

Infant Stabilization Room (ISR) CBME Rotation Objectives **by STAGE and CanMEDS Competency**

TRANSITION TO DISCIPLINE 2-3 BLOCKS	FOUNDATIONS OF DISCIPLINE 6-9 BLOCKS	CORE OF DISCIPLINE 9-12 BLOCKS	TRANSITION TO PRACTICE 1-2 BLOCKS
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Fellows rotate in ISR rotation during TTD, FOD and COD stages as follows. In addition, they have an additional longitudinal experience during the on calls. During this rotation, fellows have opportunity to experience the following opportunities:

- 1- Observe, manage and lead resuscitation
- 2- Practice and supervise different procedures
- 3- Participate and lead daily huddles and debriefing
- 4- Observe and lead in-patient antenatal consultation, in-patient neonatal consultation
- 5- Teach and observe different learners including junior fellows, pediatric residents, nurse practitioner and physician assistants' trainees

Additional optional experiences:

- 1- Opportunity to manage/observe transport calls
- 2- Participate in mock codes, simulation teaching

STAGE: TRANSITION TO DISCIPLINE

Duration: 2 Weeks within the first 12 Weeks of Training
 EPAs Mapped: TTD 1, 2, 3

EPAs TO BE COMPLETED:

TTD EPA #1 Resuscitating late preterm or term infants

Key Features: recognizing the sick/deteriorating infant requiring resuscitation, performing the skills of neonatal resuscitation and basic procedure skills like mask ventilation, intubation, chest compressions and UVC insertion as per current guidelines, and knowing when to call for assistance.

Assessment Plan: Collect 3 observation of achievement.

Direct observation by supervisor

- At least 3 with mask ventilation
- At least 1 observation of each procedure
- At least 1 observation by a neonatologist

TTD EPA #2: Performing clinical assessments for infants without complex conditions, and developing management plans:

PART A: clinical assessment (2 observations of achievement)

PART B: clinical documentation (2 observations of achievement)

TTD EPA #3: Providing clinical updates about the condition and management of infants without complex conditions (2 observations of achievement)

MEDICAL EXPERT

- 1.4 Recognize one's own limits and seek assistance as needed
- 2.1 Determine the acuity of the issue and the priorities for patient care
- 2.2 Elicit an accurate, relevant history including pertinent antenatal, perinatal and/or postnatal information, perform a physical exam that informs the diagnosis, Provide assessment and initial stabilization of ABCs
- 2.2 Synthesize clinical information to formulate a summary of the case, select and/or interpret investigations, develop a differential diagnosis
- 2.4 Develop a management plan for common neonatal presentations
- 3.1 Integrate planned procedures or therapies into resuscitative efforts
- 3.4 Perform bag/mask ventilation effectively when indicated and perform the sequence of neonatal resuscitation as per established protocols

Procedure skills:

- Providing bag and mask ventilation
- Intubation of late preterm and term newborns
- Insertion of UVC and UAC

SCHOLAR

- 2.5 Role model self-assessment and feedback seeking behaviour

COMMUNICATOR

- 1.1 Communicate using a patient-centred and family-integrated approach that encourages trust and is characterized by empathy, respect, and compassion
- 1.4 Respond to non-verbal behaviors to enhance communication
- 3.0 Share health care information and plans with patients' families
- 3.1 Share information and explanations that are clear, accurate, and timely, while assessing for understanding
- 5.1 Document clinical encounters in an accurate, complete, timely, and accessible manner, in compliance with regulatory and legal requirements

COLLABORATOR

- 1.2 Negotiate overlapping and shared responsibilities with physicians and other colleagues in the health care professions in episodic and ongoing care
- 1.3 Engage in respectful shared decision-making with physicians and other colleagues in the health care professions

PROFESSIONAL

- 1.2 Ensure that family and/or caregiver(s) are informed about the diagnosis and plan of care
- 4.1 Maintain capacity for professional clinical performance in stressful situations

