



- 1 Data collection **MUST** be mapped to your selected body region (see Appendix for a breakdown of common procedures by body region). This is to ensure consistent data collection across all participating hospitals. **ALL** surgical activity relating to your selected body region should be captured, even if it is split between different surgical units in your hospital. Surgery is defined as an operation performed by a surgeon in an operating theatre, with the exception of minor procedures listed in the Appendix.
- 2 A hospital is a self-sufficient surgical facility that is under unified management. Provide total counts for all surgery performed in the hospital.
- 3 Elective surgery is that was **planned** prior to admission. Includes scheduled and expedited surgery (e.g. planned admission for cancer surgery 1 week after diagnosis).
- 4 Emergency surgery is defined as surgery that was **not planned** prior to admission. Includes surgery on any **unplanned** admission + surgery for postop complications.
- 5 Provide a count of the number of **operations** rather than the number of patients. This means that if a particular patient has two operations they should be counted twice.
- 6 Count of operations on patients with perioperative SARS-CoV-2 (defined as positive SARS-CoV-2 PCR swab test or rapid antigen test [if confirmatory PCR swab is not available] in the 7 days before or 30 days after surgery). These patients should be included in the totals for 'operations performed'.
- 7 Count operations cancelled on the planned day of surgery (do not include operations cancelled before the planned day of surgery). Do not include these patients in the totals for 'operations performed'. Cancellation on the planned day of surgery means any operation booked as an elective case which is cancelled for any reason on the day when the patient was planned to undergo surgery. This includes instances where the patient has not presented to the hospital on the planned day of surgery.

**Main reason for cancellation of operation on the planned day of surgery**

For **each** patient whose operation was cancelled on the planned day of surgery, please record **ONE** of the reasons listed below, which most closely represents the **MAIN** reason why the operation was cancelled. In addition, record whether the pandemic contributed (either directly or indirectly) to the cancellation. Examples of how pandemic might contribute: e.g. insufficient ITU bed capacity due to COVID-19 admissions, or surgeon unavailable as self-isolating with SARS-CoV-2 infection.

Options for main reason for cancellation of planned operation on the day of surgery:

- Patient tested positive for SARS-CoV-2
- Household member (e.g. parent, partner) tested positive for SARS-CoV-2
- Lack of ward bed
- Lack of intensive care or high dependency bed
- Operating theatre not available
- 'Over-run' of operating theatre during preceding case(s)
- Equipment/ instrument problem or not available
- Electricity supply issue (power cut)
- Water supply issue
- Hospital strike (industrial action)
- Surgeon not available
- Anaesthetist not available
- Nursing or operating department practitioner staff not available
- Ward nursing staff not available
- Patient did not attend
- Patient/family refused surgery
- Change in patient's medical status (surgery no longer indicated)
- Patient unwell (non-COVID illness)
- Incomplete preoperative work-up
- Finance related issues
- Non-finance administrative reason

*Log of reasons for cancellation of planned operations on the day of surgery:*

	Main reason for cancellation (select one of the reasons listed above)	Did pandemic contribute to the cancellation?
Cancellation 1	_____	Yes / No
Cancellation 2	_____	Yes / No
Cancellation 3	_____	Yes / No
Cancellation 4	_____	Yes / No
Cancellation 5	_____	Yes / No

*Please continue collecting this for however many planned operations were cancelled during the 14-day block*

**The data you collect should be submitted on REDCap.  
Your Hospital Lead will provide a link to a survey where data should be submitted. You will not need a personal REDCap login.**

## Appendix: Inclusion criteria & list of excluded procedures

The CovidSurg-3 hospital-level component data collection **MUST** be mapped to a pre-selected body region. **ALL** eligible surgical activity relating to the selected body region should be captured, even if it is split between different surgical units in the hospital.

Surgery is defined as an operation performed by a surgeon in an operating theatre, with the exception of minor procedures listed as excluded below. Both day case surgeries and inpatient surgeries and procedures performed with and without general anaesthetic should be included.

Interventional radiology procedures are excluded. Endoscopic procedures (diagnostic or therapeutic) that are usually performed in an operating theatre by a surgeon are included. Endoscopic procedures that are usually performed outside of an operating theatre (e.g. in an endoscopy suite) or by a non-surgeon are excluded.

