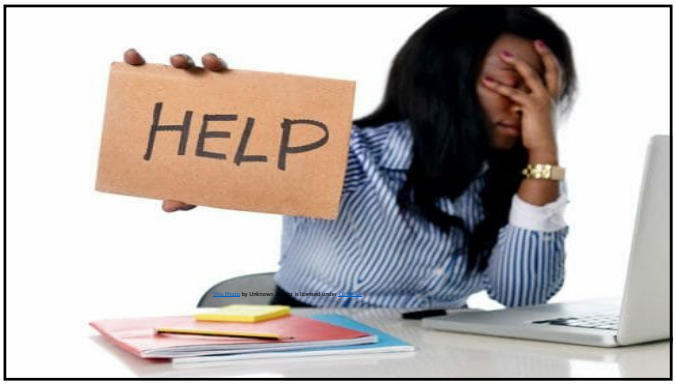

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Today's objectives:

Describe at least 3 **benefits** of unit-wide education of IDF™

List the steps in a **PDSA** cycle for creating a QI project

Describe at least 2 recent **QI studies** integrating IDF™

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The Infant-Driven Feeding™ Program

√ Online learning program for **ALL** staff
√ **Neurodevelopmental** foundation
√ Identifies **Process**
√ Includes **Families**
√ **Breast** and Bottle
√ Component on **Systems Change**
√ Unit-Wide purchase includes **Implementation**

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The Infant-Driven Feeding™ Program: The Evidence that will Change your Feeding Practice

Shelly Frisco, DNP, ACCNS-N, CCRN, C-ELBW
Amanda Geringer, BSN, RN
Renee Bloom, MSN, RN, RNC-NIC, RNC-LRN
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Summary of Benefits

- Reduced **length of stay**
- Decreased time to **full oral feedings**
- Increased **breastfeeding** rates
- Improved parent and staff **satisfaction**
- Reduced **costs**
- Increased **skin to skin** time
- Greater **RN understanding** of feeding cues and responses

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Implementing an Evidence-Based Feeding Protocol

Impact on Nurses' Knowledge, Perceptions, and Feeding Culture in the NICU -McKenna et al, 2022

Study Design

- Pre/Post prospective comparative design
  36 bed level 3 NICU
  N=39
- Evaluate changes in RN knowledge and perceptions following implementation of IDF™

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McKenna et al, 2022

Results

- Fewer nurses making decisions to begin oral feedings
- > use of GA to increase frequency of oral feeding attempts
- Less reliance on weight loss to decrease feeding attempts
- Increase in combination interventions to prepare infants for oral feeding
- Greater willingness to allow a rest period

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McKenna et al, 2022

Implications

- 'This difference indicates a greater understanding of infant feeding cues and appropriate responses to them'
- 'It also reflects a change in feeding culture and practice that is consistent with other evidence-based oral feedings'

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Imagine…

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