Appendix – Patient Questionnaire

Baseline Form	
1. Date of admission *Time should be entered in the 24-hour clock format.*	DD-MM-YYYY HH:MM
2. Date of discharge *Time should be entered in the 24-hour clock format.*	DD-MM-YYYY HH:MM
3. Procedure *Please select the most appropriate procedure from the list of procedures within Appendix – Included Procedures.* *The drop-down menu includes an extensive list of procedures. Please choose the most suitable code for the main procedure that the patient underwent. For example, if a patient underwent appendicectomy and laparoscopic washout, please record this as appendicectomy (the main procedure performed).* *If you are collecting data on paper forms, please write down the full procedure name on in the space provided on the form. You can later select the most appropriate code when you are entering the data on to Redcap.*	(Procedure)
4. Age in years *Please mention age of patient at the time of surgery.*	(Age)
5. Sex	a. Male b. Female c. Other
6. Weight in kg *Please mention weight of patient at the time of surgery.*	(Weight)
7. Height in cm *Please mention height of patient at the time of surgery.*	(Height)
8. American Society of Anesthesiologists (ASA) classification *Full definitions are available at:* ***https://www.asahq.org/standards-andguidelines/asa-physical-status-classification-system***	a. Grade 1: Normal healthy person b. Grade 2: Mild systemic disease (e.g., controlled diabetes, hypertension) c. Grade 3: Severe systemic disease not incapacitating (e.g., moderate chronic obstructive pulmonary disease, malignancy, diabetes)

	d. Grade 4: Incapacitating systemic disease that is a constant threat to life (e.g., pre-eclampsia, heavy bleeding) e. Grade 5: Moribund patient, not expected to survive with or without operation (e.g., major trauma) f. Not recorded
9. Does the patient suffer from HIV/AIDS?	a. Yes, on antiretroviral therapy b. Yes, not on antiretroviral therapy c. No d. Unknown
10a. If yes, within these 12 months, what was the last CD4 count (cells per ml) of the patient? *Please state the most recent preoperative CD4 count.*	(Please fill in your answer) or select "Unknown"
10. Does the patient have diabetes mellitus?	a. Yes, diet-controlled b. Yes, medication (non-insulin) controlled c. Yes, insulin controlled d. No, patient does not have diabetes
11. Was the patient taking oral or intravenous steroids preoperatively? *These do not include steroids administered topically (i.e., via inhalers, creams).* *Please only mark yes if the patient took steroids for 10 days or more in the 30 days prior to surgery.*	a. Yes b. No
12. Was the patient taking immunosuppressants preoperatively? *These can include drugs like methotrexate, azathioprine, mycophenolate mofetil, anti-TNF alpha antibodies.* *Please only mark yes if the patient took immunosuppressants for 10 days or more in the 30 days prior to surgery.*	a. Yes b. No
13. Was the patient receiving chemotherapy for cancer preoperatively? *This would include drugs like capecitabine, oxaliplatin, fluorouracil, etc., and not hormone-modifying drugs, i.e., tamoxifen, anastrozole or goserelin, etc.* *Please only mark yes if the patient received chemotherapy in the 30 days prior to surgery.*	a. Yes b. No
14. What was the patient's smoking status at the time of surgery?	a. Never smoked b. Ex-smoker (stopped in the 6 weeks prior to surgery) c. Ex-smoker (stopped ≥6 weeks prior to surgery)

	d. Current smoker (at the time of surgery)
15. Was the patient suffering from tuberculosis?	a. Yes, diagnosed within 9 months of surgery b. Yes, diagnosed ≥9 months of surgery c. No, never diagnosed with tuberculosis
16. Please select how this patient was identified for inclusion *Select all that apply.*	○ Theatre logbook review ○ From planned theatres lists or diaries (i.e., before the surgery had occurred) ○ Handover lists ○ Memory recall from staff ○ Review of ward lists

Preoperative Form	
1. Urgency of surgery? *An elective operation is one where it is planned prior to the patient's admission to hospital.* *An emergency surgery is defined as any surgery during the same admission as diagnosis. Emergency surgeries may take place on the day of hospital admission or on any other day during hospital admission,*	a. Elective b. Emergency
2. Was the surgery performed as day-case surgery? *A day-case surgery is defined as surgery performed with length of stay <24 hours (i.e., without any overnight hospital stay; surgical day care procedures).* *If a day-case surgery was planned, but the patient required hospital stay ≥24 hours, select "No".*	a. Yes b. No
3. Indication for surgery? *Benign disease: Any disease/condition that is not related to trauma, malignancy, or obstetrics. These may include benign neoplastic or non-neoplastic conditions.* *Malignancy: Suspected or confirmed malignancies.* *Trauma: Any cause of injury, including burns.* *Obstetric: Procedures related to childbirth, i.e., cesarean section, etc.*	a. Benign disease b. Malignancy c. Trauma d. Obstetric
3a. If you selected malignancy, was this cancer surgery planned to be curative, palliative, or diagnostic? *Curative: To remove the cancer completely, or to enable definitive treatment to cure the patient. If a patient undergoes surgery with the aim of removing the cancer and cure but this proves to not be possible, they should still be recorded as having had curative intent.* *Palliative: To relieve symptoms related to the cancer, knowing that that the surgery will not cure the patient.* *A biopsy for diagnosis may be sent in a curative or palliative procedure. "Surgery for*	a. Curative b. Palliative c. Surgery for diagnostic purpose only