STAGE: FOUNDATION OF DISCIPLINE

Duration: 4 Weeks

EPAs Mapped: FOD 1, 2, 4, 5, 8, 9, 10

MEDICAL EXPERT

- 1.3 Apply knowledge of normal and aberrant fetal physiology, growth, and development
- 1.3 Apply knowledge of the indications, function, and limitation of biomedical devices used in the care of the infant
- 1.4 Act decisively and maintain control in critical situations
- 1.4 Recognize one's own limits, and seek assistance as needed
- 1.6 Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice
- 2.1 Determine the acuity of the issue and prioritize issues to address in the patient's assessment and management
- 2.2 Elicit an accurate, relevant history including pertinent antenatal, perinatal and/or postnatal information, perform a physical exam that informs the diagnosis in a timely manner, without excluding key elements
- 2.2 Develop a differential diagnosis and integrate information from the clinical assessment to determine the patient's clinical status and health care needs
- 2.2 Synthesize clinical information to formulate a summary (documenting clinical encounters)
- 2.2 Provide assessment and initial stabilization of ABCs
- 2.2 Recognize when ongoing resuscitation efforts are no longer effective and should be discontinued
- 2.2 Select and/or interpret investigations
- 2.3 Address with the family their ideas about the nature and cause of the health problem, and their fears and concerns and work with the patient's family to establish goals of care
- 2.4 Assess the need and timing of transfer to another level of care and determine the setting of care appropriate for the patient's health needs
- 2.4 Develop and implement a management plan that align with the goals of care
- 2.4 Establish a plan for ongoing care in the local setting and/or for care prior to and during transfer
- 2.4 Manage hemodynamic support and monitoring
- 2.4 Manage non-invasive and/or invasive ventilation
- 2.4 Provide concurrent treatment and ongoing assessment of the patient's clinical condition
- 2.4 Reassess clinical status and re-evaluate and adjust resuscitative and diagnostic efforts as appropriate
- 3.1 Describe the indications, contraindications, risks and alternatives for a given procedure or therapy
- 3.1 Integrate planned procedures into resuscitative efforts
- 3.2 Obtain and document informed consent, explaining the risks and rationale for a proposed procedure
- 3.4 Demonstrate aseptic technique: skin preparation; draping; establishing and respecting the sterile field; hand cleanse, gown and glove
- 3.4 Direct the sequence of neonatal resuscitation
- 3.4 Establish and implement a plan for post-procedure care
- 3.4 Gather and/or manage the availability of appropriate instruments and materials
- 3.4 Handle sharps safely
- 3.4 Maintain universal precautions
- 3.4 Perform procedures in a skillful and safe manner, adapting to unanticipated findings or changing clinical circumstances and recognize and manage complications
- 3.4 Perform the sequence of neonatal resuscitation as per established protocols
- 3.4 Position the patient appropriately

- 4.1 Ask for additional assistance and/or other services when indicated
- 4.1 Determine the need and timing of follow up
- 4.1 Determine the need and timing of referral to other health care professionals
- 4.1 Establish plans for ongoing care, including follow-up on investigations and response to treatment
- 5.2 Demonstrate situational awareness, avoid fixation error
- 5.2 Use structured communication tools and strategies to enhance patient safety

MANAGER/LEADER

- L 1.2 Establish a safe environment for debriefing critical events
- L 4.2 Establish clear leadership in resuscitative efforts, assuming the leadership role as appropriate in resuscitation in moderate preterm, late preterm and term infants

SCHOLAR

- S 2.3 Provide opportunities for appropriate clinical responsibility (when supervising and educating other learners)
- S 2.3 Supervise learners to ensure they work within their limits
- S 2.4 Identify the learning needs and desired learning outcomes of others
- S 2.4 Present information in an organized manner to facilitate understanding of learners
- S 2.4 Provide adequate time for questions and/or discussion with learners
- S 2.5 Provide feedback to enhance learning and performance
- S 2.5 Provide specific suggestions for improvement of performance
- S 2.5 Role model self-assessment and feedback seeking behaviour
- S 3.4 Integrate best evidence and clinical expertise into decision making

