



**FAMILY-CENTERED CARE INITIATIVE:
PAIRED
(EXPANDED INITIATIVE)**

APPLICATION GUIDE



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This application guide explains the objectives of the PAIRED Initiative to promote and improve family-centered care, reviews our model for quality improvement, your role as a participant, the initiative timeline and activities, and proposed initiative measures.

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Initiative Overview

Family-centered care (FCC) is defined as a shared approach to the planning, delivery, and evaluation of health care that is grounded in mutually beneficial partnership among health care professionals, patients, and families. FCC places an emphasis on collaborating with people of all ages and backgrounds, 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 partners not only to improve the quality and safety of health care for the patient but also to improve outcomes for the family. Core domains of FCC include: (1) participation in care and decision-making; (2) dignity and respect in identifying every infant and family as individuals; (3) respectful collaboration with families; and (4) information sharing regarding education for families about medical care.

(Adapted from the Institute for Patient- and Family-Centered Care:

<https://www.ipfcc.org/bestpractices/sustainable-partnerships/background/pfcc-defined.html>).

After testing this initiative in 17 pilot NICUs, the Florida Perinatal Quality Collaborative (FPQC) wants to improve the provision of FCC in partnership with hospitals through this initiative. The initiative's name, PAIRED, reflects the initiative's emphasis on the need for paired care between the medical team and families, by recognizing and utilizing the four core FCC domains underlined above. In support of this concept, PAIRED is being developed with direct input and support of a PAIRED Advisory Council as well as having participating family advisory group members.

FCC changes the culture of providing healthcare. Despite growing evidence that family participation in hospital care improves the outcomes of NICU infants, there are currently no validated metrics related solely to FCC. The initiative outlines key processes to welcome parents and families into a paired care team model that encourages them to begin graduated participation in their infant's care starting at admission, to assist them in recognizing and responding to their infant's individual personality, to improve processes of communication with the medical team, and to educate families throughout the NICU stay about their infant's medical care so that they become competent and confident independent caregivers by the time of discharge. FPQC will provide participating NICUs with metrics and parent survey to track and measure their improvement in the delivery of FCC in their own unit.

Using results of a literature search and extensive input from the Family Advisory Council, the PAIRED Advisory Group identified a large number of potentially better practices that have face validity for improving FCC. Many of these potentially better practices are included in the PAIRED toolkit for hospital teams to review and choose to implement in their units. Skin-to-skin care is the centerpiece of the PAIRED initiative and is recommended for every participating NICU. Skin-to-skin care has been shown repeatedly in the literature to be associated with better outcomes for infants and families. In addition, it is an initiative that can be adopted with relative ease and at minimal cost to hospitals. The initiative will be enhanced by a robust modular educational program on the evidence-base for FCC that will review potentially better practices that the Family Advisory Council and the PAIRED Advisory Group have identified as most desirable and effective.

Initiative Foci

Standardization related to:

- Fostering family/caregiver engagement and participation in care from admission through discharge
- Developing a welcoming and supportive environment that is respectful of individual patient and family values
- Creating family-centered hospital and unit policies, guidelines and procedures through open collaboration and partnership with families
- Emphasizing the need for family education about medical care and clinical processes throughout admission to bolster family competence and confidence as independent caregivers
- Recognizing the need for family and staff education regarding implicit bias that exists in healthcare

Initiative Goal

PAIRED's primary aim is that by 6/2023 each participating NICU will achieve a 20% increase from their baseline in the percentage of infants who receive skin-to-skin care from at least one family caregiver within 3 days of clinical eligibility as defined by individual unit protocols. A secondary aim is that by 6/2023, family surveys will demonstrate a 20% improvement from baseline in the perception of the culture of family-centered care in each NICU as averaged across all four domains (participation in care, dignity and respect, collaboration, information sharing). **Participating hospitals for this initiative** will use the FCC change package, family survey and reporting system in the PAIRED Initiative to create the needed change that they want to implement to make a difference.

Why Join the Initiative

PAIRED offers an opportunity for your facility to implement change and improve the care provided to infants in the NICU and the engagement of their families in care. The initiative's goal is to apply evidence-based interventions (such as prompt skin-to-skin care) and other potentially better FCC practices to improve care for infants and their families in Florida hospitals. FPQC aims to support collaborating hospitals as they develop and implement multi-disciplinary teams and strategies with the ultimate goal of increasing skin-to-skin care and overall family-centered care in their individual units.