diagnostic purpose only" should only be selected if the intent is neither curative nor palliative.	
4. Patient preparation measures? *Select all that apply.*	o Pre-op bath/ shower (full body) o Antimicrobial soap used o Plain soap used o Others: _____
5. Was hair removed?	a. Yes, razor used b. Yes, clippers used c. No
5a. If yes, where was hair removed?	a. Home b. Ward c. Theatre

Intraoperative form	
1. Which of the following skin preparation agents were used for surgical skin preparation? *Select all that apply.*	○ Chlorhex-alc ○ Iodine-alc ○ Chlorhex-aq ○ Iodine-aq
1a. Skin allowed to fully dry before incision?	a. Yes b. No
2. Surgical hand preparation? *Select all that apply.*	○ Alcohol-based hand rub ○ Antimicrobial soap + water ○ Plain soap + water
3. Headcount at start of operation *Please document number of individuals (excluding the patient) in the operating room at the time of knife-to-skin.*	(Headcount)
4. Headcount at end of operation *Please document number of individuals (excluding the patient) in the operating room at the time of wound closure.*	(Headcount)
5. Was the surgical site marked?	a. Yes b. No
6. Was a time-out done before starting the surgery? *Time-out requires confirmation of patient and surgeon identity, site, procedure, and consent status. Further details can be reviewed in the WHO Safe Surgery Checklist (**https://www.who.int/teams/integrated-health-services/patient-safety/research/safe-surgery/tool-and-resources**)*	a. Yes b. No
7. Operative approach *Minimally invasive surgeries use specific instruments designed to reduce the invasiveness of the procedure. Examples may include completely laparoscopic, thoracoscopic, arthroscopic procedures, etc.* *"Minimally invasive procedure converted to open" includes any procedure that was initially planned as a minimally invasive procedure but was switched to an open surgery intraoperatively.* *"Hybrid" option should be selected when a minimally invasive approach is used for one body compartment (i.e., thorax) while an open approach is used for another body compartment (i.e., abdomen).*	a. Planned open surgery b. Planned and performed as minimally invasive surgery c. Minimally invasive surgery converted to open d. Hybrid surgery (i.e., laparoscopic abdomen, open chest)
8. Anesthesia? *Select all that apply.*	○ Local ○ Nerve block ○ Spinal

	○ Epidural ○ General
9. Was an epidural inserted during surgery for postoperative pain relief? *Use of a single shot of spinal anesthetic would not count as an epidural. Only answer "Yes" if an epidural catheter was inserted during surgery (even if inserted for a short time).*	a. Yes b. No
10. Surgical wound class? *Would classifications are usually measured by operating surgeons and documented in records.* *Clean-contaminated: An incision through the respiratory, alimentary or genitourinary tract under controlled conditions with no direct contamination encountered.* *Contaminated: An operation where there is major break in sterile technique or gross spillage from the gastrointestinal tract, or an incision where acute non-purulent inflammation is encountered or where procedures involve traumatic wounds that have been open for between 12 hours and 24 hours.* *Dirty: An incision undertaken where viscera are perforated, where acute inflammation or necrosis is encountered, or where there is delayed operation on traumatic wounds.*	a. Clean: Sterile tissue with no resident bacteria b. Clean-contaminated: Controlled entry to tissue with resident bacteria c. Contaminated: Uncontrolled entry to tissue with bacteria d. Dirty/ infected: Heavy contamination (e.g., soil in wind) or infection already established
11. Antibiotic used? *This may include preoperative, intraoperative, and/or postoperative antibiotic use.*	a. Yes b. No
11a. If yes, used for treatment before surgery (antibiotics within 24 hours of surgery) *If antibiotics are used within 24 hours prior to surgery, please select "Yes" and document duration of preoperative antibiotic use in days.*	a. Yes, please mention total days _____ b. No
11b. If yes, used for prophylaxis at the point of incision (i.e., standard hospital prophylaxis)	a. Yes b. No
11c. If yes, continued at the end of surgery (i.e., extended prophylaxis after surgery) *If antibiotics are continued postoperatively, please select "Yes" and document duration of postoperative antibiotics used.*	a. Yes, please mention total days _____ b. No

