## **Qualified in Service (QIS): An approach to assessing competencies and authorization of health providers to perform EmONC**

In addition to routinely assessing whether facilities have an adequate number of health providers, it is important to know whether health providers who are expected to be delivering emergency obstetric and newborn care (EmONC) services are both authorized and competent to perform those services (or qualified in service – QIS). While many countries have systems in place to ensure qualifications and to routinely assess and improve the quality of their health workforce (e.g., systems at a facility level such as credentialing and supportive supervision and systems at the national level such as licensing based on mandated pre-service preparation, continuing education and regular assessment of skills), the following approach to assessing EmONC-related qualifications can be adapted and integrated into existing practices.

All health providers must be both authorized and competent to fill their specific role in providing EmONC services in order to be considered qualified in service.

Health providers can document authorization by demonstrating one or more of the following three criteria:

1. Successful completion of a pre-service or post graduate education program that prepares an individual with the scope of practice (SOP) required for their role in provision of EmONC services,
2. Successful completion of an in-service training program that prepares an individual to provide one or more EmONC signal functions or other essential surgical, obstetric, neonatal or blood bank services required for EmONC,
3. Licensing or registration by a professional regulatory body (Board or Council) with a SOP inclusive of provision of EmONC services.

For purposes of this red flag indicator, health providers are counted as competent if they have current knowledge and skill required to deliver the services that they are authorized to provide. Competency in EmONC or other essential surgical, obstetric, neonatal or blood bank services required for EmONC should be assessed periodically and can be evaluated through a combination of one or more of the following methods:

1. Active participation in an EmONC inclusive competency maintenance program required by a professional regulatory body or association
2. Structured self-assessment that incorporates reflection and targeted improvement of knowledge and skills and feedback from supervisors and peers
3. Direct individual observation and structured feedback
4. Team drills using simulation and structured assessment tools
5. Individual assessment using simulation and structured assessment tools (OSCE)

A facility must be staffed by personnel with a combined range of qualifications and competencies required for its mission. For example, a non-surgical Basic EmONC facility must have qualified and competent midwives, nurse midwives, obstetricians or other nationally qualified birth attendants as well as qualified and competent nurses, technicians or other nationally qualified complementary health professionals. A facility offering Comprehensive EmONC services must also include qualified and competent surgical, neonatal and blood transfusion team members.

**Step 1: Document whether individual health providers in facilities are authorized and competent to perform within their role(s) on the Basic EmONC or Comprehensive EmONC team**

In Basic EmONC facilities, clinical supervisors / mentors / sub-national managers ensure that all health providers are authorized and competent upon initial employment and annually thereafter using the sample form provided in Figure 1. Authorization and competency of health providers will be determined based upon the individual provider’s role in providing Basic EmONC care. Each member of the team must be authorized and competent to perform all tasks required by her or his role to be considered QIS.

* Birth attendants must be authorized and competent to provide all elements included in the definition of skilled health personnel providing care during childbirth within the 2018 joint statement by WHO, UNFPA, UNICEF, ICM, ICN, FIGO and IPA.[[1]](#footnote-1)
* Complementary health professionals must be authorized and competent to directly provide or support the elements within the 2018 joint statement. For example, a nurse providing care within an EmONC facility may not be prepared and authorized to perform all signal functions but will be capable of supporting those signal functions as part of the team.

The person completing the assessment determines whether an individual is in the birth attendant or complementary role and the source of their authorization for that role. She or he then identifies each BEmONC maternal and newborn task that is required for an individual's role and whether that individual is authorized to perform that role. The supervisor / in-charge then uses the letter codes included in the form to document all methods used to assess competency performing each task. If competency has not been assessed or achieved, this cell on the form is left blank. The person identifies an individual to be QIS for each task that is role-related, authorized and currently assessed as competent.

The person conducting the assessment calculates a final score for each health provider by tallying the number of tasks relevant to an individual’s role, and then determining what proportion of those tasks the health provider is authorized and competent to perform (and therefore considered qualified in service or “QIS”). The tally in the authorized column is then divided by the tally in the required column to calculate a percent authorized score (# tasks authorized / # tasks required). Similarly, the percent competent (# competent / # required) and percent QIS (# QIS / # required) scores are calculated. Finally, the person conducting the assessment lists all tasks for which an individual health provider is NOT QIS.

Note that the sample forms provided below are not intended as protocols or clinical guidelines for EmONC service delivery. Depending on local service arrangements and needs, units may establish credentialing / QIS criteria beyond these requirements, with more detailed or specific competencies.