Stakeholders across the state and the U.S. have begun to recognize the importance of implementing family-centered care strategies to improve infant health outcomes and help families be well-equipped to continue care after hospital discharge. Family-centered care approaches that are sensitive to the diverse make-up of families and the challenges they face in learning to address and accommodate the complex needs of NICU infants are critically needed. Additionally, these family-centered care approaches need to come from a paired collaboration between healthcare workers and actual NICU families. Joining the initiative allows your hospital to work in a collaborative and have access to resources to help you implement evidence-based quality improvement recommendations centered on an improvement in family centered care culture. It also offers an environment to learn together with others on the best strategies, methods, and tools to adapt and implement in your hospital. Hospitals that participate in multi-organization quality improvement collaboratives achieve more gains faster than those who go it alone. Past participants have found it useful to not have to "reinvent the wheel." Participation in a multi-hospital collaborative is shown to result in more rapid positive change in patient care and safety.

Read on to learn what kind of support the FPQC can provide participating hospitals and what hospitals will be asked to commit in order to participate. If you have any questions about the information presented here, please email FPQC@usf.edu.

Hospital Participation Requirements

We plan to achieve improvements in supporting family-centered care and skin-to-skin care by implementing best practice guidelines as developed by the PAIRED Advisory Group. Participating hospitals will start the initiative together in January 2022, launch their initiatives in their local facilities, and agree to tailor and implement hospital identified process improvements over the 18-month quality improvement initiative which will begin January 2022 and go through June 2023.

Participating hospitals and providers are expected to make a commitment to implementing change and reporting progress during the collaborative for the benefit of all neonatal services statewide.

Participating Hospitals are required to:

- Participate for the entire 18-month time period of the initiative.
- Assemble a strong and full committed QI team including physician, nurse, data, and administrative champions and conduct regular team meetings to track progress throughout the initiative.

- Complete FPQC pre and post implementation surveys during the initiative phases.
- Commit at least one team member to attend every PAIRED Initiative learning series coaching call/webinar.
- Schedule an onsite educational and technical assistance visit with FPQC advisors.
- Develop, add, or amend hospital or department policy to reflect recommended quality processes and procedure changes.
- Sign Data Use Agreement and document, submit, track, and report all required FPQC process and outcome measures on a monthly basis throughout the initiative.
- Notify FPQC of changes to the QI team.
- Send at least two members of your team to participate in the virtual Kick-Off meeting and attend another Initiative face-to-face or virtual training meetings in the fall of 2022.
- Participate in presenting during monthly learning coaching calls and webinars on sharing progress, overcoming challenges, seeking consultation, or other topics.

Hospital Administrator in Participating Hospitals:

- Promote the goals of the collaborative and develop links to hospital strategic initiatives.
- Provide the resources to support their team, including time to devote to this effort (team meetings, learning sessions, FPQC PAIRED Initiative virtual and in-person meetings and monthly coaching calls/webinars) and facilitate active senior leadership involvement as appropriate.
- Closely track initiative progress to assure adequate initiative support during the initiative.

Neonatologist and Nurse Leaders in Participating Hospitals:

- Lead the hospital's quality improvement efforts, including convening regular team meetings.
- Develop a strategy for accountability among partners to help assure progress toward local goals.
- Attend PAIRED Initiative virtual and in-person meetings and monthly collaborative coaching calls/webinars.
- Share information and experiences from the initiative with fellow participants on coaching calls/webinars and at in-person meetings.
- Perform tests of change that lead to process improvements in the organization.
- Work with your peers to gain support and incorporate initiative components into practice.
- Spread successes across the entire hospital system where applicable.

Strategies will be adaptable to all hospital settings. While the toolkit provided to participating hospitals will outline various potentially better practices with resources and metrics for improving the culture of family-centered care, we recommend that all participating hospitals prioritize skin-to-skin care as the centerpiece of the initiative and to submit data on metrics for skin-to-skin care. Participating hospitals are encouraged to submit data on the other additional potentially better practices from the toolkit based on their individual needs assessment. The toolkit contains a questionnaire to help guide each hospital in its needs assessment. Each facility can either adopt an existing set of protocols or guidelines and tools or develop/adapt protocols or guidelines and tools over time using the evidence-based elements.

