

Hospital: – National ID Number: ______ Study-generated Surgical Provider ID: ______ Study-generated ID for the CS Case: _____

EmONC Needs Assessment in Afghanistan-Part III Cesarean Section Jhpiego

Tool 2: Clinical Observation of Cesarean Section

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|   | Information about Data Collection       | Response                   |  |
|---|-----------------------------------------|----------------------------|--|
| 1 | Assessor Name /ID Number:               |                            |  |
| 2 | Health Facility Type: (circle response) | DH(1), PH(2), RH(3), SH(4) |  |
| 3 | Today's Date: (mm/dd):                  | /                          |  |
| 4 | Study-generated Surgical Provider ID: _ |                            |  |

Instructions. There are three sections of this Observation Tool:

- Section A. Preliminary Information About the Observation
- Section B. Observation of Cesarean Surgery
- Section C. Observation of Post-Operative and Newborn Care

Please note that this tool should be followed by Tool 3: Interview with Surgical Provider on the Observed Case.

## **SECTION A - Preliminary Information About the Observation**

Please obtain the information in Section A by asking the nurse or checking the medical chart. Please fill in the response in the space provided, or circle the appropriate number.

| 000 | Provider Team Cadres                      | Response |
|-----|-------------------------------------------|----------|
| 001 | What is the cadre or qualification of the |          |
| 001 | surgical provider? (write in space)       |          |

| 002 | anesthesia provider?                                 |  |
|-----|------------------------------------------------------|--|
| 003 | nurse?                                               |  |
| 004 | (ContinuedWhat is the cadre or qualification of the) |  |
| 004 | other team member?                                   |  |

| 100 | Woman's Characteristics and Arrival                                                                                              | Response                                                                                                                                                                  |
|-----|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 101 | What is the age of the mother/patient?<br>(write age or 99 for not recorded)                                                     |                                                                                                                                                                           |
| 102 | What is the parity of the mother?<br>(write age or 99 for not recorded)                                                          |                                                                                                                                                                           |
| 103 | Did the woman come to this hospital for routine labor and delivery or due to a complication?                                     | Routine labor1 Complication2                                                                                                                                              |
| 104 | Did the woman come to the hospital from home, or was<br>she referred by the traditional birth attendant or a health<br>facility? | Home1<br>Referred from<br>Traditional Birth Attendant2<br>Referred from Health Facility3<br>Other4<br>(specify)<br>(If response is not "health facility",<br>skip to 201) |
| 105 | If the woman was referred from another health facility,<br>what type of facility was it? (write in)                              |                                                                                                                                                                           |

| 200 | Case Time Flow                                                                                                       | Time<br>(hh/mm) | AM or<br>PM  | Date<br>(dd/mm) |
|-----|----------------------------------------------------------------------------------------------------------------------|-----------------|--------------|-----------------|
| 201 | Regarding this caseat what time did the woman arrive to the ward?                                                    | :               | a.m.<br>p.m. | /               |
| 202 | At what time was the woman <i>first</i> seen by a provider?                                                          | :               | a.m.<br>p.m. | /               |
| 203 | At what time, and on which date, was the complication resulting in the cesarean <i>first</i> detected?               | :               | a.m.<br>p.m. | /               |
| 204 | What is the cadre of the provider who first noted the complication and need for cesarean? ( <i>write the cadre</i> ) |                 |              |                 |

| 200 | Case Time Flow                                                                                                                                  | Time<br>(hh/mm) | AM or<br>PM  | Date<br>(dd/mm) |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------|-----------------|
| 205 | At what <u>time</u> , and on which <u>date</u> ,<br>was the Surgical Provider first notified/told of the<br>complication and need for cesarean? | :               | a.m.<br>p.m. | /               |
| 206 | (Continued At what <u>time</u> , and on which <u>date</u> ,)<br>did the Surgical Provider decide that cesarean was required?                    | :               | a.m.<br>p.m. | /               |
| 207 | was the Anesthesia Provider, notified of the complication and need for cesarean?                                                                | :               | a.m.<br>p.m. | /               |
| 208 | was the abdominal incision made?                                                                                                                | :               | a.m.<br>p.m. | /               |
| 209 | was the baby born?                                                                                                                              | :               | a.m.<br>p.m. | /               |
| 210 | was the woman moved out of the operating theater to the post-surgical area?                                                                     | :               | a.m.<br>p.m. | /               |
| 211 | was the woman moved to the postpartum ward?                                                                                                     | :               | a.m.<br>p.m. | /               |

