SurgWeek-2

Paper case report forms

For use where data are collected on paper and entered into REDCap afterwards. Derived from CRF in Appendices version 3.2 (28 August 2026).

How to use this pack

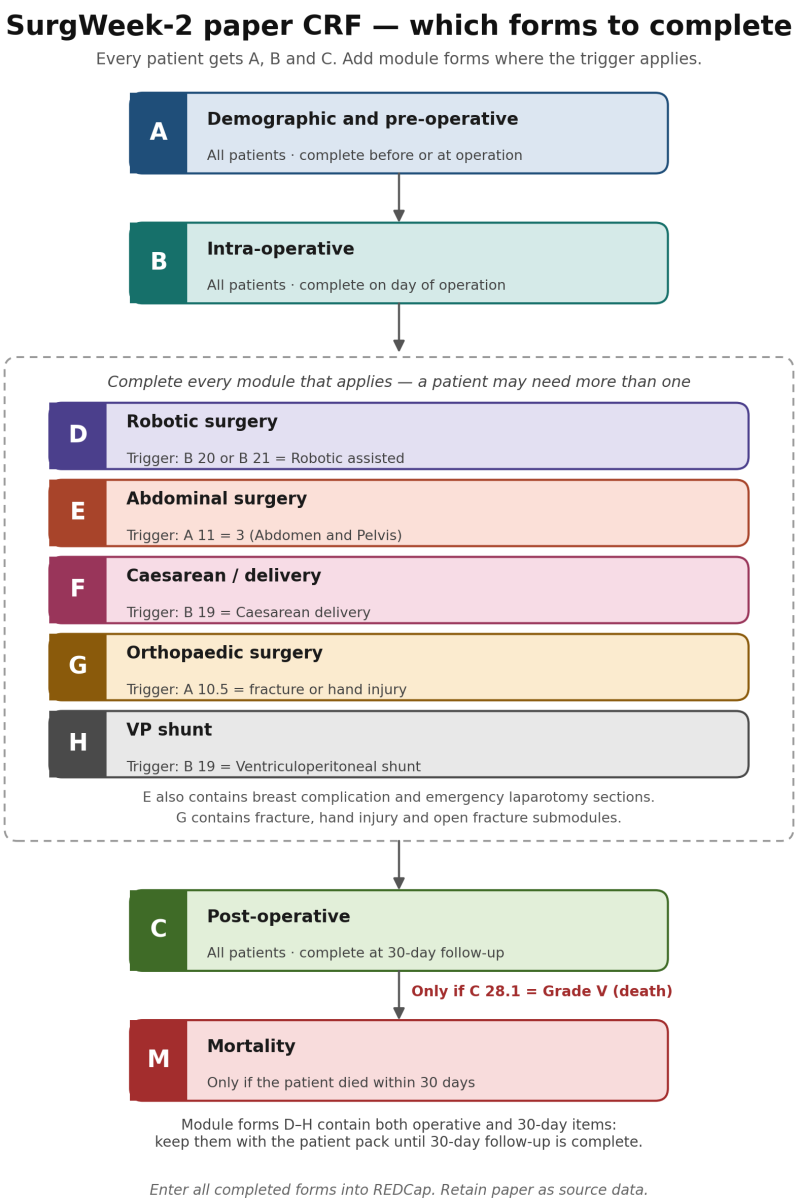
- Complete Forms A, B and C for every patient entered into the study.
- Add each module form (D–H) whose trigger applies. A patient may need more than one (for example, a robotic abdominal operation needs both D and E)
- Grey shaded questions are conditional. Complete them only when the "Only if" line at the top of the question is true; otherwise leave the whole question blank.
- Write the patient identifier on every page before you start. Pages become separated.
- Do not upload the patient identifier to REDCap. It stays on the paper forms only.
- Enter the completed forms into REDCap and file the paper originals as source data.