FPQC will:

- Build a strong collaborative learning environment to support hospitals with driving change
- Coordinate experts and other resources to support the improvement process
- Offer content oversight and process management for the initiative
- Offer participants evidence-based information on the subject and information on applying that subject matter via medical and quality improvement experts

- Offer tools and resources to support hospitals in implementing process changes and improving documentation
- Develop/adapt/update useful materials and tools as needed by the initiative
- Host an online resource toolbox for hospital implementation
- Offer guidance and feedback to participating hospitals on executing improvement strategies
- Provide educational events and conduct on-site technical assistance consultations
- Convene regular learning session coaching calls and webinars to support hospitals in driving change
- Facilitate an online data submission process and provide monthly quality improvement data reports for participating hospitals as well as a baseline assessment report
- Communicate progress and deliverables to the stakeholders of FPQC
- Evaluate and report results in a fashion that does not publicly identify hospitals and providers

PAIRED Initiative hospitals will learn improvement strategies that include establishing goals and methods to develop, test, and implement changes to their systems with the goal of improving the culture of family-centered care. Sites will collect quantitative and qualitative data and submit monthly to FPQC using REDCap, a HIPAA-compliant, secure online interface. FPQC will regularly share de-identified comparative data with hospital teams. A data use agreement will be established with hospitals prior to the start of the initiative.

PAIRED Initiative Timeline

Timeline is subject to change.

Tasks	Target Completion Date
Recruit Leadership Team and Submit Hospital Application to Participate	December 2021
Prepare for Hospital Kick Off, Establish Local Team Meeting Schedule	January 2022
Virtual Initiative Kick-Off Meeting Training, Complete Pre-Implementation Survey	February 10, 2022
Individual Hospital Kick-Offs of PAIRED Initiative	March 2022
Regular Learning Session Webinars/Coaching Calls for training and collaboration (including at least one presentation from each facility on your progress) Hold regular local team/department meetings	March 2022 – May 2023
On-Site Technical Assistance Consultations from FPQC	March 2022 – May 2023
Ongoing Data Collection and Technical Assistance upon request	March 2022 – May 2023
In-person or virtual mid-project meeting	Fall 2022
Initiative hospital post-implementation survey	May 2023
Initiative completion	June 2023

PAIRED Initiative Recommended Key Practices

1. Form a multi-disciplinary team to address FCC potentially better practices, including skin-to-skin care
2. Encourage family/caregiver engagement in the initiative
3. Develop or revise hospital guidelines and policies that support and promote FCC, including but not limited to those related to skin-to-skin care in the NICU
4. Provide family education throughout NICU admission to optimize infant outcomes and transition to home
5. Educate staff on FCC techniques and approaches, as well as implicit bias that exists in healthcare
6. Provide feedback to strengthen the FCC initiative

A key driver diagram that visualizes factors that impact outcomes in order to assist in prioritizing strategies and actions to improve outcomes is included in Appendix A.

Initiative Core Measures

Data collection and analysis are a key components of quality improvement. What gets measured gets managed! Participants will focus on improving practice metrics for their institution relative to their baseline assessment (aggregate and de-identified data will be submitted by participating sites). FPQC will provide monthly metric outcomes de-identified by hospital to allow each hospital to compare itself to other participating sites.

Participating hospitals will be asked to collect and submit data to support outcome, process, and balancing measures. Please see the Measurement Grid in Appendix B for more information on each measure.