12. Admission to procedure time in hours *Please mention time duration from hospital admission till start of surgery (knife-to-skin).*	(Preoperative hospital length of stay in hours)
13. Time of operation start (time of knife-to-skin)? *Time should be entered in the 24-hour clock format.*	DD-MM-YYYY HH:MM
14. Time of operation end (when wound closed)? *Time should be entered in the 24-hour clock format.*	DD-MM-YYYY HH:MM
15. Length of operation (knife-to-skin until wound closure)?	(Operation time in minutes)
16. Was a World Health Organization (or equivalent) surgical safety checklist used?	a. Yes b. No, but available in this center c. No, not available in this center

Postoperative form	
1. Did the patient require intensive care unit (ICU) admission?	a. Yes b. No
1a. Duration of ICU stay (hours)	(Duration of ICU stay in hours)
2. Length of hospital stay (days)	(Duration of hospital stay in days)
3. Was surgical site infection (SSI) seen in 30 days postoperatively?	a. Yes b. No
2a. How was the SSI detected?	a. Inpatient (during the index hospital admission for surgery) b. At readmission c. At post-discharge outpatient clinic follow-up d. At post-discharge telephonic follow-up
2b. Date of onset of SSI? *Please mention date when the patient started experiencing symptoms related to SSI. In case this date is unknown, mention date of diagnosis of SSI.*	(DD-MM-YYYY)
2c. Criteria for SSI *Select all that apply.*	o Abscess or other evidence of infection found during a re-operation, by radiology or histopathology examination o Antibiotics prescribed by GP for SSI (patient reported only) o Aspirated fluid/swab of surgical site yields organisms and pus cells are present o Clinician's diagnosis o Fever (temperature 38ºC or more) o Heat o Incision spontaneously dehisces or opened by surgeon/dehisces o Localized pain or tenderness o Localized swelling o Purulent drainage o Redness
2d. SSI Type?	a. Superficial incisional b. Deep incisional c. Organ/ space
2e. If organ/space was detected, specific site of organ/space SSI? *Select all that apply.*	o Arterial or venous o Bone (osteomyelitis) o Breast abscess/mastitis o Endocardium o Gastrointestinal tract o Intra- abdominal o Intracranial o Joint or bursa o Mediastinum o Meningitis o Myocardium or pericardium o Vaginal cuff o Vertebral disc space
2f. How was SSI treated? *Select all that apply.*	o Operative drainage o Wound opened outside of operating theatre o Antibiotics
2g. Was the patient readmitted due to surgical site infection?	a. Yes b. No

	2h. If yes, date of SSI-related readmission	(DD-MM-YYYY)
	2i. Was a wound swab sent for microbiological assessment?	a. Yes b. No
	2j. What bacteria, if any, were identified? *Please select causative organism(s) isolated from patient specimens.*	(Drop down list)
	2k. Sensitivity profile of organism(s) cultured towards the antimicrobial prophylaxis used *This question refers to sensitivity and resistance of the causative organism(s) to the antibiotic used for prophylaxis.*	Organism (n): a. Sensitive to antibiotic b. Resistant to antibiotic c. Sensitivity not tested
4.	**Was any other hospital-acquired infection seen within 30 days postoperatively?** *Hospital-acquired infections can also be referred to as nosocomial infections.* *Select all that apply.*	o Yes, urinary tract infection o Yes, pneumonia o Yes, central venous line infection o Yes, peripheral line infection o Yes, other, please specify _____ o No
	4a. Date of onset of other hospital-acquired infection?	(DD-MM-YYYY)
5.	**Mortality within 30 days of surgery**	a. Yes b. No
	4a. Date of mortality?	(DD-MM-YYYY)
6.	**Was there any unexpected reintervention within 30 days postoperatively?** *In a case where a plan is made at the time of the original operation for a "relook" surgery, this is not an "unexpected" reintervention.*	a. Yes, surgical b. Yes, endoscopic c. Yes, interventional radiology d. No
	5a. Date of unexpected reintervention?	(DD-MM-YYYY)
7.	**How was 30-day follow-up completed?** *Please select all that apply*	o Follow-up during the inpatient hospital stay o Follow-up during hospital readmissions o Post-discharge outpatient clinic follow-up o Post-discharge telephonic follow-up o Discharged before 30 days and not contacted again
	6a. Was telephone follow-up done at your hospital? *Please select all that apply*	o Yes, at day 3 o Yes, at day 15 o Yes, at day 30 o No
8.	**Should this record be included in the analysis?**	a. Include, this record is a valid record for a patient who fulfils the inclusion criteria b. Exclude – patient does not fulfill inclusion criteria c. Exclude – patient did not undergo surgery (operation cancelled) d. Exclude – duplicate record e. Exclude – patient withdrew consent f. Exclude – test/practice record or record created by error