Form key

	FORM	WHO COMPLETES IT	ITEMS
A	**Demographic and pre-operative data**	All patients	**30**
B	**Intra-operative data**	All patients	**18**
C	**Post-operative data**	All patients	**18**
D	**Robotic surgery module**	Only if B 20 or B 21 = Robotic assisted	**23**
E	**Abdominal surgery module**	Only if A 11 = Abdomen and Pelvis, excluding caesarean section	**36**
F	**Caesarean section module**	Only if B 19 = Caesarean section (caesarean delivery is an equivalent term)	**42**
G	**Orthopaedic surgery module**	Only if A 10.5 includes a fracture or hand injury	**49**
H	**VP shunt module**	Only if B 19 = insertion of a primary ventriculoperitoneal shunt, or revision of a ventriculoperitoneal shunt	**10**
M	**Mortality module**	Only if C 28.1 = Grade V (death within 30 days)	**21**

Colour and letter are printed on every page. If you photocopy in black and white the letter block still identifies the form.

Completion pathway



FORM A — Demographic and pre-operative data

All patients

Patient identifier _____
Initials _____ Centre _____

All patients

1	**Period operated in** *(tick one)* ☐ Period 1 (00:00 31st August 2026 – 23:59 6th September 2026) ☐ Period 2 (00:00 7th September 2026 – 23:59 13th September 2026) ☐ Period 3 (00:00 14th September 2026 – 23:59 20th September 2026) ☐ Period 4 (00:00 21st September 2026 – 23:59 27th September 2026) ☐ Period 5 (00:00 28th September 2026 – 23:59 4th October 2026) ☐ Period 6 (00:00 5th October 2026 – 23:59 11th October 2026)
2	**Sex** *(tick one)* ☐ Female ☐ Male
3	**Age** *(tick one)* ☐ 0-4 weeks ☐ 5 - 52 weeks ☐ 1-4 years ☐ 5-9 years ☐ 10-17 years ☐ 18-29 years ☐ 30-39 years ☐ 40-49 years ☐ 50-59 years ☐ 60-69 years ☐ 70-79 years ☐ 80-89 years ☐ 90 years or more
3.1	**Only if:** *A 2 = Female and A 3 = age 10–59* **Pregnancy status** *(tick one)* ☐ No ☐ Yes – first trimester (<13 weeks) ☐ Yes – second trimester (13-28 weeks) ☐ Yes – third trimester (>28 weeks)
4	**ASA** *(tick one)* ☐ Grade I ☐ Grade II ☐ Grade III ☐ Grade IV ☐ Grade V ☐ Grade VI
5.1	**Only if:** *A 3 = aged 18 years or more* **BMI** _____ *Link to calculator: https://www.bupa.co.uk/health-information/bmi-calculator*
5.2	**Only if:** *A 3 = aged under 18 years* **Weight (kg)** _____
6.1	**Co-morbidities** *(tick all that apply)* ☐ Ischaemic heart disease ☐ Congestive heart failure ☐ Cerebrovascular disease ☐ Diabetes mellitus – insulin dependent ☐ Diabetes mellitus – non-insulin dependent ☐ Chronic kidney disease (baseline creatinine >176.8 µmol/L or >2 mg/dL) ☐ Human immunodeficiency virus (HIV) ☐ Hypertension ☐ None of the above
6.2	**Only if:** *A 6.1 = Human immunodeficiency virus* **HIV status** *(tick one)* ☐ Untreated HIV ☐ HIV with CD4 cell count <200 cells/mm3 ☐ HIV with CD4 cell count 200-500 cells/mm3 ☐ HIV with CD4 cell count >500 cells/mm3 ☐ HIV with CD4 cell count unknown
7	**Clinical frailty score** *(tick one)* *Link: https://www.bgs.org.uk/sites/default/files/content/attachment/2018-07-05/rockwood_cfs.pdf* ☐ 1 – Very fit ☐ 2 – Well ☐ 3 – Managing well ☐ 4 – Vulnerable ☐ 5 – Mildly frail ☐ 6 – Moderately frail ☐ 7 – Severely frail – completely dependent for personal care ☐ 8 – Very severely frail ☐ 9 – Terminally ill
8	**Smoking status** *(tick all that apply)* ☐ No – never smoked ☐ No – ex smoker, stopped ≥ 6 weeks ago ☐ No – ex smoker, stopped in the last 6 weeks ☐ Yes – current smoker ☐ No – never vaped ☐ No – previously vaped, stopped ≥ 6 weeks ago ☐ No – previously vaped, stopped in the last 6 weeks ☐ Yes – currently vapes ☐ Unknown smoking or vaping status
9	**Type of admission** *(tick one)* ☐ Elective (surgery on a planned admission) ☐ Emergency (surgery on an unplanned admission)
10.1	**Indication for surgery (broad category)** *(tick one)* ☐ Benign ☐ Malignant / pre-malignant ☐ Trauma ☐ Obstetrics
11	**Body region of main operation** *(tick one)* ☐ Head and neck ☐ Thorax ☐ Abdomen and Pelvis ☐ Upper limb ☐ Lower limb ☐ Spine
12	**Indication for operation (specific diagnosis)** *For example, appendicitis, perforated colonic adenocarcinoma, testicular torsion etc.* *A list of operations is provided as a separate document. Write the operation here, then select the matching entry from the REDCap drop-down list at data entry.*

