

## Data Summary Document

The following data points will be recorded within the HIPPO Study REDCap Database:

Pre-operative Data Fields	Required data (definition / comment)
1. Patient age	Years (months if < 1y)
2. Patient sex	Male / Female
3. Height	(cm)
4. Weight	(kg)
5. Gestational age Branching logic if the patient is a child (<16y)	(weeks)
6. Patient ASA grade	Grade I / Grade II / Grade III / Grade IV / Grade V
7. Smoking status	Never smoked / Current smoker or Ex-smoker (<6 weeks ago) / Ex-smoker (>6 weeks ago)
8. Clinical Frailty scale*	1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 / 9
9. Co-morbidities	Ischemic heart disease / Congestive heart failure / Cerebrovascular disease / Chronic kidney disease / Diabetes Mellitus (NIDDM / IDDM)
10. Did the patient have a test for SARS-CoV-2 in the 72h before surgery?	Yes (PCR / Lateral flow) / No
11. Did the patient have any symptoms related to inguinal hernia before surgery?	Yes (e.g., pain, heaviness, dull discomfort, dragging sensation) / No
12. Time of first symptoms Branching logic if the patient had symptoms	mm
13. Date of diagnosis	Dd/ mm / yyyy / At birth (neonate 28d) / Infant (up to 1 year)
14. Date of decision for surgery	Dd / mm / yyyy
15. Date of operation	Dd/ mm / yyyy
16. Was the patient able to do daily activities while waiting for surgery (work, school, or family duties)?	Yes (completely) / Some, but not all / No, not at all
17. Site of hernia	Left / Right / Bilateral
18. Size of inguinal hernia <i>Referring to the biggest one if bilateral</i>	Limited to inguinal region / Limited to scrotum / Extend to mid-thigh / Extend to knee or beyond
19. Indication for surgery	Symptomatic / Incarcerated / Obstruction / Strangulated

Intra-operative Data Fields	Required data (definition / comment)
1. Urgency of surgery	Elective / Emergency  <i>If emergency: Was the patient already on the elective waiting list for surgery? (Yes / No)</i>
2. Mode of Anaesthesia <i>This refers to the main anaesthetic used during the operation and not as induction agents</i>	Local / Regional (spine-related / regional nerve block) / Sedation (e.g., midazolam) / General Inhaled (sevoflurane / halothane / desflurane / N <sub>2</sub> O / isoflurane) / TIVA
3. Was the anaesthesia given by the professional who repaired the hernia?	Yes (e.g., surgeon) / No (anaesthetist / anaesthetic nurse / technician)
4. Was the WHO checklist used?	Yes / No
5. Prophylactic antibiotic	Yes / No
6. Primary Operator	Senior surgeon (Consultant or Attending) / Trainee surgeon / Non-surgeon (medical practitioners / non-surgeon / non-medical practitioners)  <i>If selected any:</i> -- How many inguinal hernias were performed prior to this? (0-50 / 51-100 / 101-200 / ≥201) -What was the speciality? (general surgeon / urology / paediatric surgeon / other) -What was the speciality? (general surgeon / urology / paediatric surgeon / other)

<b>7. Operative approach</b>	<p><b>Open</b> (performed exclusively using instruments inserted in to the abdomen through a <u>surgical incision in the groin area</u>).</p> <p><b>Laparoscopic</b> (performed exclusively using instruments inserted in to the abdomen through <u>ports</u>)</p> <p><b>Laparoscopic converted to open</b> (surgery planned to be performed laparoscopically but for unforeseen reasons the decision was made to change to an open approach).</p> <p><b>Robotic</b> (robot-assisted surgery with no conversion to either laparoscopic or open approaches).</p> <p><b>Robotic converted to open</b> (surgery planned to be performed robotically but for unforeseen reasons the decision was made to change to an open approach).</p>
<b>8. Size of inguinal hernia</b>	<b>Up to 1.5cm / Up to 3cm / &gt;3cm / Not known</b>
<b>9. Bowel resection</b>	<b>Yes / No</b>
<b>10. Type of hernia repair</b>	<b>Primary herniotomy / Mesh</b> (Lichtenstein / Transinguinal pre-peritoneal (TIPP) / Trans rectal pre-peritoneal (TREPP) / plug and patch / PHS (bilayer) / other) / <b>Non-mesh</b> (Desarda / Bassini / Shouldice, other) / <b>MIS</b> (TAPP / TEP / SILS)
<b>11. Mesh used</b>	<p><b>Yes / No</b></p> <p><i>If mesh used:</i></p> <ul style="list-style-type: none"> <li>- Country of manufacture: (Longlist, unknown)</li> <li>- Type: Permanent synthetic / Absorbable synthetic / Biological / Composite</li> <li>- Was the excess mesh re-sterilised and re-used? Yes /No</li> <li>- Suture used to fix the mesh to inguinal ligament: absorbable / non-absorbable / not fixed</li> <li>- / glue (fibrin / histo-acryl) / tackers</li> </ul>
<b>12. Operative contamination</b>	<p><b>Clean</b> (Gastrointestinal (GI) and genitourinary (GU) tract not entered).</p> <p><b>Clean-Contaminated</b> (GI or GU tracts entered but no gross contamination).</p> <p><b>Contaminated</b> (GI or GU tracts entered with gross spillage or major break in sterile technique).</p> <p><b>Dirty</b> (There is already contamination prior to operation, e.g. faeces or bile).</p>
<b>13. Were reusable gowns used in this procedure?</b>	<b>Yes</b> (All scrubbed staff/ some scrubbed staff) / <b>No</b>
<b>14. Were reusable drapes used in this procedure?</b>	<b>Yes / No</b>
<b>15. Was recycling of waste performed?</b>	<b>Yes, paper / Yes plastic / Yes glass / No</b>

Post-operative Data Fields	Required data (definition / comment)
<b>1. 30-day follow-up</b>	<b>Yes</b> (Telephone / In-person) / <b>No</b>
<b>2. 30-day surgical site infection</b>	<b>Yes</b> (No readmission within 30-days / readmission within 30-days) / <b>No</b>
<b>3. 30-day Reoperation</b>	<b>Yes</b> (early recurrence, bleeding, injury to the vas deferens, other) / <b>No</b>
<b>4. Post-operative length of stay</b>	<p><b>Same day discharge</b></p> <p><b>Admitted</b> (If admitted, <b>Number</b> of days inpatient, considering day after surgery as day 1 to <u>day of discharge</u>. If the patient has not been discharged prior to the end of 30-day follow-up, enter '31'.)</p>
<b>5. Overall Clavien-Dindo complication</b>	<b>None / Grade I / Grade II / Grade IIIa / Grade IIIb / Grade IVa / Grade IVb / Grade V</b>