

MEASUREMENT GRID

These measures will be calculated and reported to the hospitals in a quality improvement data report on a monthly basis so that facilities can track their progress.
 NOTE: These measures may be subject to change during the initiative with prior approvals.

Definition of Family-Centered Care (FCC): An approach to the planning, delivery, and evaluation of health care that is grounded in mutually beneficial partnership among the health care professionals, patients, and families. FCC places an emphasis on collaborating with people of all ages, at all levels of care, and in all health care settings. FCC assures that health care is responsive to priorities, preferences, and values of patients and their families. FCC recognizes that families are essential allies for health care quality and safety during the direct care of the patient within the family but also in the effort to improve health care for all. Core domains of FCC include: (1) participation in care and decision-making; (2) dignity and respect; (3) collaboration; and (4) information sharing. (Adapted from the Institute for Patient- and Family-Centered Care: <https://www.ipfcc.org/bestpractices/sustainable-partnerships/background/pfcc-defined.html>.)

Skin-to-skin care (SSC) will be the PAIRED quality improvement initiative centerpiece and will be recommended for every participating NICU. The initiative will be supplemented by a robust modular educational program on the evidence-base for FCC and potentially better practices (PBPs) for implementation of SSC. The initiative will also provide a toolkit for implementing other potentially better practices other than SSC in the four core domains.

Inclusion criteria for patient level data (qualifying infant): include any infant of any gestational age who: (1) requires NICU hospitalization for more than 5 days; 2) is eligible for SSC; (3) survives at least 3 days beyond their eligibility for SSC as defined by individual unit protocols; and (4) has a family caregiver involved in his/her care

#	Outcome Measures	Description	Frequency
1	Percentage of infants receiving prompt initiation of SSC	<p>Aim: To increase the percentage of eligible infants who receive prompt SSC with a family caregiver from the baseline quarter to Q2 of 2022. The goal is to increase this by 20% over the course of the quality improvement initiative.</p> <p>Numerator: # of qualifying infants who receive SSC from at least one family caregiver within 3 days of clinical eligibility as defined by individual unit protocols.</p> <p>Denominator: Total # of qualifying infants.</p>	Monthly
2	Average day of life when SSC was first provided by a family caregiver	<p>Aim: To reduce the interval in days between birth and the first family caregiver SSC.</p> <p>Defined as: The average of the day of life at which a family caregiver provided the infant's initial SSC.</p> <p>Numerator: Total # of days of life of qualifying infants' first episode of SSC by family caregiver.</p> <p>Denominator: Total # of qualifying infants.</p>	Monthly

3	Percentage of eligible inpatient days where a family caregiver provided at least one hour of SSC	<p>Aim: To sustain the benefits of providing prompt initial SSC.</p> <p>Numerator: # of days during which a qualifying infant received at least one hour of SSC from a family caregiver.</p> <p>Denominator: # of inpatient days after which the infant was first eligible to start receiving SSC (date of final disposition minus date of SSC eligibility)</p>	Monthly
4	Percentage of infants receiving any of mother's own milk at the time of initial disposition	<p>Aim: Improvement in SSC (earlier initiation, more frequent episodes of significant duration) should correlate with an increase in the number of infants receiving any of mother's own milk (MOM) at initial disposition.</p> <p>Numerator: # of qualifying infants who were receiving any of MOM via direct nursing or expressed breast milk by bottle on the day of initial disposition.</p> <p>Denominator: Total # of qualifying infants</p> <p>Exclusions: Infants not eligible for MOM (infants with contraindications by the American Academy of Breastfeeding Medicine, birth mother not involved)</p>	Monthly
5	Scores on family caregiver surveys on SSC	Average score on family caregiver evaluation of SSC experience in NICU during hospitalization of qualifying infants as determined on a survey at the time of discharge.	Quarterly

#	Structural Measure	Description	Frequency
1	Use of standardized documentation of SSC in the electronic medical record or use of a case report form designed to capture key information for each episode of SSC	<p>Defined as: Implementation of discrete documentation in the electronic medical record or care report form that captures key information for every episode of SSC during the infant's hospitalization, including: (1) the start and end time of each episode of SSC; (2) the family caregiver who provided SSC; (3) the type of respiratory support* and intravenous (IV) /intra-arterial (IA) lines~ the infant had at the time of each SSC episode(4) the occurrence (or not) or any adverse events related to SSC</p> <p>* Respiratory support: HFOV - high frequency oscillatory ventilation; HFJV - high-frequency jet ventilation; CMV - continuous mandatory ventilation; NIPPV - nasal intermittent positive pressure ventilation; nCPAP - nasal continuous positive airway pressure; NC - nasal canula.</p> <p>~IV-IA lines: UAC - umbilical artery catheter; UVC - umbilical venous catheter; PAL - peripheral arterial line; PICC - peripherally inserted central catheter; PIV - peripheral intravenous line.</p>	Monthly

2	Development and implementation of an NICU policy promoting SSC for all eligible infants and family caregivers.	Defined as: A written policy that defines the steps and components of SSC for all eligible infants and family caregivers.	Monthly
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#	Process Measures	Description	Frequency
		Some process measures will be reported on individual infants, and some will be reported on individual hospitals.	
1	Percentage of providers, nursing and respiratory therapy staff educated about all of SSC (didactic instruction about the benefits of SSC, followed by clinical training via simulation, bedside observation, or direct assistance with infant transfers)	<p>Aim: Providers, nurses and respiratory therapists will receive instruction and clinical training on SSC tailored to their roles (simulation, bedside observation, providing direct assistance with infant transfers).</p> <p>Doctors/Nurse Practitioners/Physician Assistants: Numerator: # of providers who received education and clinical training on SSC. Denominator: Total # of providers who cared for NICU infants in the month.</p> <p>Nurses: Numerator: # of nurses on staff who received education and clinical training on SSC. Denominator: Total # of nurses who cared for NICU infants in the month.</p> <p>Respiratory therapists (RTs): Numerator: # of RTs on staff who received education and clinical training on SSC. Denominator: Total # of RTs who cared for NICU infants in the month.</p>	Monthly
2	Percentage of family caregivers who received education about and competency training in SSC	<p>Aim: Each family caregiver will be introduced to SSC as early as possible (including before birth, if possible). Each family caregiver will be given materials describing the evidence of benefit for SSC, the unit policy on implementing SSC, and educational materials that demonstrates the physical process of infant transfer from the isolette to a family caregiver.</p> <p>Numerator: Number of infants discharged where one family caregiver received education about and competency training in SSC at final disposition.</p> <p>Denominator: # of eligible infants.</p>	Monthly

#	Balancing Measures	Description	Frequency
1	Percentage of unplanned extubations associated with SSC among SSC episodes	Numerator: # of unplanned extubations that occurred during transfers or during SSC at final disposition. Denominator: Total # of episodes of SSC at final disposition.	Monthly
2	Percentage of other documented unplanned events associated with SSC	Numerator: # of SSC episodes during which a documented adverse health event* other than extubation occurred including: significant desaturation, apnea or bradycardia ¹ ; hypothermia ² ; or line dislodgement at final disposition ³ . Denominator: Total # of episodes of SSC at final disposition. Adverse health event definition: ¹ Significant desaturation/apnea/bradycardia which requires early termination of SSC per unit guideline; ² Hypothermia - temp < 36.5 at any time during or immediately after SSC; ³ Line dislodgement - loss of line or subsequent malfunction or malposition of line;	Monthly