# **SECTION B – Observation of Cesarean Surgery**

Please circle the response that corresponds with your observation. Few questions have an option of "not applicable" or N/A. This should be used rarely, when the item can not be done.

| 300 | Initial assessment                                                                                  | Response    |
|-----|-----------------------------------------------------------------------------------------------------|-------------|
| 301 | Does the provider perform a rapid initial assessment and institute emergency measures if necessary? | Yes1<br>No0 |
| 302 | Does the surgical provider ask about the time of last fluid/solid intake?                           | Yes1<br>No0 |
| 303 | Does the provider review the woman's chart?                                                         | Yes1<br>No0 |
| 304 | Does anyone mobilize the surgical / operative theatre team?                                         | Yes1<br>No0 |
| 305 | Does anyone mobilize anesthesia?                                                                    | Yes1<br>No0 |
| 306 | Does anyone mobilize the pediatric team?                                                            | Yes1<br>No0 |

| 400 | Physical exam                                                                                                 | Response             |
|-----|---------------------------------------------------------------------------------------------------------------|----------------------|
| 401 | Does the provider check blood pressure and pulse?                                                             | Yes1<br>No0          |
| 402 | Does the provider check the temperature?                                                                      | Yes1<br>No0          |
| 403 | Does the surgical provider note urine output?                                                                 | Yes1<br>No0          |
| 404 | Does the surgical provider listen to lungs and heart?                                                         | Yes1<br>No0          |
| 405 | Does the surgical provider palpate abdomen and uterus?                                                        | Yes1<br>No0          |
| 406 | Does the surgical provider confirm presentation of fetus and whether the gestation is singleton vs. multiple? | Yes1<br>No0          |
| 407 | Does the surgical provider confirm whether fetus is alive?                                                    | Yes1<br>No0          |
| 408 | Does the surgical provider perform cervical exam if indicated?                                                | Yes1<br>No0<br>N/A99 |

| 500 | Preparation for anesthesia and surgery                                       | Response                            |
|-----|------------------------------------------------------------------------------|-------------------------------------|
| 501 | Has an IV line been inserted?                                                | Yes1<br>No0<br>(If no, skip to 504) |
| 502 | If yes, do the providers bolus<br>500 cc of IV fluids for general anesthesia | Yes1<br>No0<br>N/A99                |
| 503 | 1000cc of crystalloid fluids for regional anesthesia                         | Yes1<br>No0<br>N/A99                |
| 504 | Does any provider<br>clean vulva?                                            | Yes1<br>No0                         |
| 505 | insert sterile catheter?                                                     | Yes1<br>No0                         |
| 506 | give the woman an enema?                                                     | Yes1<br>No0                         |
| 507 | shave the woman's abdomen?                                                   | Yes1<br>No0                         |