The table below maps common procedures to the body regions. Minor procedures that are excluded are tabulated in the 'excluded procedures' column below. The list of included procedures below is **NOT** exhaustive (indicative only); procedures should be included unless they are explicitly excluded.

Transplant procedures are captured under the relevant body region.

Example (not exhaustive list) included procedures	Excluded procedures
<b>Blood vessels (vascular): Includes aorta, arteries, veins</b>	
<ul style="list-style-type: none"> <li>&gt;Aortic root/aorta surgery</li> <li>&gt;Carotid enterectomy</li> <li>&gt;Repair of arterial aneurysm</li> <li>&gt;Varicose vein ligation and stripping</li> <li>&gt;Formation of arterio-venous fistula</li> <li>&gt;Embolectomy/thrombectomy</li> <li>&gt;Arterial bypass</li> </ul>	<ul style="list-style-type: none"> <li>&gt;Transluminal (endovascular) procedures on arteries (diagnostic or therapeutic), including with open cut down to the artery</li> <li>&gt;Transluminal (endovascular) procedures on veins (diagnostic or therapeutic), such as endovenous laser treatment (EVLT)</li> <li>&gt;Injection into varicose vein of leg</li> <li>&gt;Insertion or removal of central venous catheter/line (CVC)</li> <li>&gt;Insertion or removal of Hickmann line</li> <li>&gt;Insertion or removal of dialysis catheter</li> </ul>
<b>Brain: Includes skull</b>	
<ul style="list-style-type: none"> <li>&gt;Brain biopsy</li> <li>&gt;Brain excision</li> <li>&gt;Ventriculoperitoneal Shunt insertion</li> <li>&gt;Craniectomy/Craniotomy</li> <li>&gt;Drainage of spaces in the skull</li> </ul>	
<b>Colon, rectum and small bowel</b>	
<ul style="list-style-type: none"> <li>&gt;Small bowel resection or bypass</li> <li>&gt;Colorectal resection (excision, colectomy)</li> <li>&gt;Stoma formation, refashioning, re-siting and reversal</li> <li>&gt;Repair of perforated duodenal ulcer</li> <li>&gt;Perianal/pilonidal abscess incision and drainage</li> </ul>	<ul style="list-style-type: none"> <li>&gt;Colonoscopy (diagnostic or therapeutic)</li> <li>&gt;Flexible sigmoidoscopy (diagnostic or therapeutic)</li> <li>&gt;Proctoscopy (diagnostic or therapeutic)</li> </ul>
<b>Eyes (ophthalmology)</b>	
<ul style="list-style-type: none"> <li>&gt;Procedures on the iris, retina, vitreous body, cornea, eyelid</li> <li>&gt;Cataract surgery</li> <li>&gt;Glaucoma surgery</li> <li>&gt;Pterygium surgery</li> <li>&gt;Strabismus surgery</li> </ul>	<ul style="list-style-type: none"> <li>&gt;Removal of foreign body from cornea</li> </ul>
<b>Female reproductive system: Includes fallopian tubes, ovaries, uterus, vagina</b>	
<ul style="list-style-type: none"> <li>&gt;Excision of the uterus (hysterectomy)</li> <li>&gt;Uterus repair</li> <li>&gt;Excision of vagina</li> <li>&gt;Repair of vaginal prolapse</li> <li>&gt;Ovarian detorsion</li> <li>&gt;Oophorectomy +/- salpingectomy</li> <li>&gt;Ovarian Cystectomy</li> <li>&gt;Female sterilisation</li> <li>&gt;Ablation/excision of endometrium:</li> <li>&gt;Vulval procedures</li> <li>&gt;Dilatation and curettage</li> <li>&gt;Hysteroscopy + intervention/biopsy</li> </ul>	<ul style="list-style-type: none"> <li>&gt;Cervical biopsy</li> <li>&gt;Colposcopy (diagnostic or therapeutic)</li> </ul>
<b>General surgery: Includes breast, endocrine, hernia and miscellaneous emergency surgery</b>	
<ul style="list-style-type: none"> <li>&gt;Adrenalectomy</li> </ul>	<ul style="list-style-type: none"> <li>&gt;Ascitic drain (drainage of the peritoneal cavity)</li> <li>&gt;Breast biopsy</li> </ul>

