### PGSSC Surgical Assessment Tool (SAT)
#### Hospital Walkthrough

### GENERAL QUESTIONS

<table>
<thead>
<tr>
<th>Country:</th>
<th>□ Health Centre/Clinic □ District/Rural Hospital/First referral Hospital □ Provincial/Secondary Hospital □ Tertiary/Teaching/Specialized Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of health care facility:</td>
<td>□ □ □ □</td>
</tr>
<tr>
<td>Address of health care facility:</td>
<td>□ □ □ □</td>
</tr>
<tr>
<td>Phone number and email of health care facility:</td>
<td>□ □ □ □</td>
</tr>
<tr>
<td>Date of data collection (dd/mm/yyyy):</td>
<td>□ □ □ □</td>
</tr>
<tr>
<td>Name and professional title of staff filling out form:</td>
<td>□ □ □ □</td>
</tr>
<tr>
<td>Contact information of staff completing this assessment (phone and email):</td>
<td>□ □ □ □</td>
</tr>
</tbody>
</table>

### INFRASTRUCTURE

#### General Infrastructure - How often is this item available and functional?

<table>
<thead>
<tr>
<th>Infrastructure</th>
<th>□ 0 (Never) □ 1-25% (Rarely) □ 26-50% (Sometimes) □ 51-75% (Often) □ 76-99% (Almost always) □ 100% (Always)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity/operational power generator</td>
<td>□ □ □ □</td>
</tr>
<tr>
<td>Running water</td>
<td>□ □ □ □</td>
</tr>
<tr>
<td>Internet</td>
<td>□ □ □ □</td>
</tr>
<tr>
<td>Oxygen</td>
<td>□ □ □ □</td>
</tr>
<tr>
<td>Total number of admissions in a year</td>
<td>#</td>
</tr>
<tr>
<td>Total number of outpatients seen in a year</td>
<td>#</td>
</tr>
<tr>
<td>Total number of inpatient hospital beds</td>
<td>#</td>
</tr>
<tr>
<td>Total number of surgical beds</td>
<td>#</td>
</tr>
<tr>
<td>Total number of functioning operating rooms (major and minor)</td>
<td>#</td>
</tr>
<tr>
<td>Total number of post-anaesthesia care beds (0 for none)</td>
<td>#</td>
</tr>
<tr>
<td>Total number of advanced care/ICU beds</td>
<td>#</td>
</tr>
<tr>
<td>Total number of functional ventilators in the ICU</td>
<td>#</td>
</tr>
</tbody>
</table>

#### Pharmacy – How often is it this available for surgery?

<table>
<thead>
<tr>
<th>Medicine type</th>
<th>□ 0 (Never) □ 1-25% (Rarely) □ 26-50% (Sometimes) □ 51-75% (Often) □ 76-99% (Almost always) □ 100% (Always)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalational general anaesthesia</td>
<td>□ □ □ □</td>
</tr>
<tr>
<td>IV sedation anaesthesia (Ketamine, Midazolam, Propofol)</td>
<td>□ □ □ □</td>
</tr>
<tr>
<td>Spinal anaesthesia</td>
<td>□ □ □ □</td>
</tr>
<tr>
<td>Regional anaesthesia available</td>
<td>□ □ □ □</td>
</tr>
<tr>
<td>Peri-operative antibiotics</td>
<td>□ □ □ □</td>
</tr>
<tr>
<td>IV fluids</td>
<td>□ □ □ □</td>
</tr>
<tr>
<td>Muscle relaxants/paralytics</td>
<td>□ □ □ □</td>
</tr>
<tr>
<td>Sedatives</td>
<td>□ □ □ □</td>
</tr>
<tr>
<td>Vasopressors</td>
<td>□ □ □ □</td>
</tr>
<tr>
<td>Post-op narcotics</td>
<td>□ □ □ □</td>
</tr>
</tbody>
</table>

#### Radiology – How often do you have access to functioning radiology equipment?

<table>
<thead>
<tr>
<th>Equipment</th>
<th>□ 0 (Never) □ 1-25% (Rarely) □ 26-50% (Sometimes) □ 51-75% (Often) □ 76-99% (Almost always) □ 100% (Always)</th>
</tr>
</thead>
<tbody>
<tr>
<td>X-ray machine</td>
<td>□ □ □ □</td>
</tr>
<tr>
<td>Ultrasound</td>
<td>□ □ □ □</td>
</tr>
<tr>
<td>CT scanner</td>
<td>□ □ □ □</td>
</tr>
<tr>
<td>MRI scanner</td>
<td>□ □ □ □</td>
</tr>
</tbody>
</table>