| 500 | Preparation for anesthesia and surgery                                                                                                                                                  | Response                                                                                                                                                |  |  |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| 508 | shave the woman's pubic hair?                                                                                                                                                           | Yes1<br>No0                                                                                                                                             |  |  |
| 509 | Does any provider give<br>Magnesium trisilicate 300 mgs                                                                                                                                 | Yes1<br>No0                                                                                                                                             |  |  |
| 510 | Sodium citrate 30 cc 0.3 molar                                                                                                                                                          | Yes1<br>No0                                                                                                                                             |  |  |
| 511 | Ranitidine 150 mgs PO or 50 mgs IV                                                                                                                                                      | Yes1<br>No0                                                                                                                                             |  |  |
| 512 | Does any provider roll the patient 15 degrees to the left and place a pillow under the right hip to decrease risk of supine hypotension OR tilt the entire operating table to the left? | Yes1<br>No0                                                                                                                                             |  |  |
| 513 | Was the fetal heart rate assessed before beginning skin prep and surgery?                                                                                                               | Yes1<br>No0<br>N/A99                                                                                                                                    |  |  |
| 514 | Time fetal heart rate was obtained                                                                                                                                                      | : a.m. /<br>p.m. /                                                                                                                                      |  |  |
| 515 | Is pulse oximetry machine checked before the start of the case?                                                                                                                         | Yes1<br>No0<br>N/A99                                                                                                                                    |  |  |
| 516 | Type of anesthesia used                                                                                                                                                                 | General       1         Spinal       2         Ketamine       3         Local       4         Ether       5         Combination       6         Specify |  |  |
| 517 | Ask Q517 – Q520 ONLY if <u>general</u> anesthesia was used.<br>If used other type of anesthesia, skip to Q601.<br>Is the patient intubated?                                             | Yes1<br>No0<br>N/A99                                                                                                                                    |  |  |
| 518 | Does the anesthesia provider auscultate the chest to confirm that air is entering both lungs equally?                                                                                   | Yes1<br>No0<br>N/A99                                                                                                                                    |  |  |
| 519 | Does the anesthesia provider auscultate over the stomach and ensure absence of air entry into the stomach?                                                                              | Yes1<br>No0<br>N/A99                                                                                                                                    |  |  |
| 520 | Does the surgical provider check that the anesthesia has taken full effect by speaking with anesthesia provider and gently pinching abdominal skin with a forceps or clamps?            | Yes1<br>No0<br>N/A99                                                                                                                                    |  |  |

Continued...

| 600  | Cesarean Practice – From Beginning to Before Incision                                          | Response             |
|------|------------------------------------------------------------------------------------------------|----------------------|
| 601  | Does the surgical provider put on appropriate scrub clothes?                                   | Yes1<br>No0          |
| 602  | Does the anesthesia provider put on appropriate scrub clothes?                                 | Yes1<br>No0          |
| 603a | Does the surgical provider put on<br>a cap?                                                    | Yes1<br>No0          |
| 603b | Does the surgical provider put on<br>protective eyeglasses or shield?                          | Yes1<br>No0          |
| 603c | Does the surgical provider put on<br>a facemask?                                               | Yes1<br>No0          |
| 603d | Does the surgical provider put on<br>shoe covers?                                              | Yes1<br>No0          |
| 604a | Does the anesthesia provider put on<br>a cap                                                   | Yes1<br>No0          |
| 604b | Does the anesthesia provider put on<br>protective eyeglasses or shield?                        | Yes1<br>No0          |
| 604c | Does the anesthesia provider put on<br>a facemask?                                             | Yes1<br>No0          |
| 604d | Does the anesthesia provider put on<br>shoe covers?                                            | Yes1<br>No0          |
| 605  | Does the surgical provider perform a surgical hand scrub?                                      | Yes1<br>No0          |
| 606  | Does the anesthesia provider perform a surgical hand scrub?                                    | Yes1<br>No0          |
| 607  | Does the surgical provider put on HLD/sterile gloves?                                          | Yes1<br>No0          |
| 608  | Does the anesthesia provider put on clean or HLD/sterile gloves?                               | Yes1<br>No0          |
| 609  | Does any provider apply antiseptic solution to the abdomen?                                    | Yes1<br>No0          |
| 610  | Does a provider check function of surgical suctioning?                                         | Yes1<br>No0<br>N/A99 |
| 611  | Does the surgical provider attach electrocautery tip to sterile connectors and check function? | Yes1<br>No0<br>N/A99 |
| 612  | Does any provider ensure that bladder catheter is draining urine into gravity bag?             | Yes1<br>No0<br>N/A99 |