Elective admission — only if A 9 = Elective admission

9.1	**How many days passed between the decision to operation (or patient being booked for the operation) to having the operation?** _____ (days)

Malignant or pre-malignant — only if A 10.1 = Malignant / pre-malignant

10.2	**Intent of this operation** *(tick one)* ☐ Curative ☐ Palliative
10.3	**Extent of malignancy** *(tick one)* ☐ Pre-malignant ☐ Primary only ☐ Nodal metastases ☐ Distant metastases ☐ Not staged

Emergency admission — only if A 9 = Emergency admission

9.2 **On presentation to hospital was the patient septic?** *(tick one)* ☐ No ☐ Yes
Sepsis is life-threatening organ dysfunction caused by a dysregulated host response to infection. Full definition: see the appendices of the study protocol.

9.2.1 **Only if:** *A 9.2 = Yes, patient was septic*
Duration of time from identification of suspected sepsis in hospital to first antibiotics being given *(tick one)*
☐ <30 minutes ☐ 30-59 minutes ☐ 60-119 minutes ☐ 120 minutes - 24 hours ☐ No antibiotics given within 24 hours

9.3 **On presentation to hospital were there signs of shock?** *(tick one)* ☐ No ☐ Yes
Shock is inadequate tissue perfusion, recognised clinically as hypotension with evidence of end-organ hypoperfusion. Full definition: see the appendices of the study protocol.

9.4 **Time of symptom onset or injury to presentation to hospital** *(tick one)*
☐ Under 12 hours ☐ 12-23 hours ☐ 24-47 hours ☐ 48-71 hours ☐ 72 hours or more

9.5 **Time from presentation to hospital to review by surgical team** *(tick one)*
☐ <1 hour ☐ 1-2 hours ☐ 3-6 hours ☐ 7-12 hours ☐ 13-24 hours ☐ Over 24 hours

9.6 **Time from review by surgical team to decision for operation** *(tick one)*
☐ <1 hour ☐ 1-2 hours ☐ 3-6 hours ☐ 7-12 hours ☐ 13-24 hours ☐ Over 24 hours

9.7 **Duration of time from decision to operate (booking of theatre case) to patient arrival in theatre** *(tick one)*
☐ <2 hours ☐ 2 - 6 hours ☐ 7-18 hours ☐ >18 hours

9.8 **What was the intended window from decision to operate (booking the theatre case) to the operation?** *(tick one)*
☐ <2 hours ☐ 2 - 6 hours ☐ 7-18 hours ☐ >18 hours ☐ No window set ☐ Unknown

9.9 **Immediately prior to attending this hospital, did patient seek care from anywhere else?** *(tick all that apply)*
☐ No ☐ Yes – Traditional or faith healer ☐ Yes - Community health worker ☐ Yes – Family or primary care doctor
☐ Yes - Another hospital transferred this patient to this hospital ☐ Yes – Other, please specify_____
☐ Unknown _____

