# Appendix: Data Dictionary

| Pre-operative Data Fields | Required data (definition / comment) | Suggested source(s) |
|---|---|---|
| **1. Patient age** | **Years** (whole years at the time of operation) | – Clinical notes |
| **2. Patient gender** | **Male** / **Female** | |
| **3. Cultural identity** | **European/Aboriginal/Torres Straights Islander/Maori/Pacific Peoples/Asian/Middle Eastern/Latin American/African/Other** | – Clinical notes |
| **4. Patient height** | **Meters** (record to two decimal places) | – Drug charts<br>– Clinical notes |
| **5. Patient weight** | **Kilograms** (record to one decimal places) | |
| **6. Patient ASA grade** | **Grade I-V** (Full ASA classification available at: https://www.asahq.org/resources/clinical-information/asa-physical-status-classification-system). | – Anaesthetic notes |
| **7. History of cardiac disease** | **Yes** (myocardial infarction, angina, congestive cardiac failure within 30d prior to surgery, hypertension on Rx) / **No** | – Admission clerking<br>– Anaesthetic notes<br>– Outpatient letters |
| **8. Clinical Frailty Score** | **1 – 9** | |
| | | |
| **9. History of chronic respiratory disease** | **Yes** (asthma, chronic obstructive pulmonary disease or pneumonia, bronchiectasis, pulmonary fibrosis, lung cancer, obstructive sleep apnoea, other) / **No** | |
| **10. History of Diabetes** | **Diabetes** (diet controlled, tablet controlled, insulin controlled) | |
| **11. History of neurological disease / stroke** | **Yes** / **No** | |
| **12. History of liver disease** | **Yes** / **No** | |
| **13. Smoking status** | **Current** (includes those who stopped smoking within 6 weeks), Ex-smoker, **Never**. | |
| **14. Anticoagulant/Antiplatelet** | **Yes** / **No** | |
| **15. Pre-operative blood test values** | **Haemoglobin** (grams / litre) / Creatinine / **estimated Glomerular Filtration Rate** (ml / min) / Ferritin (if done) | – Pathology systems |
| **16. Pre-operative anaemia management** | Oral or intravenous iron clinic **Yes** / **No**<br>Number of days prior to operation patient received treatment | – |

**Abbreviations**: ASA = American Society of Anaesthesiologists; Hb = Haemoglobin; PACS = Picture Archiving and Communication.

| Intra-operative Data Fields | Required data (definition / comment) | Suggested source(s) |
|---|---|---|
| **1. Operative urgency (NCEPOD Classification of Intervention)** | **Immediate** (Immediate life, limb or organ-saving intervention – resuscitation simultaneous with intervention. Normally within minutes of decision to operate).<br>**Urgent (**Intervention for acute onset or clinical deterioration of potentially life-threatening conditions, for those conditions that may threaten the survival of limb or organ, for fixation of many fractures and for relief of pain or other distressing symptoms. Normally within hours of decision to operate)<br>**Expedited (**requiring early treatment where the condition is not an immediate threat to life, limb or organ survival. Normally within days of decision to operate).<br>**Elective (**Intervention planned in advance of routine admission to hospital). | – Operative note<br>– Admissions clerking<br>– Clinical notes |
| **2. Operative procedure** | **Select main procedure** (closest option from the drop-down list or enter as free text by selecting “other”).<br>(1) Upper gastrointestinal tract surgery<br>(2) Colorectal surgery<br>(3) Hepato-pancreato-biliary (HPB) surgery<br>(4) Vascular surgery<br>(5) Urology<br>(6) Gynaecology | – Operative note<br>– Clinical notes<br>– Theatre records |
| **3. Operative contamination** | **Clean** (Gastrointestinal (GI) and genitourinary (GU) tract not entered).<br>**Clean-Contaminated** (GI or GU tracts entered but no gross contamination).<br>**Contaminated** (GI or GU tracts entered with gross spillage or major break in sterile technique).<br>**Dirty** (There is already contamination prior to operation, e.g. faeces or bile). | |
| **4. Tranexamic acid use** | **Yes** / **No** | |
| **5. Intraoperative blood transfusion** | **0 / 1 / 2 / 3 / 4 / >4** | |
| **6. Hb at transfusion** | **Yes** / **No** | |
| **7. Duration of procedure** | **Minutes**<br>– Total duration including anaesthetic time<br>Duration from skin incision to completion of skin closure | |
| | | |
| | | |
| **Abbreviations**: NCEPOD: National Confidential Enquiry into Patient Outcome and Death. WHO = World Health Organisation | | |

| Post-operative Data Fields | Required data (definition / comment) | Suggested sources |
|---|---|---|
| **1. Critical care admission** | **Date of admission** | – Clinical notes |
| **2. Critical care bed days** *(if yes)* | **Date of discharge** | |
| **3. Highest inpatient complications** | **None / Clavien-Dindo Grade I-V** (see appendix for the Clavien-Dindo scale). | |
| **4. Reoperation** | **Yes/No**<br>**Date**<br>**List operation performed & date** | |
| **5. Post-operative length of stay (hospital)** | **Date of Discharge** | |
| **6. Iron Therapy in post-operative period** | Iron Oral / IV / none | – Discharge letter |
| **7. Blood Transfusion in post-operative period** | None/Units 1/2/3/4/>4<br>Hb immediately prior to transfusion<br>Subsequent transfusions in remainder of post op period Y/N | – Pathology systems |
| **8. Discharge Destination** | Home / rehabilitation / nursing or supported care | – Discharge letter |
| **9. Haemoglobin level** | Admission to HDU / ICU / extended recovery | – Pathology systems |
| | Discharge from HDU / ICU / extended recovery | |
| | Lowest Hb in first 3 days postoperatively | |
| | Last recorded before discharge from hospital | |

| 30-day Data Fields | Required data (definition / comment) | Suggested sources |
|---|---|---|
| **1. RE – admission** | **Yes / No**<br>**If yes complete readmission form** | – Telephone follow-up<br>– Follow up clinic<br>– Clinical notes |
| **2.** Hb level | 4-6 weeks | |
| **3.** Location | Home/rehabilitation/nursing or supported care | |
| 4. 30-day Infection | **Was there post-operative infection Yes/ No**<br>**Respiratory / urinary / wound / other** | |
| **5.** Highest 30-day complication grade | **None / Clavien-Dindo Grade I-V** (see appendix for the Clavien-Dindo scale). | |
| 6. Clinical Frailty score | 1-9 | – Clinical Notes |

| Readmission Data Fields | Required data (definition / comment) | Suggested sources |
|---|---|---|
| 1. **Reason for Readmission** | **Planned Y reason free text**<br>**Unplanned Y see appendix**<br>**Scored as per CD scale** | – Clinical notes |
| 2. **Haemoglobin level** | On admission | – Pathology systems |
| | Lowest Hb day 1-3 | |
| | Last recorded before discharge from hospital | |
| 3. **Blood transfusion** | **0 / 1 / 2 / 3 / 4** | |
| 4. **Readmission to HDU / ICU** | **Date of admission** | |
| 5. **Discharge from HDU / ICU** *(if yes)* | **Date of discharge** | |
| 6. **Reoperation** | **Yes / No date**<br>**List operation performed & date**<br>**repeat intraoperative and post-operative data** | – Discharge letter<br>– Clinical notes |
| 7. **Length of stay (hospital)** | **Number** (days from the first re-admission day to day of discharge. If the patient has not been discharged prior to the end of 30-day re-admission, enter ‘31’). | |
| 8. **Discharge Destination** | Home / rehabilitation / nursing or supported care | |