|     | Cesarean Practice – From Incision to End                                                                                                                     | Response                                                        |                   |  |  |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|-------------------|--|--|
| 613 | Skin incision time                                                                                                                                           | :                                                               | a.m. /<br>p.m. /  |  |  |
| 613 | What type of skin incision is made?                                                                                                                          |                                                                 | rtical1<br>verse0 |  |  |
| 615 | What type of uterine incision is made?                                                                                                                       | Midline vertical1<br>Low transverse0                            |                   |  |  |
| 616 | Does the provider clamp and tie or cauterize arterial and venous bleeding points as encountered?                                                             | No                                                              | 1<br>0<br>99      |  |  |
| 617 | Does the surgical provider push or sharply dissect the bladder downward off the lower uterine segment?                                                       |                                                                 | 1<br>0            |  |  |
| 618 | Does the surgical provider use a bladder retractor?                                                                                                          |                                                                 | 1<br>0            |  |  |
| 619 | Does the surgical provider confirm presentation and positioning of the fetus by manual palpation of the uterus?                                              |                                                                 | 1<br>0            |  |  |
| 620 | Does the surgical provider inform newborn care team of the color of the amniotic fluid?                                                                      |                                                                 | Yes1<br>No0       |  |  |
| 621 | Does the surgical provider suction the newborn's mouth and nose when delivered with bulb suction?                                                            | Yes1<br>No0<br>N/A99                                            |                   |  |  |
| 622 | Does the surgical provider use DeLee suction apparatus if meconium stained fluid observed?                                                                   | Yes1<br>No0<br>N/A99                                            |                   |  |  |
| 623 | After delivery of the newborn, which uterotoic was the woman given, if any?                                                                                  | None0<br>Oxytocin1<br>Misoprostol2<br>Ergometrine3              |                   |  |  |
| 624 | What dose was the woman given? (write dose or 0 for "none")                                                                                                  |                                                                 | (specify units)   |  |  |
| 625 | If ergometrine is given, does the provider obtain the woman's blood pressure to ensure it is not elevated?                                                   | Yes1<br>No0<br>N/A99                                            |                   |  |  |
| 626 | Does the surgical provider hand newborn to newborn care team<br>while maintaining sterility of gloves and gown or change gloves<br>if sterility is breeched? | Yes1<br>No0                                                     |                   |  |  |
| 627 | After clamping the cord, does the woman receive prophylactic antibiotics?                                                                                    | No0<br>Yes, ampicillin 2 grams IV 1<br>Yes, other2<br>(specify) |                   |  |  |

|     | Cesarean Practice – From Incision to End                                                       | Response                            |
|-----|------------------------------------------------------------------------------------------------|-------------------------------------|
| 628 | Does the provider deliver the placenta by<br>Controlled traction on the cord?                  | Yes1<br>No0                         |
| 629 | Manual extraction?                                                                             | Yes1<br>No0                         |
| 630 | Both?                                                                                          | Yes1<br>No0                         |
| 631 | Does the provider inspect placenta for completeness or abnormalities?                          | Yes1<br>No0                         |
| 632 | Does the provider explore the pelvis to remove blood clots from pelvis?                        | Yes1<br>No0                         |
| 633 | Does the provider look for any extension of the uterine incision into the cervix/upper vagina? | Yes1<br>No0                         |
| 634 | Does the provider check the bladder for injury and repair injury if necessary?                 | Yes1<br>No0                         |
| 635 | Does the provider close the peritoneum?                                                        | Yes1<br>No0                         |
| 636 | Did the provider recheck the uterus to make sure it is firm?                                   | Yes1<br>No0                         |
| 637 | Did the woman receive a tubal ligation during surgery?                                         | Yes1<br>No0<br>(If no, skip to 639) |
| 638 | if yes, did she request the tubal ligation?<br>(please ask the providers or observe in chart)  | Yes1<br>No0<br>N/A99                |
| 639 | Was a final sponge and instrument count done?                                                  | Yes1<br>No0                         |
| 640 | Does any provider apply a sterile dressing?                                                    | Yes1<br>No0                         |
| 641 | Does any provider apply water-occlusive covering over the dressing?                            | Yes1<br>No0                         |
| 642 | Does the provider ensure that urine is flowing into urine bag?                                 | Yes1<br>No0<br>N/A99                |
| 643 | In your opinion, did the client have adequate anesthesia throughout cesarean section?          | Yes1<br>No0                         |
| 644 | Were the blood pressure and pulse measured at least every 15 minutes during the procedure?     | Yes1<br>No0                         |