COMMUNICATOR

- COM 1.1 Develop trusting and supportive relationships with families in distress
- COM 1.4 Respond to non-verbal communication and use appropriate non-verbal behaviours to enhance communication
- COM 1.5 Establish boundaries as needed in emotional situations
- COM 1.5 Recognize when strong emotions (e.g. fear, anger, anxiety, sorrow) are impacting an interaction and respond appropriately
- COM 2.1 Conduct a patient-centred interview, gathering all relevant biomedical and psychosocial information
- COM 2.3 Identify other sources of information (e.g. family, medical record) that may assist in a given patient's care
- COM 2.3 Request and synthesize patient information gathered by another health professional
- COM 3.1 Convey information to the family clearly and compassionately
- COM 3.1 Use appropriate language and avoid medical jargon
- COM 3.1 Use strategies to verify and validate the family's understanding
- COM 3.1. Convey information about diagnosis and prognosis clearly and compassionately
- COM 4.3 Answer questions from the family
- COM 5.1 Complete clinical documentation in a timely manner
- COM 5.1 Convey clinical reasoning and the rationale for decisions
- COM 5.1 Document all relevant findings and investigations
- COM 5.1 Document relevant discussions with families and/or other health care providers, as applicable
- COM 5.1 Document resuscitative/stabilization efforts and the sequence of events, as applicable
- COM 5.1 Document the encounter to convey the procedure and outcome
- COM 5.1 Organize information in a logical manner

COM 5.1 Provide a clear plan for ongoing management

COLLABORATOR

- COL 1.2 Delegate tasks and direct team members to aid in resuscitation
- COL 1.2 Integrate the skills of other health care professionals in the resuscitation
- COL 1.2 Seek and respond to input from other health care professionals
- COL 1.2 Use closed loop communication
- COL 1.3 Communicate effectively with other health care professionals
- COL 1.3 Communicate with the health care team using clear language
- COL 2.1 Delegate tasks and responsibilities in an appropriate and respectful manner
- COL 3.2 Communicate with the receiving physician(s) or health care professional during transitions in care, clarifying issues as needed
- COL 3.2 Provide anticipatory guidance for results of outstanding investigations and/or next steps for management
- COL 3.2 Summarize patient issues providing rationale for key decisions

HEALTH ADVOCATE

- HA 1.1 Assess a patient's need for additional health services or resources

PROFESSIONAL

- P 1.1 Intervene when behaviours toward colleagues and/or learners undermine a respectful environment
- P 1.2 Ensure that family and/or caregiver(s) are informed about the diagnosis and plan of care
- P 1.3 Recognize and respond to ethical issues
- P 4.1 Exhibit self-awareness, recognizing and managing the impact of end of life care on personal well-being and professional performance
- P 4.1 Maintain capacity for professional clinical performance in stressful situations
- P 4.3 Recognize, support and respond effectively to colleagues in need

STAGE: CORE OF DISCIPLINE

Duration: 4 Weeks

EPAs Mapped: COD 1, 2, 4, 7

MEDICAL EXPERT

- ME 1.3 Apply knowledge of normal and aberrant fetal physiology, growth, and development
- ME 1.4 Act decisively and maintain control in critical situations
- ME 1.4 Recognize one's own limits and seek assistance as needed
- ME 2.1 Prioritize issues to address in the patient's assessment and management
- ME 2.2 Develop a differential diagnosis
- ME 2.2 Elicit an accurate, relevant history including pertinent antenatal, perinatal and/or postnatal information
- ME 2.2 Integrate information from the clinical assessment to determine the patient's clinical status and health care needs
- ME 2.2 Perform a physical exam that informs the diagnosis
- ME 2.2 Perform the history and physical exam in a timely manner, without excluding key elements
- ME 2.2 Recognize when ongoing resuscitation efforts are no longer effective and should be discontinued
- ME 2.2 Select and/or interpret investigations