How to Apply

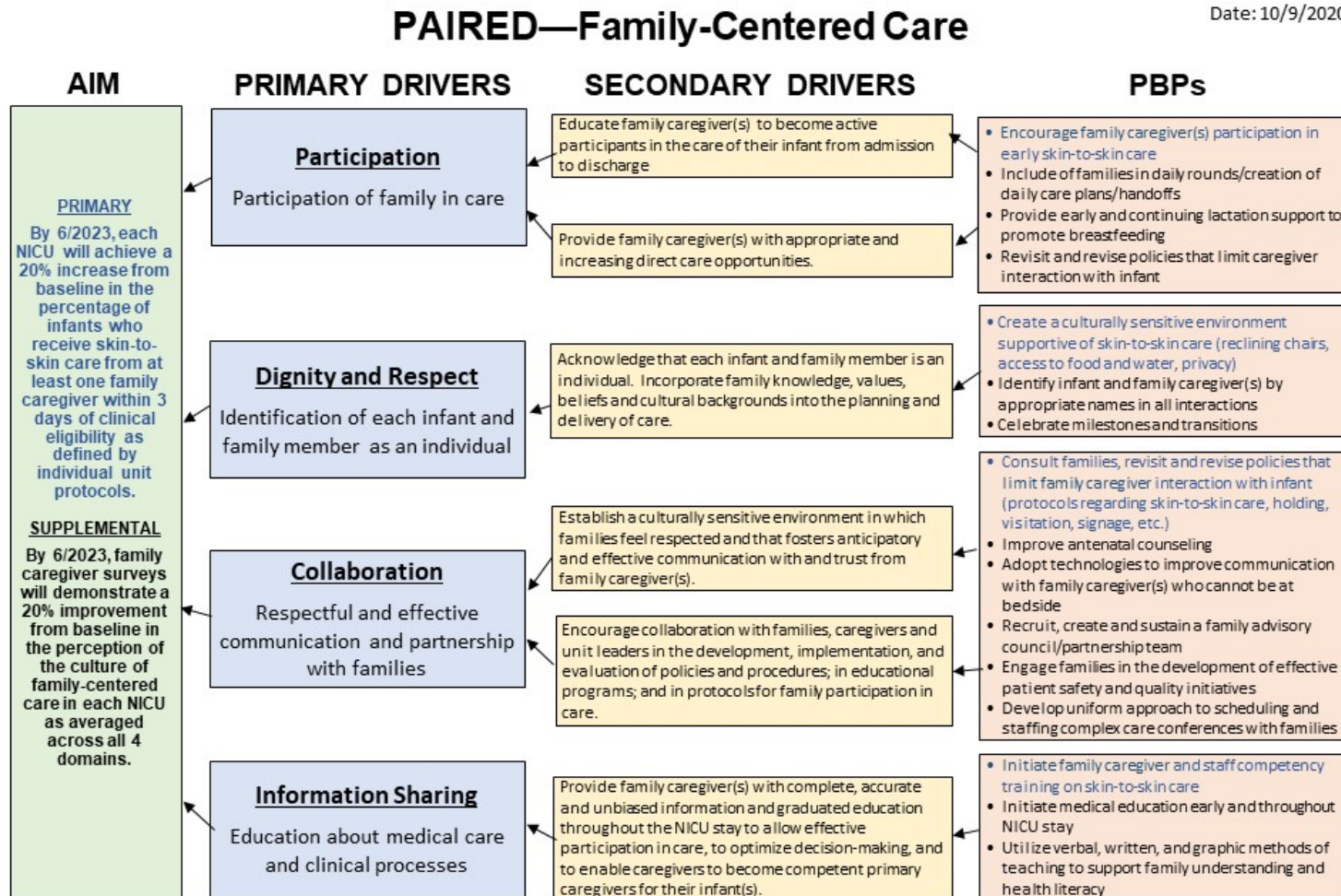
To be involved in the PAIRED Initiative, please complete the online application at https://usf.az1.qualtrics.com/jfe/form/SV_en6Fba8k3XpVpau. The deadline for applying is December 1, 2021.

It is important that you coordinate with your entire department to ensure everyone is aware that you are applying and your hospital does not submit more than one application with different champions. A minimum of 3 team leaders are required. We will contact all team members by email to confirm commitment; **a response from all team members will be required to complete your application.**

If accepted, a Hospital Commitment Letter signed by an appropriate authorizing hospital executive will be required. A Data Use Agreement will be provided to accepted hospitals.

APPENDIX A: KEY DRIVER DIAGRAM

A key driver diagram (KDD) is intended to assist in identifying factors that impact outcomes, and in prioritizing actions and strategies to be undertaken to improve outcomes. This includes potentially better practices (PBPs) that relate directly to the primary aim of improving skin-to-skin care (in blue font), as well as PBPs that relate to the overall goal of an improvement in family-centered care for all four core domains/primary drivers.



Family-centered care is defined as a shared approach to the planning, delivery, and evaluation of healthcare that is based upon a partnership between healthcare professionals and family caregiver(s). There are four essential domains of FCC: 1) family participation in care, 2) dignity and respect, 3) family collaboration, and 4) information sharing.

APPENDIX B: 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