|     | Cesarean Practice – From Incision to End                                                                  | Response                                            |
|-----|-----------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| 645 | How often were the blood pressure and pulse measured during the procedure?                                | Never0<br>Once1<br>2 – 5 times2<br>6 or more times3 |
| 646 | Was the airway monitored and respirations/pulse oximeter assessed?                                        | Yes1<br>No0                                         |
| 647 | If the woman was intubated, does the anesthesia provider confirm that the client is ready for extubation? | Yes1<br>No0<br>N/A99                                |

## SECTION C – Observation of Post-Operative and Newborn Care

Please circle the response that corresponds with your observation. Few questions have an option of "not applicable" or N/A. This response should be used rarely, only when the item can not be done.

Observe the following items in the first <u>one-hour</u> period of post-operative care for the mother.

| 700 | Immediate Post-Operative Care - Observe for 1 hour                        | Response |
|-----|---------------------------------------------------------------------------|----------|
| 701 | In the first hour of the mother's recovery, how often (how many times) is | times    |
|     | level of alertness checked?                                               |          |
| 702 | B/P checked?                                                              | times    |
| 703 | heart rate checked?                                                       | times    |
| 704 | breathing checked?                                                        | times    |
| 705 | temperature checked?                                                      | times    |
| 706 | perineum checked for bleeding?                                            | times    |
| 707 | abdomen checked?                                                          | times    |
| 708 | urine bag checked for urine flow?                                         | times    |

Continued...

Please observe the following items in the two-hour post-operative care period for the mother.

| 800 | Immediate Post-Operative Care - Observe for 2 hours                                                                | Response                            |
|-----|--------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| 801 | Is the IV maintained during recovery?                                                                              | Yes1<br>No0                         |
| 802 | Are antibiotics continued for the postoperative period?                                                            | Yes1<br>No0                         |
| 803 | Was the woman given blood during or shortly after the cesarean?                                                    | Yes1<br>No0<br>(If no, skip to 804) |
| 804 | If yes, was blood given as a routine measure or due to hemorrhage?                                                 | Routine1<br>Hemorrhage2             |
| 805 | Is the woman ever left unattended in the first hour?                                                               | Yes1<br>No0                         |
| 806 | Does the surgical provider use antiseptic hand scrub or wash hands thoroughly with soap and water after the case?  | Yes1<br>No0                         |
| 807 | Does the surgical assistant use antiseptic hand scrub or wash hands thoroughly with soap and water after the case? | Yes1<br>No0                         |
| 808 | Does the provider write an operation note?                                                                         | Yes1<br>No0                         |
| 809 | Does the provider write postoperative management instructions?                                                     | Yes1<br>No0                         |

#### Please observe the following items in the <u>two-hour</u> post-operative care period for the <u>baby</u>.

| 900 | Immediate Newborn Care                                                                                             | Response             |
|-----|--------------------------------------------------------------------------------------------------------------------|----------------------|
| 901 | Immediately after birth, is the baby dried and wrapped in a dry blanket OR dried and placed under a warming light? | Yes1<br>No0<br>N/A99 |
| 902 | Is the baby slapped to stimulate breathing?                                                                        | Yes1<br>No0          |
| 903 | Is the baby rubbed to stimulate breathing?                                                                         | Yes1<br>No0          |

| 900 | Immediate Newborn Care                                        | Response                                           |
|-----|---------------------------------------------------------------|----------------------------------------------------|
| 904 | What is the condition of the newborn immediately after birth? | Normal: crying or pink and alert with good<br>tone |