<ul style="list-style-type: none"> <li>&gt;Parathyroidectomy</li> <li>&gt;Pituitary gland excision</li> <li>&gt;Thyroidectomy</li> <li><b>Breast</b></li> <li>&gt;Mastectomy</li> <li>&gt;Lumpectomy</li> <li>&gt;Mammoplasty</li> <li>&gt;Procedures on axillary nodes</li> <li><b>Hernia</b></li> <li>&gt;Femoral, inguinal, incisional, umbilical hernia repair</li> <li>&gt;Ventral, Spigellian, epigastric hernia repair</li> <li><b>Other</b></li> <li>&gt;Excision of retroperitoneal sarcoma</li> <li>&gt;Multivisceral resection</li> <li><b>Emergency surgery</b></li> <li>&gt;Trauma laparotomy</li> <li>&gt;Abdominal exploration and washout</li> <li>&gt;Appendectomy (open or laparoscopy)</li> <li>&gt;Adhesiolysis (open or laparoscopic)</li> <li>&gt;Diagnostic laparoscopy +/- washout</li> <li>&gt;Diagnostic laparotomy +/- washout</li> </ul>	<ul style="list-style-type: none"> <li>&gt;Endoscopic ultrasound</li> <li>&gt;Laparoscopic ultrasound</li> <li>&gt;Vacuum dressing</li> </ul>
<b>Head &amp; neck: Includes ear, nose, mouth, salivary glands, tonsils, larynx, pharynx, maxillofacial surgery, and surgical tracheostomy</b>	
<ul style="list-style-type: none"> <li>&gt;Procedures on the cochlear, external auditory meatus, cochlear, inner ear, middle ear, external ear and eardrum.</li> <li>&gt;Excision of larynx</li> <li>&gt;Orthognathic (jaw) surgery</li> <li>&gt;Reduction/fixation of the mandible</li> <li>&gt;Excision of bone of face</li> <li>&gt;Drainage of extra/intra-oral abscesses</li> <li>&gt;Orofacial cleft surgery</li> <li>&gt;Radical and selective neck dissection</li> <li>&gt;Nasendoscopy <u>with</u> intervention</li> <li>&gt;Nasal fracture reduction</li> <li>&gt;Endoscopic sinus surgery</li> <li>&gt;Surgical arrest of bleeding from the internal nose</li> <li>&gt;Excision of pharynx</li> <li>&gt;Excision of submental, submandibular and parotid gland.</li> <li>&gt;Partial/total glossectomy</li> <li>&gt;Tongue tie division (lingual frenectomy)</li> <li>&gt;Tonsillectomy</li> <li>&gt;Excision of adenoids</li> <li>&gt;Surgical tracheostomy</li> </ul>	<ul style="list-style-type: none"> <li>&gt;Implantation of tooth</li> <li>&gt;Insertion of dental prosthesis</li> <li>&gt;Orthodontic operations</li> <li>&gt;Restoration of tooth</li> <li>&gt;Extraction of tooth</li> <li>&gt;Nasendoscopy (diagnostic or therapeutic)</li> <li>&gt;Laryngoscopy (diagnostic or therapeutic)</li> <li>&gt;Packing of cavity of the nose</li> <li>&gt;Percutaneous tracheostomy</li> </ul>
<b>Heart: Includes mediastinum and pericardium</b>	
<ul style="list-style-type: none"> <li>&gt;Valvular surgery</li> <li>&gt;Atrial/ventricular septal defect repair</li> <li>&gt;Coronary artery bypass graft</li> <li>&gt;Heart transplant</li> </ul>	<ul style="list-style-type: none"> <li>&gt;Transluminal balloon angioplasty of coronary artery</li> <li>&gt;Insertion of cardiac pacemaker</li> <li>&gt;Percutaneous coronary intervention (PCI)</li> </ul>
<b>Hepatobiliary system: Includes bile ducts, gallbladder, liver, pancreas, spleen</b>	
<ul style="list-style-type: none"> <li>&gt;Cholecystectomy</li> <li>&gt;Liver resection</li> <li>&gt;Liver transplantation</li> <li>&gt;Distal pancreatectomy</li> <li>&gt;Pancreaticoduodenectomy</li> <li>&gt;Splenectomy:</li> </ul>	<ul style="list-style-type: none"> <li>&gt;Endoscopic retrograde cholangiopancreatography [ERCP] (diagnostic or therapeutic)</li> <li>&gt;Liver biopsy</li> </ul>
<b>Lung: Includes pleura and chest wall</b>	
<ul style="list-style-type: none"> <li>&gt;Resection of lung or chest wall</li> <li>&gt;Resection of mediastinal mass</li> <li>&gt;Lung transplantation</li> </ul>	<ul style="list-style-type: none"> <li>&gt;Bronchoscopy (diagnostic or therapeutic)</li> <li>&gt;Chest drain</li> </ul>
<b>Musculoskeletal: Includes bones, joints, muscles, tendons, and spinal surgery</b>	
<ul style="list-style-type: none"> <li>&gt;Amputation of foot, leg, toe</li> <li>&gt;Ligament repair</li> <li>&gt;Arthroscopy of joint</li> <li>&gt;Limb fracture surgery</li> <li>&gt;Debridement and irrigation joint</li> <li>&gt;Fasciotomy</li> <li>&gt;Joint replacement</li> </ul>	<ul style="list-style-type: none"> <li>&gt;Bone biopsy</li> <li>&gt;Injection into the joint</li> <li>&gt;Muscle biopsy</li> <li>&gt;Lumbar (spinal) puncture</li> <li>&gt;Therapeutic epidural injection</li> </ul>