#### **Figure 1.** Sample BEmONC personnel QIS documentation form[[2]](#footnote-2)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Health provider name:** |  | | | | | | |
| **Health provider role**  **(select one):** | Birth attendant | Complementary health professional | | | | | |
| **Documentation of authorization of role** | |  | | |  | | |
| **Authorization source**  **(select all that apply):** | Pre-service education | In-service training | | | Licensing / registration | | |
| **Documentation of Qualified in Service (QIS)** | | | | | | | |
| *For each task associated with BEmONC Care:*   * *Place checkmark if the task is required for an individual’s role on the team.* * *Place checkmark if the individual is authorized to perform that task.* * *If the individual has been assessed as competent for that task within the prior 12 months, denote this by writing in what competency assessment method was used (see competency assessment codes listed below).* * *Check QIS for those tasks that are required by role, authorized to perform and assessed within the past 12 months.*     *Competency Assessment Codes*  ***CMP*** *= Participation in competency maintenance program required by regulatory board or council*  ***SSA*** *= Structured self-assessment*  ***DO*** *= Direct observation*  ***TD*** *= Team drills*  ***OSCE*** *= Objective structured clinical evaluation* | | | | | | | |
| **BEmONC tasks** | | | **Required for role** | **Authorized**  **to perform** | | **Competency assessed** | **QIS** |
| Support and monitor woman and fetus through labor including identifying deviations from normal | | |  |  | |  |  |
| Conduct normal spontaneous vaginal birth | | |  |  | |  |  |
| Provide IV fluid replacement therapy and stabilize for referral if necessary | | |  |  | |  |  |
| Identify and repair perineal lacerations | | |  |  | |  |  |
| Prevent, identify and manage maternal sepsis including administration of parenteral antibiotics | | |  |  | |  |  |
| Identify and treat PPH including administer medications to treat PPH | | |  |  | |  |  |
| Identify and manually remove retained placenta | | |  |  | |  |  |
| Perform assisted vaginal birth with vacuum | | |  |  | |  |  |
| Initiate and support early and exclusive breastfeeding | | |  |  | |  |  |
| Perform newborn resuscitation with bag and mask | | |  |  | |  |  |
| Identify preeclampsia/eclampsia and administer magnesium sulfate | | |  |  | |  |  |
| Identify incomplete abortion and remove retained products of conception | | |  |  | |  |  |
| Administer parenteral antibiotics (newborns) | | |  |  | |  |  |
| Practice immediate KMC for preterm and LBW infants | | |  |  | |  |  |
| Administer oxygen therapy with pulse oximetry for stabilization and transportation (newborns) | | |  |  | |  |  |
| Arrange ambulance (for a patient requiring referral), with trained and equipped provider, to a facility that can provide definitive care | | |  |  | |  |  |
| **Final score / result** | | | **# required** | **% authorized** | | **% competent** | **% QIS** |
|  |  | |  |  |
| **For this individual, please list all tasks that are NOT QIS:** | | |  | | | | |

Figure 2 provides a sample form to determine qualification of health providers staffing CEmONC facilities. The clinical supervisors / mentors / sub-national managers complete this form as described above with the following exceptions. First, the person conducting the assessment identifies the team or teams that an individual health provider is assigned to within the facility (see below). Then the person conducting the assessment completes the specific component of the form for the team(s) to which the individual health provider is assigned.

* **EmONC Team:** Includes birth attendants and complementary health professionals described above who provide labor, birth and postpartum/newborn care in the CEmONC/IEmONC facility.
* **Obstetric Surgical Team:** Includes skilled personnel performing as a surgeon/operator, surgical first assistant, scrub nurse/technician, circulating nurse/technician, and anesthetist.
* **Neonatal Team:** The neonatal team may include neonatal specialty nurses, neonatal nurse practitioners, pediatricians, neonatologists and other nationally authorized providers. The team must be able to collectively provide all neonatal signal functions required within their Comprehensive or Intensive EmONC designated facility.
* **Blood Transfusion Team:** Members of the blood transfusion team may include physicians, nurses and laboratory personnel required to order, type and crossmatch, and administer blood transfusion to women and newborns.

Finally, the person conducting the assessment tallies and calculates percent scores only for the team(s) to which an individual health provider is assigned in the facility.