#### Blood Supply

| How often are you able to administer a blood transfusion within 2 hours in your facility? | □ 0 (Never) □ 1-25% □ 26-50% □ 51-75% □ 76-99% □ 100% (Always) |

#### Laboratory

| How often is the lab able to run a Complete Blood Count (haemoglobin, haematocrit, WBC, platelets)? | □ 0 (Never) □ 1-25% □ 26-50% □ 51-75% □ 76-99% □ 100% (Always) |
### PGSSC Surgical Assessment Tool (SAT)
**Hospital Walkthrough**

| How often is the lab able to run a chemistry panel (BUN, creatinine, Na, K, etc.)? |
|-----------------|-----------------|-----------------|-----------------|
|                 | □ 0 (Never)     | □ 1-25%         | □ 26-50%        |
|                 | □ 51-75%        | □ 76-99%        | □ 100% (Always) |

| How often is the lab able to run coagulation studies (PT, PTT, BT, INR)? |
|-----------------|-----------------|-----------------|-----------------|
|                 | □ 0 (Never)     | □ 1-25%         | □ 26-50%        |
|                 | □ 51-75%        | □ 76-99%        | □ 100% (Always) |

<table>
<thead>
<tr>
<th>How often is the lab able to do a urinalysis?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How often are you able to screen for an infectious panel (HIV, hepatitis virus)?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

**Access and referral systems**

<table>
<thead>
<tr>
<th>What is the population served by this facility?</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>What percentage of your patients can reach the hospital within 2 hours of travel?</td>
<td>□ 0 (None) □ 1-25% □ 26-50% □ 51-75% □ 76-99% □ 100% (All)</td>
</tr>
<tr>
<td>Total number of patients that you refer for surgical intervention to a higher level facility per year</td>
<td>#</td>
</tr>
</tbody>
</table>

**SERVICE DELIVERY**

**Procedures - Primary health care facility**

**How many of the following procedures have been performed at this facility in the past 1 year?**

1. Normal obstetric delivery
2. Suturing laceration
3. Drainage of abscess
4. Male circumcision
5. Management of non-displaced fractures
6. Wound debridement
7. Removal of foreign body (throat/ear/eye/nose)
8. Biopsy (lymph node, mass, other)

**Procedures - First-level hospital**

**Obstetrics, gynaecology, family planning**

1. Caesarean birth
2. Vacuum extraction/forceps delivery
3. Ectopic pregnancy
4. Manual vacuum aspiration and dilation and curettage
5. Tubal ligation
6. Vasectomy
7. Hysterectomy
8. Inspection with acetic acid, cryotherapy for cervical lesions

**General Surgery**

9. Repair of intestinal perforations
10. Appendectomy
11. Bowel obstruction
12. Colostomy/ileoostomy
13. Gallbladder disease
14. Hernia, including incarceration
15. Hydrocelectomy
16. Relief of urinary obstruction

**Injury**

17. Resuscitation with advanced life support measures, including surgical airway
18. Tube thoracostomy
19. Trauma laparotomy
20. Fracture reduction
21. Irrigation and debridement of open fractures
22. Placement of external fixator
23. Escharotomy/fasciotomy
24. Amputations
### PGSSC Surgical Assessment Tool (SAT)
#### Hospital Walkthrough

<table>
<thead>
<tr>
<th>25. Skin grafting</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>26. Burr hole</td>
<td>#</td>
</tr>
<tr>
<td><strong>Non-trauma orthopaedic</strong></td>
<td></td>
</tr>
<tr>
<td>27. Drainage of septic arthritis</td>
<td>#</td>
</tr>
<tr>
<td>28. Debridement of osteomyelitis</td>
<td>#</td>
</tr>
</tbody>
</table>

#### Procedures – secondary and tertiary level

How many of the following procedures have been performed at this facility in the past 1 year?

1. Repair obstetric fistula
   - #
2. Repair of cleft lip and palate
   - #
3. Repair of club foot
   - #
4. Shunt for hydrocephalus
   - #
5. Repair of anorectal malformation and Hirschsprung’s Disease
   - #
6. Cataract extraction and insertion of intraocular lens
   - #
7. Eyelid surgery for trachoma
   - #

#### Surgical Volume

- Number of laparotomies performed last year #
- Number of C-sections performed last year #
- Number of open fracture repairs performed last year #
- Number of surgeries performed last year #
- Number of paediatric surgeries (<15 yrs) performed last year #