<ul style="list-style-type: none"> <li>&gt;Muscle/tendon repair</li> <li>&gt;Carpal tunnel release</li> <li>&gt;Nailbed surgery</li> </ul> <b>Spinal:</b> <ul style="list-style-type: none"> <li>&gt;Cranial nerve, peripheral nerve, sympathetic nerve operation</li> <li>&gt;Vertebral procedures</li> <li>&gt;Decompression/excision of intervertebral disc</li> <li>&gt;Laminectomy</li> </ul>	
<b>Obstetric</b>	
<ul style="list-style-type: none"> <li>&gt;Caesarean section</li> <li>&gt;Evacuation of contents of uterus/ manual removal of placenta</li> <li>&gt;Repair of obstetric laceration (3/4th degree)</li> </ul>	<ul style="list-style-type: none"> <li>&gt;Any vaginal delivery (normal delivery, breech delivery, forceps delivery, vacuum delivery)</li> <li>&gt;Surgical termination of pregnancy</li> </ul>
<b>Oesophagus and stomach</b>	
<ul style="list-style-type: none"> <li>&gt;Nissen's fundoplication, Heller myotomy</li> <li>&gt;Oesophagectomy, oesophagogastrrectomy</li> <li>&gt;Gastrectomy</li> <li>&gt;Primary / revision of anti-reflex operation</li> <li>&gt;Perforated peptic ulcer repair</li> </ul>	<ul style="list-style-type: none"> <li>&gt;Oesophago-gastro-duodenoscopy [OGD] (diagnostic or therapeutic)</li> </ul>
<b>Skin (plastic surgery): Includes burns surgery and flaps</b>	
<ul style="list-style-type: none"> <li>&gt;Excision of benign and malignant skin lesion</li> <li>&gt;Excision of sebaceous cyst</li> <li>&gt;Repair of skin laceration</li> <li>&gt;Abdominoplasty</li> <li>&gt;Burns debridement, excision, dressing and reconstruction.</li> <li>&gt;Flap (local and free) or skin graft</li> </ul>	<ul style="list-style-type: none"> <li>&gt;Skin biopsy (including shave biopsy of skin)</li> </ul>
<b>Urinary and male reproductive systems: Includes kidney, bladder, ureter, prostate, testicles, renal transplant</b>	
<ul style="list-style-type: none"> <li>&gt;Nephrectomy</li> <li>&gt;Percutaneous nephrolithotomy</li> <li>&gt;Transplantation of kidney</li> <li>&gt;Cystectomy</li> <li>&gt;Transurethral resection of bladder (TURBT)</li> <li>&gt;Transurethral resection of prostate (TURP)</li> <li>&gt;Female incontinence surgery</li> <li>&gt;Circumcision</li> <li>&gt;Male sterilisation</li> <li>&gt;Hydrocele/varicocele surgery</li> <li>&gt;Testicular exploration</li> <li>&gt;Insertion of ureteric stent</li> <li>&gt;Rigid cystoscopy under general anaesthesia</li> </ul>	<ul style="list-style-type: none"> <li>&gt;Bladder biopsy</li> <li>&gt;Extracorporeal shock wave lithotripsy (ESWL)</li> <li>&gt;Flexible cystoscopy (diagnostic)</li> <li>&gt;Percutaneous nephrostomy</li> </ul>