ME 2.2 Synthesize clinical information to formulate a summary (documenting clinical encounters)
ME 2.4 Develop and implement a management plan
ME 2.4 Manage hemodynamic support and monitoring
ME 2.4 Manage non-invasive and/or invasive ventilation
ME 2.4 Reassess clinical status and re-evaluate and adjust resuscitative and diagnostic efforts as appropriate
ME 3.1 Describe the indications, contraindications, risks and alternatives for a given procedure or therapy
ME 3.1 Integrate planned procedures or therapies into resuscitative efforts
ME 3.2 Obtain and document informed consent, explaining the risks and rationale for a proposed procedure
ME 3.4 Demonstrate aseptic technique: skin preparation; draping; establishing and respecting the sterile field; hand cleanse, gown and glove
ME 3.4 Establish and implement a plan for post-procedure care
ME 3.4 Gather and/or manage the availability of appropriate instruments and materials
ME 3.4 Handle sharps safely
ME 3.4 Maintain universal precautions
ME 3.4 Perform procedures in a skillful and safe manner, adapting to unanticipated findings or changing clinical circumstances
ME 3.4 Position the patient appropriately
ME 3.4 Recognize and manage complications
ME 4.1 Determine the need and timing of followup
ME 4.1 Determine the need and timing of referral to other health care professionals
ME 4.1 Establish plans for ongoing care, including follow-up on investigations and response to treatment
ME 5.2 Demonstrate situational awareness, avoid fixation error
ME 5.2 Use structured communication tools and strategies to enhance patient safety

MANAGER/LEADER

L 1.1 Summarize debriefing discussions, identifying potential improvements in health care delivery
L 1.2 Encourage all members of the team to identify opportunities to improve patient care
L 1.2 Establish a safe environment for debriefing critical events
L 2.1 Apply knowledge of the resources and/or services available in various care settings
L 2.1 Consider costs when choosing diagnostic and/or treatment options
L 4.2 Establish clear leadership in resuscitative efforts, assuming the leadership role as appropriate in resuscitation of critically ill infants, and or complex

SCHOLAR

S 2.3 Provide opportunities for appropriate clinical responsibility (when supervising and educating other learners)
S 2.3 Supervise learners to ensure they work within their limits
S 2.4 Identify the learning needs and desired learning outcomes of others
S 2.4 Present information in an organized manner to facilitate understanding of learners
S 2.4 Provide adequate time for questions and/or discussion with learners
S 2.5 Provide feedback to enhance learning and performance
S 2.5 Provide specific suggestions for improvement of performance
S 2.5 Role model self-assessment and feedback seeking behaviour
S 3.4 Integrate best evidence and clinical expertise into decision making

COMMUNICATOR

COM 1.1 Develop trusting and supportive relationships with families in distress

COM 1.4 Respond to non-verbal communication and use appropriate non-verbal behaviours to enhance communication

COM 1.5 Establish boundaries as needed in emotional situations

COM 1.5 Recognize when strong emotions (e.g. fear, anger, anxiety, sorrow) are impacting an interaction and respond appropriately

COM 2.3 Request and synthesize patient information gathered by another health professional

COM 3.1 Convey information about diagnosis and prognosis clearly and compassionately

COM 3.1 Use appropriate language and avoid medical jargon

COM 3.1 Use strategies to verify and validate the family's understanding

COM 4.3 Answer questions from the family

COM 5.1 Document telephone advice provided, and the care provided during transport

COM 5.1 Document the clinical encounter to accurately reflect the discussion and decisions

COM 5.1 Document the encounter to convey the procedure and outcome

COLLABORATOR

COL 1.2 Consult as needed with other health care professionals, including other physicians

COL 1.2 Delegate tasks and direct team members to aid in resuscitation

COL 1.2 Seek and respond to input from other health care professionals

COL 1.2 Use closed loop communication

COL 1.3 Communicate with the health care team using clear language

COL 1.3 Convey the purpose of debriefing an event to the health care team

COL 1.3 Facilitate discussions within the health care team, ensuring everyone has the opportunity to participate

HEALTH ADVOCATE

HA 1.1 Assess a patient's need for additional health services or resources

HA 1.1 Facilitate access to bereavement support for a patient's family, as appropriate

PROFESSIONAL

P 1.1 Intervene when behaviours toward colleagues and/or learners undermine a respectful environment

P 1.2 Ensure that family and/or caregiver(s) are informed about the diagnosis and plan of care

P 1.3 Recognize and respond to ethical issues

P 4.1 Exhibit self-awareness, recognizing and managing the impact of end of life care on personal well-being and professional performance

P 4.1 Maintain capacity for professional clinical performance in stressful situations

P 4.3 Recognize, support and respond effectively to colleagues in need

INFANT STABILIZATION (ISR) ORIENTATION PACKAGE

SUMMARY

Fellows will participate in one 2-weeks rotation and two 4-week Infant Stabilization (ISR) rotation during fellowship in order to learn how to stabilize and resuscitate newborns.