#### **Figure 2.** Sample CEmONC personnel QIS documentation form2

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Health provider name:** | |  |  |  | | | | | | | |
| **Health provider role as part of the following functional teams**  **(select one or more):** | | EmONC | | Surgical | | | Neonatal | | Blood transfusion | | |
| **Documentation of authorization of role** | | | | | | | | |  | | |
| **Authorization source**  **(select all that apply):** | | Pre-service education | | | In-service training | | | | Licensing / registration | | |
| **Documentation of Qualified in Service (QIS)** | | | | | | | | | | | |
| *For each task associated with care within one of the roles selected above:*   * *Place checkmark if the task is required for an individual’s role on the team.* * *Place checkmark if the individual is authorized to perform that task.* * *If the individual has been assessed as competent for that task within the prior 12 months, denote this by writing in what competency assessment method was used (see competency assessment codes listed below).* * *Check QIS for those tasks that are required by role, authorized to perform and assessed within the past 12 months.*   *Competency Assessment Codes*  ***CMP*** *= Participation in competency maintenance program required by regulatory board or council*  ***SSA*** *= Structured self-assessment*  ***DO*** *= Direct observation*  ***TD*** *= Team drills*  ***OSCE*** *= Objective structured clinical evaluation* | | | | | | | | | | | |
| **CEmONC Tasks** | | | | | | **Required for role** | | **Authorized**  **to perform** | | **Competency assessed** | **QIS** |
| **EmONC team** | | | | | |  | |  | |  |  |
| Support and monitor woman and fetus through labor | | | | | |  | |  | |  |  |
| Conduct normal spontaneous vaginal birth | | | | | |  | |  | |  |  |
| Provide IV fluid replacement therapy | | | | | |  | |  | |  |  |
| Identify and repair perineal lacerations | | | | | |  | |  | |  |  |
| Prevent, identify and manage maternal sepsis including administration of parenteral antibiotics | | | | | |  | |  | |  |  |
| Identify and treat PPH including administer medications to treat PPH | | | | | |  | |  | |  |  |
| Identify preeclampsia/eclampsia and administer magnesium sulfate | | | | | |  | |  | |  |  |
| Identify and manually remove retained placenta | | | | | |  | |  | |  |  |
| Perform assisted vaginal birth | | | | | |  | |  | |  |  |
| Initiate and support early and exclusive breastfeeding | | | | | |  | |  | |  |  |
| Perform newborn resuscitation with bag and mask | | | | | |  | |  | |  |  |
| Identify incomplete abortion and remove retained products of conception | | | | | |  | |  | |  |  |
| Administer parenteral antibiotics (newborns) | | | | | |  | |  | |  |  |
| Practice immediate KMC for preterm and LBW infants | | | | | |  | |  | |  |  |
| Administer oxygen therapy with pulse oximetry (newborns) | | | | | |  | |  | |  |  |
| Administer antenatal corticosteroids | | | | | |  | |  | |  |  |
| Provide intensive level organ support ***(women - Intensive EmONC level only)*** | | | | | |  | |  | |  |  |
| **Obstetric surgical team** | | | | | |  | |  | |  |  |
| Perform cesarean delivery | | | | | |  | |  | |  |  |
| First assist obstetrical surgery including cesarean | | | | | |  | |  | |  |  |
| Perform hysterectomy for ruptured uterus | | | | | |  | |  | |  |  |
| Perform laparotomy for ectopic pregnancies | | | | | |  | |  | |  |  |
| Perform as scrub nurse or technician | | | | | |  | |  | |  |  |
| Perform as circulating nurse or technician | | | | | |  | |  | |  |  |
| Provide anesthesia | | | | | |  | |  | |  |  |
| **Neonatal team** | | | | | |  | |  | |  |  |
| Enable assisted feeding with expressed breast milk (with cup and spoon and tube feeding) | | | | | |  | |  | |  |  |
| Provide IV fluids to preterm, small and/or sick newborns | | | | | |  | |  | |  |  |
| Practice immediate KMC for preterm and LBW infants | | | | | |  | |  | |  |  |
| Administer parenteral antibiotics to preterm, small and/or sick newborns | | | | | |  | |  | |  |  |
| Administer oxygen therapy with pulse oximetry | | | | | |  | |  | |  |  |
| Provide CPAP | | | | | |  | |  | |  |  |
| Provide phototherapy | | | | | |  | |  | |  |  |
| Provide thermal care with radiant warmer or incubator | | | | | |  | |  | |  |  |
| Perform mechanical ventilation to preterm, small and/or sick newborns ***(Intensive EmONC level only)*** | | | | | |  | |  | |  |  |
| Perform screening and treatment for retinopathy of prematurity ***(Intensive EmONC level only)*** | | | | | |  | |  | |  |  |
| **Blood transfusion team** | | | | | |  | |  | |  |  |
| Order blood transfusion | | | | | |  | |  | |  |  |
| Type and crossmatch blood for transfusion | | | | | |  | |  | |  |  |
| Administer maternal blood transfusion | | | | | |  | |  | |  |  |
| Administer newborn blood transfusion | | | | | |  | |  | |  |  |
| **Other tasks** | | | | | |  | |  | |  |  |
| Arrange ambulance (for a patient requiring referral), with trained and equipped provider, to a facility that can provide definitive care | | | | | |  | |  | |  |  |
| **Final score / result** |  | | | | | **# required** | | **% authorized** | | **% competent** | **% QIS** |
| **Role/**  **Team** | **EmONC** | | | | |  | |  | |  |  |
| **Obstetric surgical** | | | | |  | |  | |  |  |
| **Neonatal** | | | | |  | |  | |  |  |
| **Blood transfusion** | | | | |  | |  | |  |  |
| **For this individual, please list all tasks (for relevant teams) that are NOT QIS:** | | | | | | | | | | | |