9.9.1 **Only if:** *A 9.9 = another hospital transferred this patient*
What was the reason for hospital transfer? *(tick all that apply)*
☐ For input from a surgical speciality not available at referring hospital ☐ No surgeon at referring hospital
☐ Anaesthetic requirement ☐ No operating theatre ☐ Critical care (High dependency or intensive care unit) requirements
☐ Diagnostics; for example no CT scanner ☐ Interventional radiology unavailable ☐ Blood product availability
☐ Equipment limitations (robot/laparoscopy/stapling devices etc) ☐ Complexity requires tertiary centre (i.e. patient factors)
☐ External disruption; for example power issues, flooding, staff strikes ☐ Financial constraints
☐ Other, please specify_____

Trauma — only if A 10.1 = Trauma

10.4 **Mechanism of injury** *(tick all that apply)*
☐ Fall less than 2 metres ☐ Fall more than 2 metres ☐ Road traffic collision – occupant ☐ Road traffic collision – pedestrian ☐ Road traffic collision – cyclist ☐ Gunshot ☐ Stab ☐ Other penetrating injury (not gunshot/stab)
☐ Assault – blunt force ☐ Blast / explosion ☐ Crush injury ☐ Industrial / Occupational ☐ Animal bite
☐ Sport related ☐ Burns or thermal injury ☐ Self harm ☐ Other, please specify_____

10.5 **Identify all of the injuries** *(tick all that apply)*
☐ Single acute fracture ☐ Multiple acute fractures ☐ Hand injury ☐ Traumatic brain injury ☐ Skull fracture
☐ Facial fracture ☐ Neck injury (vascular/airway) ☐ Rib fractures ☐ Pneumothorax/Haemothorax ☐ Lung contusion
☐ Cardiac injury ☐ Abdominal solid organ injury ☐ Abdominal hollow viscus injury ☐ Vertebral fracture
☐ Spinal cord injury ☐ Upper limb dislocation ☐ Upper limb soft tissue injury ☐ Lower limb dislocation
☐ Lower limb soft tissue injury ☐ Vascular injury ☐ Nerve injury