ISR rotation includes exposure and participation in the following learning opportunities:

- 1- Participating and leading neonatal resuscitation
- 2- Providing neonatal consultations for referrals from Level 1 nursery (4C) and different admissions from different parts of the hospital.
- 3- Participating or leading in-patient antenatal consultations
- 4- Completing or supervising common procedures in the resuscitation of newborns.
- 5- Supervise, teach, and support junior learners on the team including residents, nurse practitioners, physician assistants and/or clinical fellows
- 6- Participating and/or leading the daily labor and delivery huddle, high risk huddles and debriefing.

CONTACT INFORMATION

Neonatology attending: Esther Rai
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Administrative assistant: Kelly Binkle

DAILY ACTIVITIES (9AM-5PM)

Main Activities:

- ✓ At the beginning of ISR rotation, fellows are to identify the attending responsible for ISR that week and communicate with them in regard to team management, personal objectives, and goals.
- ✓ Different resources are available to fellows in regard to different antenatal consultations. See Appendix 1.
- ✓ Infant stabilization occurs in the ISR room. Often, the team is composed of attending, the fellow, and a frontline staff (clinical fellow, resident, NP or PA). The fellow is responsible to carry the fellow ISR pager and the fellow code pink pager. They are responsible for attending all high-risk deliveries and provide supervision to all intermediate/low risk deliveries.
- ✓ In the morning at around 8:00, morning handover and then a second nursing huddle occurs typically in the handover room (4D23) at 9:15 where the morning cases are discussed. The fellow is to go over these cases and prepare for them with the team before the huddle.
- ✓ The fellow will also go over antenatal consults in the binder at south desk and will complete them after discussion with the attending.
- ✓ The fellow is also responsible for completing (or ensuring completion) the attendance at delivery form (consult) for each delivery (found in the binder) and also documenting the reason for attendance at delivery in the binder at the south desk.
- ✓ At the end of each week, fellows are to discuss feedback with their respective attending in response to their personal objectives and goals.

Commented [SB1]: Resources for antenatal consults

WEEKLY SCHEDULE

	Monday	Tuesday	Wednesday	Thursday	Friday
8:00 - 8:15	Team 5 handover	Team 5 handover	Team 5 handover	Team 5 handover	Neonatal seminar or MFM rounds
8:30 - 9:00	Morning huddle	Morning huddle	Morning huddle		
9:00 - 9:15		Journal Club	Case based teaching		
9:15 - 9:40				Morning huddle	Morning huddle
9:40 - 10:00					CQI huddle
13:00-16:00	Meet with attending for weekly goals			AHD Protected time Handover pagers to attending	Meet with attending for feedback

OBJECTIVES AND EPAs

Royal College objectives are available online and are also available on the MEDPORTAL website. Please refer to NPM rotation specific objectives and EPAs document for more details. Please see in the appendix useful tools to help you keep track of your learning.

Before starting the rotation, it is recommended that fellows:

- 1- Review rotation objectives by stage and develop own objectives guided by own learning plans
- 2- Plan EPAs that they will need to complete during their upcoming rotation.

During the rotation, fellows are expected to:

- 1- Meet with clinical supervisor every Monday to discuss their objectives for the week and to share about what EPAs they would like to complete.
- 2- Inform clinical supervisor about their daily planned EPAs, ensure to touch base with clinical supervisor after the observation is completed.
- 3- It is recommended that the EPA is triggered and completed the same day of the observation using phone or iPad (provided by the program).
- 4- During ISR rotation, completing one EPA/day typically should be sufficient.
- 5- At the end of the week, meet with supervisor for feedback that is guided by your weekly objectives. Ensure that such feedback is documented on CBME narrative form.