**Step 2: Calculate the proportion of staff in a facility who are qualified in service for EmONC**

All EmONC health providers must be currently authorized to perform tasks related to their role within the facility. They must also have been assessed as competent to perform each of those tasks within the prior twelve months by one or more measures. Note that for CEmONC facilities, health providers may have roles pertaining to more than one of the functional teams (EmONC, obstetric surgical, neonatal, blood transfusion), and that they must be qualified in service for all the tasks that are required for their role(s). Using Figure 3 below, the person conducting the assessment counts the number of health providers that are actively providing care during the period being documented, disaggregated by their role on the EmONC, obstetric surgical, neonatal and blood transfusion teams. She or he then calculates the number and percent of EmONC health providers who were both authorized and competent (or “qualified in service”) during the window of documentation. Finally, the person conducting the assessment reviews all individual forms (for individual health providers) to identify any tasks in which no member of the team in a facility is QIS. These tasks are listed on the final row of Figure 3.

#### **Figure 3.** Number and proportion of EmONC health providers qualified in service (QIS)[[3]](#footnote-3)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Facility name:** |  |  | **EmONC designation:** | BEmONC | CEmONC | Intensive EmONC |
| **Team Role** | **Total Personnel** | **Total Authorized** | **Percent Authorized** | **Total Competent** | **Percent Competent** | **Percent QIS (authorized AND competent)** |
| EmONC |  |  |  |  |  |  |
| Obstetric surgical |  |  |  |  |  |  |
| Neonatal |  |  |  |  |  |  |
| Blood transfusion |  |  |  |  |  |  |
| List all EmONC tasks that you believe are insufficiently covered by health providers within your facility. | | | | | | |

**Step 3: Analysis and interpretation**

The information collected in this type of assessment can be analyzed and acted upon in a variety of ways within the health system. Facility managers may use this information at the individual health provider level to identify clinical tasks that are required by a health provider’s role for which she or he is not authorized or competent to perform. In this case this information will flag that an individual health provider may require further education, training or regulatory approval in EmONC, in accordance with clinical EmONC guidelines and quality standards, to become authorized and to achieve competency.

If results across facilities are aggregated, analysis of the total and percent of EmONC health providers who are authorized, competent and qualified at the national or sub-national levels may provide insights into gaps in pre-service and post-graduate education, in-service training, regulatory mechanisms supporting EmONC service delivery and availability of continued competency assessments that are needed to ensure effective delivery of services. Analysis at the national and sub-national levels may also identify certain geographic areas that have critical gaps in health providers who are QIS to provide EmONC, obstetric surgical, neonatal and blood transfusion tasks.

#### Useful links

* WHO - Essential Newborn Care Course: <https://www.who.int/tools/essential-newborn-care-training-course>
* American Academy of Pediatrics, Jhpiego, Laerdal – Helping Mothers and Babies Survive: Learning resources for quality care at birth: <https://hmbs.org/>
* WHO – Strengthening midwifery toolkit: <https://www.who.int/publications/i/item/9789241501965>

1. “Skilled health personnel, as referenced by SDG indicator 3.1.2, are competent maternal and newborn health (MNH) professionals educated, trained and regulated to national and international standards. They are competent to: (i) provide and promote evidence-based, human-rights based, quality, socioculturally sensitive and dignified care to women and newborns; (ii) facilitate physiological processes during labour and delivery to ensure a clean and positive childbirth experience; and (iii) identify and manage or refer women and/or newborns with complications. In addition, as part of an integrated team of MNH professionals (including midwives, nurses, obstetricians, paediatricians and anaesthetists), they perform all signal functions of emergency maternal and newborn care to optimize the health and well-being of women and newborns. Within an enabling environment, midwives trained to International Confederation of Midwives (ICM) standards can provide nearly all of the essential care needed for women and newborns. (In different countries, these competencies are held by professionals with varying occupational titles.)” (<https://www.who.int/publications/i/item/WHO-RHR-18.14>) [↑](#footnote-ref-1)
2. Each form would also include the name of the facility, name of the person conducting the assessment and the date that the form is filled out. [↑](#footnote-ref-2)
3. This form should also include a place for the name of the person calculating the facility QIS status along with the date the form was filled out. [↑](#footnote-ref-3)