13	**Was the WHO Safer surgery checklist used in theatre?** *(tick one)* ☐ No ☐ Yes
14	**Grade of the most senior surgeon in theatre** *(tick one)* ☐ Consultant or equivalent ☐ Doctor/surgeon with 3 or more years of experience ☐ Doctor/surgeon with 1-2 years of experience ☐ Non-physician
15	**Grade of primary surgeon (Defined as performing over 50% of the critical operative steps)** *(tick one)* ☐ Consultant or equivalent ☐ Doctor/surgeon with 3 or more years of experience ☐ Doctor/surgeon with 1-2 years of experience ☐ Non-physician
16	**Grade of the most senior anaesthetist in theatre** *(tick one)* ☐ Consultant or equivalent ☐ Doctor with 3 or more years of experience ☐ Doctor with 1-2 years of experience ☐ Non-physician
17	**Type(s) of anaesthesia** *(tick all that apply)* ☐ General (gaseous) ☐ General (total intravenous) ☐ Neuraxial - epidural ☐ Neuraxial - spinal ☐ Regional nerve block ☐ Sedation ☐ Local anaesthetic ☐ None
18	**Time of knife to skin (start of operation)** *(tick one)* ☐ 08:00-17:59 ☐ 18:00-23:59 ☐ 00:00-07:59
19	**Main operation** *A list of operations is provided as a separate document. Write the operation here, then select the matching entry from the REDCap drop-down list at data entry.*
20	**Planned initial operative approach** *(tick one)* ☐ Open ☐ Standard minimally invasive (e.g. laparoscopic, thoracoscopic or equivalent video-assisted technique excluding robotic assisted) ☐ Robotic assisted ☐ Hybrid (minimally invasive and open) ☐ Endoluminal ☐ Natural orifice transluminal
21	**Final (completion) surgical approach** *(tick one)* ☐ Open ☐ Standard minimally invasive (e.g. laparoscopic/thoracoscopic or equivalent video-assisted technique excluding robotic assisted) ☐ Robotic assisted ☐ Hybrid (minimally invasive and open) ☐ Endoluminal ☐ Natural orifice transluminal
22	**Degree of intra-operative contamination** *(tick one)* ☐ Clean ☐ Clean-contaminated ☐ Contaminated ☐ Dirty
23	**Did the patient receive antibiotics at induction of anaesthesia?** *(tick one)* ☐ Yes, at induction of anaesthesia ☐ No, but had a dose within the previous 8 hours ☐ No and did not have any antibiotics in the preceding 8 hours.
24.1	**How was the main surgical wound closed?** *(tick one)* ☐ Primary closure ☐ Left to heal by secondary intention ☐ No external surgical wound or not applicable
24.2	**Only if:** *B 24.1 = a surgical wound is present* **What dressing was used for the main surgical wound?** *(tick one)* ☐ Antimicrobial or bacteria-binding (e.g. iodine impregnated, silver impregnated, chlorhexidine impregnated or hydrophobic fibre/DACC) ☐ Closed incision negative pressure (ciNPWT) (canister-based or single use) ☐ Glue-containing (e.g. cyanoacrylate skin adhesive, alone or with self-adhering mesh) ☐ Simple dressing only (e.g. gauze, adhesive island dressing, transparent film) ☐ No dressing
24.3	**Only if:** *B 24.1 = left to heal by secondary intention* **Location of the wound left to heal by secondary intention** *(tick one)* ☐ Foot ☐ Leg ☐ Abdomen ☐ Other, please specify
25	**Skin preparation** *(tick all that apply)* ☐ Chlorhexidine in alcohol ☐ Aqueous chlorhexidine ☐ Povidone-iodine (aqueous) ☐ Povidone-iodine in alcohol ☐ Alcohol only ☐ Olanexidine ☐ Ioban drape or equivalent ☐ Other, please specify ☐ Unknown _____
26.1	**Were there any power outages during the operation?** *(tick one)* ☐ No ☐ Yes, 1-14 minutes total power outage ☐ Yes 15-29 minutes total power outage ☐ Yes, 30-59 minutes total power outage ☐ Yes, > 1-hour total power outage ☐ Unknown
26.2	**Only if:** *B 26.1 = a power outage occurred* **Did this result in any change of procedure?** *(tick one)* ☐ No ☐ Conversion from minimally invasive to open ☐ Abandoned procedure objective ☐ Alternative procedure performed ☐ Other, please specify_____
26.3	**Only if:** *B 26.1 = a power outage occurred* **What was the impact to the patient?** *(tick one)* ☐ No impact ☐ Minor complication ☐ Moderate complication ☐ Life-threatening complication