#### Quality and Safety

- What percent of cases were emergency/urgent (non-elective) cases? %

#### Operating Room Equipment and Supplies – How often are the following equipment available and functional for surgery?

<table>
<thead>
<tr>
<th>Equipment</th>
<th>How often available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pulse oximetry</td>
<td>O (Never) 1-25% 26-50% 51-75% 76-99% 100% (Always)</td>
</tr>
<tr>
<td>Adult oropharyngeal airway</td>
<td>O (Never) 1-25% 26-50% 51-75% 76-99% 100% (Always)</td>
</tr>
<tr>
<td>Paediatric oropharyngeal airway</td>
<td>O (Never) 1-25% 26-50% 51-75% 76-99% 100% (Always)</td>
</tr>
<tr>
<td>Adult endotracheal tube</td>
<td>O (Never) 1-25% 26-50% 51-75% 76-99% 100% (Always)</td>
</tr>
<tr>
<td>Paediatric endotracheal tube</td>
<td>O (Never) 1-25% 26-50% 51-75% 76-99% 100% (Always)</td>
</tr>
<tr>
<td>Adult laryngoscope</td>
<td>O (Never) 1-25% 26-50% 51-75% 76-99% 100% (Always)</td>
</tr>
<tr>
<td>Paediatric laryngoscope</td>
<td>O (Never) 1-25% 26-50% 51-75% 76-99% 100% (Always)</td>
</tr>
<tr>
<td>Adult facemask bag valve</td>
<td>O (Never) 1-25% 26-50% 51-75% 76-99% 100% (Always)</td>
</tr>
<tr>
<td>Paediatric facemask bag valve</td>
<td>O (Never) 1-25% 26-50% 51-75% 76-99% 100% (Always)</td>
</tr>
<tr>
<td>Difficult airway kit (LMA)</td>
<td>O (Never) 1-25% 26-50% 51-75% 76-99% 100% (Always)</td>
</tr>
<tr>
<td>Adult Magill forceps</td>
<td>O (Never) 1-25% 26-50% 51-75% 76-99% 100% (Always)</td>
</tr>
<tr>
<td>Paediatric Magill forceps</td>
<td>O (Never) 1-25% 26-50% 51-75% 76-99% 100% (Always)</td>
</tr>
<tr>
<td>Blood pressure monitor or cuff</td>
<td>O (Never) 1-25% 26-50% 51-75% 76-99% 100% (Always)</td>
</tr>
<tr>
<td>Pulse oximeter</td>
<td>O (Never) 1-25% 26-50% 51-75% 76-99% 100% (Always)</td>
</tr>
<tr>
<td>Stethoscope</td>
<td>O (Never) 1-25% 26-50% 51-75% 76-99% 100% (Always)</td>
</tr>
<tr>
<td>Suction apparatus</td>
<td>O (Never) 1-25% 26-50% 51-75% 76-99% 100% (Always)</td>
</tr>
<tr>
<td>Thermometer</td>
<td>O (Never) 1-25% 26-50% 51-75% 76-99% 100% (Always)</td>
</tr>
<tr>
<td>Nasogastric Tube</td>
<td>O (Never) 1-25% 26-50% 51-75% 76-99% 100% (Always)</td>
</tr>
<tr>
<td>Light source</td>
<td>O (Never) 1-25% 26-50% 51-75% 76-99% 100% (Always)</td>
</tr>
<tr>
<td>Chest tube</td>
<td>O (Never) 1-25% 26-50% 51-75% 76-99% 100% (Always)</td>
</tr>
<tr>
<td>Electrocautery</td>
<td>O (Never) 1-25% 26-50% 51-75% 76-99% 100% (Always)</td>
</tr>
<tr>
<td>Autoclave/Sterilizer</td>
<td>O (Never) 1-25% 26-50% 51-75% 76-99% 100% (Always)</td>
</tr>
<tr>
<td>Forceps</td>
<td>O (Never) 1-25% 26-50% 51-75% 76-99% 100% (Always)</td>
</tr>
<tr>
<td>Syringes with needles</td>
<td>O (Never) 1-25% 26-50% 51-75% 76-99% 100% (Always)</td>
</tr>
</tbody>
</table>
### PGSSC Surgical Assessment Tool (SAT)
#### Hospital Walkthrough

<table>
<thead>
<tr>
<th>Item</th>
<th>Full time</th>
<th>Part time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scalpel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scissors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Needle holder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retractor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sterile gloves</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urinary catheters</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tourniquet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Face masks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gowns</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disinfectant hand wash</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sterilizing skin prep</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eye protection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sharps disposal container</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-sterile Examination Gloves</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sutures</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### WORKFORCE