#### Please observe the following items in the first <u>one-hour</u> period for the newborn.

| 1000 | Normal Newborn – 1 <sup>st</sup> hour              | Response            |
|------|----------------------------------------------------|---------------------|
| 1001 | How often in the first hour is the baby's          | times               |
| 1001 | heart rate checked?                                | unes                |
| 1002 | breathing checked?                                 | times               |
| 1003 | temperature checked by thermometer?                | times               |
| 1004 | temperature checked by touch?                      | times               |
| 1005 | Are antimicrobial drops placed in the baby's eyes? | Yes1<br>No0         |
| 1006 | Is the baby left unattended at any time?           | Yes1<br>No0         |
|      |                                                    | <u>Skip to 1200</u> |

| 1100 | Limp or Cyanotic Newborn                                      | Response                             |
|------|---------------------------------------------------------------|--------------------------------------|
| 1101 | Is the baby placed on her/his back on warm surface?           | Yes1<br>No0                          |
| 1102 | Is the baby kept wrapped except for face and chest?           | Yes1<br>No0                          |
| 1103 | Is the airway cleared before beginning further resuscitation? | Yes1<br>No0                          |
| 1104 | Is baby ventilated with bag and mask attached to oxygen?      | Yes1<br>No0<br>(If no, skip to 1006) |

| 1100 | Limp or Cyanotic Newborn                                                                | Response                                                                                                                       |
|------|-----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| 1105 | If yes, what is the size of the mask?                                                   | (specify units)                                                                                                                |
| 1006 | Does the baby require intubation?                                                       | Yes1<br>No0                                                                                                                    |
| 1007 | Does the baby receive cardiac compressions?                                             | Yes1<br>No0<br>(If no, skip to 1009)                                                                                           |
| 1008 | If yes, for how long did the baby receive compressions?                                 | minutes                                                                                                                        |
| 1009 | Is the mother (if awake) kept informed of condition of her baby?                        | Yes, informed1<br>No, not informed2<br>N/A, mother not awake3                                                                  |
| 1010 | If the baby is born alive and requires resuscitation, what is the outcome for the baby? | Alive and admitted to care of mother or<br>normal newborn nursery1<br>Alive and admitted to special care for sick<br>newborns2 |
|      | resuscitation, what is the outcome for the baby?                                        | Alive and transferred to another facility for<br>special care                                                                  |

Please observe the following interpersonal items for the overall case.

| 1200 | <b>Overall Client Provider interaction</b>                                                                                                          | Response                                         |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| 1201 | Does a member of the provider team explain the reason(s) for the cesarean to the woman and/or her companion/family?                                 | Yes1<br>( <i>If yes, skip to 1203)</i><br>No0    |
| 1202 | If not, why were reasons not explained?                                                                                                             |                                                  |
| 1203 | Did the surgical and/or anesthesia provider counsel the woman and/or companion/family on the risks and benefits of cesarean section and anesthesia? | Yes1<br>No0                                      |
| 1204 | Did the surgical provider answer any questions of the woman and her companion/family?                                                               | Yes1<br>No0<br>N/A (No questions were asked ).99 |
| 1205 | Did a member of the provider team obtain signed written<br>consent from client to proceed with cesarean section and<br>anesthesia?                  | Yes1<br>No0                                      |

| 1200 | <b>Overall Client Provider interaction</b>                                                          | Response                                                                                   |
|------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| 1206 | Did the surgical provider keep the woman and/or her companion/family informed at all times?         | Yes1<br>No0                                                                                |
| 1207 | Overall, did the team of providers maintain privacy for the woman including draping for procedures? | Yes1<br>No0                                                                                |
| 1208 | Overall, did the team of providers maintain confidentiality of information?                         | Yes1<br>No0                                                                                |
| 1209 | Overall, how respectful or disrespectful was the team of providers to the woman and/or her family?  | Very respectful1<br>Somewhat respectful2<br>Somewhat disrespectful3<br>Very disrespectful4 |

#### END of Observation