1. Purpose and Scope

This Standard Operating Procedure (SOP) aims to provide guidance to the structural assessment data entry officers abstracting data from paper forms into REDCap. This is required to assure quality and reduce errors and to standardise activities and tasks throughout the study.

2. Staffing, equipment and resources

Data entry will be conducted by two data entry officers and overseen by the supervisor. A computer programmed with REDCap with an online version of the questionnaire will be availed to the officers. A clean copy of each completed questionnaire will be made in consultation with the individual who collected the data from the hospitals. These clean copies will be used to enter data into REDCap.

3. Procedure

Key in data as it appears on the paper form, where it is not clear seek clarification from the person who assessed the hospitals.

Note:

i. The form should be filled completely for those facilities with both NBU and maternity unit, for those without a maternity unit/ward leave the maternity sections blank.

ii. For the free texts, where there are more than one comment kindly separate them using a colon (:).

Record information

Select the facility name (Id), assessor, facility ownership, facility type and level from the drop down list.

Enter the date of assessment in year-month-day (YYYY-MM-DD) format.

Enter position of person interviewed in the space provided, if more than one, list them separating with a colon (:).

Section 1: Staffing and records

Section 1.11: Staffing and Newborn Unit

i. Total staffing: Please enter the total number of staff (nurses, clinical officers, medical officers, paediatricians and obstetricians) as indicated on the paper form.
ii. **Availability of clinicians:** Describe the availability of clinicians in the facility at all times (daytime and night-time arrangement/weekends) and cadre as documented in the structural assessment form.

iii. **Adequate staffing:** Describe the adequacy of staffing (clinical and nursing) separately as shown on the tool. If there is no description enter “Empty”.

iv. **Type of NBU:** Select the type of newborn unit from the list provided. For the “other” option, please describe the type of NBU arrangement.

v. **Age of newborns admission:** Please write the age (in days) up to which newborns are admitted to the NBU. If there is no age limit for admissions then write ‘No limit’.

vi. **Admission of low-weight newborns:** Please indicate if low-weight newborns are admitted into the newborn unit and under how many grams.

vii. **Admission of out-born babies:** Please indicate whether the hospital admits babies born outside the facility.

viii. **Shifts in newborn unit/area with newborns described above:** Enter the number of staff per shift (day and night) and cadre by selecting the number from the dropdown list. Enter weekdays and weekends separately. Comment on whether staffing is different on the weekend, if blank enter “Empty”.

ix. **Adequacy of staffing:** Enter the description separately for nursing and medical nurses, if it is blank enter “Empty”.

**Section 1.12: Staffing and Labour Ward/Unit**

This section should be filled if there are separate nursing staffs from the ones in the NBU area if not or for the cases without a delivery ward leave it blank.

i. **Shifts in newborn unit/area with newborns described above:** Enter the number of staff per shift (day and night) and cadre by selecting the number from the dropdown list. Enter weekdays and weekends separately. Write the comment on whether staffing is different on the weekend, if blank enter “Empty”.

ii. **Adequacy of staffing:** Enter the description separately for nursing and medical nurses.

iii. **General staffing:** Choose “Yes” or “No” for whether daily rounds are done on weekdays or weekend and enter the description of the cadre of staff who do it, into the respective weekday and weekend boxes.

iv. **Level of clinical care and staffing:** Describe the level of clinical care and staffing separately in the spaces provided.
v. **Clinical decision making:** Please select the appropriate option as documented on the structural assessment form and give a description if provided in the text box. If there is no description provided type “Empty”.

vi. **Level of nursing care and staffing:** Describe the level of nursing care and staffing separately in the space provided.

**Section 1.2: Referrals**

Please enter the referral information separately for sick newborns and mothers with pregnancy related complications. Where there are referrals to or from other facilities list the facilities in the provided boxes, one facility per box, if the facilities are more than 3 list the rest in the additional facilities box separating with a colon (:). If information about which facility the referral was made to/from is missing (when though it is indicated that a referral was made), then enter -1 into the box.

**Section 1.3: Record keeping**

Check the response from the provided list of responses separately for neonatal and maternal patients.

i. **Admission Registers**

Please select appropriate options for the existence and quality of admission register, type of admissions register and on the use of the national admissions registers.

**Type of admission register:** If it is both electronic and paper check both options, and if it is electronic describe it in the provided space.

ii. **Referral documentation.**

Please select appropriately on the existence and quality of referral documentation about referral in, out of the facility and between wards as shown on the structural assessment form.

iii. **Medical records**

For this section, select appropriately as per the documentation on the different sub-sections as documented on the structural assessment form.

**Type of medical record:** If it is both electronic and paper check both options.

**Section 2: Infrastructure**

**Section 2.1: Basic infrastructure**

Check the response from the provided list of responses.
i. **Process of sterilization:** Describe the type of sterilization in the text box provided.

ii. **Kangaroo mother care:** If provided check where it is provided from the drop-down list, if provided in an area in the facility other than what is listed then specify in the provided space. Type in the average time KMC is provided per day in hours. If the structural assessment indicated that KMC is done 3 hourly after feeding then enter ‘3 hourly after feeding’. Make sure to be consistent with exactly how this free text is written (i.e. consistencies with capitals, spacing, wording etc).

**Section 2.2: Organisation**

Check “Yes” or “No” for each question as recorded on the paper form.

i. **Number of beds/cots:** Enter the number of cots, if empty enter -1

ii. **Beds/cots clean:** If there are no bed cots in a facility leave it blank

iii. **Surgery for congenital malformations:** If provided select “Yes” and provide a description, if blank enter “Empty”.

iv. **Approximate distance between delivery ward and NBU:** Enter the distance in metres

**Section 2.3: Laboratory services**

Check “Yes” or “No” for each question as recorded on the paper form.

**Section 3: Equipment for delivery and newborn unit**

**Section 3.1: Basic hygiene and safety**

Check “Yes” or “No” for each question as recorded on the paper form separately for neonatal unit and delivery ward.

For the shared option if not ticked check “No”.

**Section 3.2: Equipment for mothers in the delivery ward**

Select “Yes” or “No” for each item as recorded on the paper form.

**Section 3.3: Equipment for newborns in the delivery ward and newborn unit**

For this section, select “Yes” or “No” for each item as recorded on the paper form separately for neonatal unit and delivery ward.

For the shared option if not ticked select “No”.

**Section 3.4: Drugs and feeds**

Check “Yes” or “No” for each item as recorded on the paper form for newborns separately for neonatal unit and delivery ward.
Check “Yes” or “No” for each item as recorded on the paper form for drugs for mothers

For the shared option if not ticked check “No”.

If an item have been ticked to be in store: check both “No” and “In store” options.

Section 3.5: Job aides
For this section, select “Yes” or “No” for each item as recorded on the paper form separately for neonatal unit and delivery ward.

Section 4: Equipment and supplies for maternity or general surgical theatre
For this section, select “Yes” or “No” for each item as recorded on the paper form.