At the end of the rotation:

- 1- Ensure to meet with clinical supervisor to complete ITER. This should be completed within 14 days of end of the rotation at the most.
- 2- Review and reflect on your EPAs completion and plan for your next rotation
- 3- Complete faculty evaluation and rotation evaluation to help us improve your learning experience. If you have any challenges, ensure to communicate to PD/PA in a timely manner

APPENDIX 1: USEFUL TRACKING TOOLS- PROCEDURES BY STAGE

Procedure log	Details	Date
Transition to discipline (TTD EPA 1)		
Bag and mask ventilation (3)		
Intubation >34w (1)		
UVC (1)		
Chest compressions (1)		
FOUNDATION (FOD EPA 4)		
Bag and mask ventilation (5)		
Intubation >28w (5)		
Surfactant (1)		
Laryngeal mask-sim (1)		
Thoracentesis (2)		
UVC (3)		
UAC (3)		
PICC (3)		
Arterial blood sampling (2)		
Venous blood sampling (2)		
Chest compressions-sim (1)		
Male urinary catheter (1)		
Female urinary catheter (1)		
Intraosseous-sim (1)		
Suprapubic aspiration-sim (1)		
CORE (COR EPA 4)		
ETT <28w (4)		
Difficult airway (2)		
Chest tube (2)		
PAL (2)		
PICC (3)		
Exchange transfusion (1)		
Pericardiocentesis-sim (1)		
Paracentesis-sim (1)		
Cardioversion-sim (2)		

Please note the number between brackets indicates the number of achieved EPAs required for each procedure. Achieved EPAs are defined by a score of 5 on the entrustable scale.

APPENDIX 1: USEFUL TRACKING TOOLS- CONSULTS

The following is a logbook for antenatal/post-natal consultations.

Consultation Type	Type of task (consult, teaching, reading)	Task completed?
Cardiovascular		
Congenital Critical Heart Disease		
Arrhythmias		
Respiratory		
Congenital diaphragmatic hernia		
RDS		
Pulmonary hypoplasia		
MAS		
TTN		
Neurological		
Seizures		
Neonatal Abstinence Syndrome		
HIE		
Subgaleal Hemorrhage		
Hematological		
Anemia		
Thrombocytopenia		
Gastrointestinal		
Esophageal Atresia		
Duodenal Atresia		
Anal Atresia		
Abdominal Wall Defects		
Genito-urinary		
Hydronephrosis		
Posterior Urethral Valves		
Ambiguous Genitalia		
Genetic		
Aneuploidies		
Hydrops		
Skeletal Dysplasia		
Genetic tests		
Infectious disease		
TORCHES		
Endocrinological		
Hypoglycemia		
Hyponatremia		
Extreme prematurity		
Multiple gestations		
Drug exposures		

ISR (Infant Stabilization Room)

TTD01- Resuscitating late preterm or term infants (3 Observations)

TTD02- Performing clinical assessments for infants without complex conditions, and developing management plans (2 Admissions + 2 Documentations)

TTD03- Providing clinical updates about the condition and management of infants without complex conditions (2 Parents update)

FOD01- Leading the resuscitation and stabilization of moderate preterm, late preterm, and term infants (7 Observations)

FOD02- Providing neonatal-perinatal consultations for patients WITHOUT complex conditions (4 Antenatal and 3 Postnatal)

FOD04- Performing the foundational procedures of Neonatal Perinatal Medicine (42 Observations)

FOD05- Assessing infants WITHOUT complex conditions and developing admission plans for level 3 NICU care (7 Observations)

FOD08- Providing clear and concise handover at transitions of care (6 Observations)

FOD09- Supervising and educating other learners (4 Observations)

FOD10- Documenting clinical encounters (8 Observations)

COD01- Leading the resuscitation and stabilization of critically ill infants, including infants that are extremely preterm and/or complex (12 Observations)

COD02- Providing antenatal consultations for patients with complex conditions (6 Observations)

COD04- Performing the Core procedures of Neonatal Perinatal Medicine (18 Observations)

COD07- Reaching shared decisions with families regarding patients with medical complexity and/or life limiting conditions (3 Observations)

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