**Surgeon/A Anaesthesiologist/Obstetrician/Provider Density**

<table>
<thead>
<tr>
<th>Providers</th>
<th>Full time</th>
<th>Part time</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the number of certified surgeons who work at this hospital (full vs part time)</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>Number of certified paediatric surgeons</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>Number of certified OBGYNs</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>Number of certified anaesthesiologists</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>Number of general doctors providing C-sections</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>Number of non-physicians providing C-sections</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>Number of non-physician providing anaesthesia</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>Number of midwives</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>Number of nurses on the surgical wards</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>Number of certified radiologists</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>Number of certified pathologists</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>Number of certified pharmacists</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>Number of certified biomedical technicians</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>How often is a surgical provider available 24 hours a day?</td>
<td>0 (Never)</td>
<td>1-25%</td>
</tr>
<tr>
<td>How often is an obstetrics/gynaecology provider available 24 hours a day?</td>
<td>0 (Never)</td>
<td>1-25%</td>
</tr>
</tbody>
</table>

#### Continuing Medical Education

- How often do you offer continuing medical education to your staff each year?  
  - Never  
  - Daily/Weekly  
  - Monthly  
  - Quarterly  
  - Yearly  
  - Other
### INFORMATION MANAGEMENT

#### Information Systems

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the method of record keeping in your hospital?</td>
<td>Electronic, Paper, Both, None</td>
</tr>
<tr>
<td>Are there personnel in charge of maintaining medical records?</td>
<td>Yes, No</td>
</tr>
<tr>
<td>Are charts accessible across multiple visits for the same patient?</td>
<td>Yes, No</td>
</tr>
<tr>
<td>How often is data prospectively collected for patient outcomes, such as surgical site infection, post op stroke, DVT, etc.?</td>
<td>0 (Never), 1-25%, 26-50%, 51-75%, 76-99%, 100% (Always)</td>
</tr>
<tr>
<td>How often is data prospectively collected for post-operative mortality rate?</td>
<td>0 (Never), 1-25%, 26-50%, 51-75%, 76-99%, 100% (Always)</td>
</tr>
<tr>
<td>How often are you required to report information to the Ministry of Health or an equivalent agency?</td>
<td>Never, Daily, Weekly, Monthly, Quarterly, Yearly</td>
</tr>
<tr>
<td>Do you use telemedicine?</td>
<td>Yes, No</td>
</tr>
</tbody>
</table>

#### Research Agenda

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often does the hospital participate in quality improvement projects, such as mortality &amp; morbidity conferences?</td>
<td>Never, Daily, Weekly, Monthly, Quarterly, Yearly</td>
</tr>
<tr>
<td>How many ongoing research projects does the hospital have?</td>
<td>#</td>
</tr>
<tr>
<td>How many ongoing research projects does the department of surgery have?</td>
<td>#</td>
</tr>
</tbody>
</table>

### FINANCING

#### Health financing and accounting

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>What percentage of your patients have health insurance?</td>
<td>0 (None), 1-25%, 26-50%, 51-75%, 76-99%, 100% (All)</td>
</tr>
</tbody>
</table>

#### Budget Allocation – **please state in US dollars**

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is your total annual hospital operating budget? (in US dollars)</td>
<td>#</td>
</tr>
<tr>
<td>How much of your annual hospital operating budget is allotted to surgery and anaesthesia? (in US dollars)</td>
<td>0 (None), 1-25%, 26-50%, 51-75%, 76-99%, 100% (All)</td>
</tr>
</tbody>
</table>

#### Cost – **please state in US dollars**

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the average out-of-pocket cost to a patient for a C section?</td>
<td>#</td>
</tr>
<tr>
<td>Average out-of-pocket cost to a patient for an open fracture repair?</td>
<td>#</td>
</tr>
<tr>
<td>Average out-of-pocket cost to a patient for a laparotomy?</td>
<td>#</td>
</tr>
<tr>
<td>Average out-of-pocket cost to a patient for a CBC?</td>
<td>#</td>
</tr>
<tr>
<td>Average out-of-pocket cost to a patient for a Chest X-ray?</td>
<td>#</td>
</tr>
<tr>
<td>Average out-of-pocket cost to a patient for surgery-associated lodging per day?</td>
<td>#</td>
</tr>
<tr>
<td>Average out-of-pocket cost for patient and family transportation per surgery/hospital stay?</td>
<td>#</td>
</tr>
<tr>
<td>Average out-of-pocket cost to a patient for surgery-associated medication per surgery/hospital stay?</td>
<td>#</td>
</tr>
<tr>
<td>Average out-of-pocket cost to a patient for other necessities (e.g. laundry/food) per surgery/hospital stay?</td>
<td>#</td>
</tr>
</tbody>
</table>