27.1	**Has this patient had follow-up within 30 days?** *(tick all that apply)* ☐ No follow-up in 30 days, data collected from hospital record review ☐ Yes - In-person clinic follow-up ☐ Yes - Telephone or video call
27.2	**Only if:** *C 27.1 = in-person, telephone or video follow-up* **On what post-operative day did the patient return to normal activity?** _____ (days) *(This could include work, care or community roles)* *(If the patient has not returned to normal activity, please enter 99)*
28.1	**30-day Clavien-Dindo grade** *(tick one)* ☐ Grade I ☐ Grade II ☐ Grade III a ☐ Grade III b ☐ Grade IV a ☐ Grade IV b ☐ Grade V ☐ No complications
28.2	**Only if:** *C 28.1 = any complication* **Which post-operative complication(s) did the patient have?** *(tick all that apply)* ☐ Surgical site infection or fracture-related infection ☐ Deep organ space infection ☐ Pneumonia ☐ Unexpected ventilation ☐ Acute respiratory distress syndrome (ARDS) ☐ Pulmonary embolism ☐ Deep vein thrombosis ☐ Pulmonary aspiration or aspiration pneumonitis ☐ Urinary tract infection ☐ Central line infection ☐ Sepsis or septic shock ☐ Myocardial infarction ☐ New acute heart failure or clinically significant cardiac arrhythmia requiring treatment ☐ Stroke ☐ Postoperative haemorrhage requiring transfusion ☐ Anastomotic leak ☐ Acute kidney injury resulting in dialysis ☐ Wound dehiscence ☐ None of the above
29	**30-day reoperation** *(tick one)* ☐ No ☐ Yes, planned re-operation ☐ Yes, unplanned re-operation ☐ Yes, both planned and unplanned re-operations
30	**Post-operative length of stay (days)** _____ (days) *(Day 0 is the day of operation)*
31	**Was the patient admitted to critical care postoperatively (high dependency unit or intensive care unit)?** *(tick all that apply)* ☐ No - not required ☐ No - planned to go to critical care but no bed available ☐ Yes - planned from theatre ☐ Yes - unplanned from theatre ☐ Yes - unplanned from ward
31.1	**Only if:** *C 31 = admitted to critical care* **On how many postoperative days, within 30 days of the operation, did the patient spend in a critical care unit?** _____ (days) *(Day 0 is the day of the operation)*
32	**Did your patient have an enhanced recovery after surgery (ERAS) protocol or equivalent?** *(tick one)* ☐ No ☐ Yes
33	**Only if:** *A 10.1 = Malignant / pre-malignant* **Was histology performed?** *(tick one)* ☐ Not performed ☐ No specimen ☐ Yes – benign ☐ Yes – malignant with R0 resection margin ☐ Yes – malignant with R1 resection margin ☐ Yes – malignant with R2 resection margin ☐ Yes – malignant but no resection margin provided
34	**On how many postoperative days, within 30 days of the operation, did the patient receive at least one dose of antibiotics** _____ (days)
35	**Did the patient have a wound swab sent for microbiology?** *(tick one)* ☐ No ☐ Yes, but no growth on any specimens ☐ Yes, growth on one or more specimens but organisms with no antimicrobial resistances ☐ Yes, growth of organisms in one or more specimens with antimicrobial resistance ☐ Yes, growth but no sensitivity performed or available
35.1	**Only if:** *C 35 = organism resistant to antibiotics* **Which organisms had resistance to antibiotics?** *(tick all that apply)* ***Enterobacterales*** ☐ Escherichia (e.g. E. coli) ☐ Klebsiella (e.g. K. pneumoniae) ☐ Enterobacter ☐ Proteus ***Specific resistances*** ☐ ESBL-producing Enterobacterales (e.g. E. coli, Klebsiella) ☐ Carbapenem-resistant Enterobacterales (CRE) ☐ Pseudomonas aeruginosa (multidrug-resistant) ☐ Methicillin-resistant Staph aureus (MRSA) ☐ Vancomycin-resistant Enterococcus (VRE) ***Anaerobes*** ☐ Bacteroides fragilis ☐ Other Bacteroides spp. ☐ Peptostreptococcus ☐ Clostridium spp. ***Other*** ☐ Gram negative ☐ Enterococcus ☐ Other not listed, please specify
36	**30-day hospital re-admission** *(tick one)* ☐ No ☐ Yes
36.1	**Only if:** *C 36 = Yes, re-admitted* **Length of readmission stay** _____ (days) *(If discharged on the same day as readmission then enter 0. If multiple readmissions within 30 days, please state the total number of readmitted days)*
37	**How was the majority of the cost of surgery supported?** *(tick one)* ☐ Insurance provided by the government (national or regional level) ☐ Insurance provided by employer (or household members' employer) ☐ Insurance that the patient has privately arranged and paid for ☐ Insurance but unknown how this was arranged ☐ External funds or grants awarded by charities/NGOs ☐ Out-of-pocket payments (patient paid the hospital directly) ☐ Free at the point of use (e.g. UK National Health Service)
37.1	**Only if:** *C 37 = cost met by insurance, grants or charity* **Did the patient pay anything out of pocket?** *(tick one)* ☐ No ☐ Yes ☐ Unknown
37.1.1	**Only if:** *C 37.1 = Yes, paid out of pocket or C 37 = out-of-pocket payments* **Did an inability to pay result in a delay to the patient having an operation?** *(tick one)* ☐ No ☐ Yes ☐ Unknown