**ANNEXURE C: DATA COLLECTION SHEET**

<table>
<tr><th colspan="6">Data collection sheet</th></tr>
<tr><td colspan="6">Exploring the outcome of post-operative interventions implemented to prevent a paralytic ileus in patients admitted to ICU following abdominal surgery</td></tr>
<tr><td colspan="6">Assigned number:</td></tr>
<tr><td colspan="6">Section A: Input: Demographic information</td></tr>
<tr><td>Sex</td><td>Male</td><td></td><td>Female</td><td></td><td></td></tr>
<tr><td>Age</td><td colspan="5">____________years</td></tr>
<tr><td>Date of surgery</td><td colspan="5">______(day)________(month)________(year)</td></tr>
<tr><td colspan="2"></td><td colspan="2">Yes</td><td colspan="2">No</td></tr>
<tr><td rowspan="8">Organ involved in surgery</td><td>Oesophagus</td><td colspan="2"></td><td colspan="2"></td></tr>
<tr><td>Stomach</td><td colspan="2"></td><td colspan="2"></td></tr>
<tr><td>Pancreas</td><td colspan="2"></td><td colspan="2"></td></tr>
<tr><td>Spleen</td><td colspan="2"></td><td colspan="2"></td></tr>
<tr><td>Liver</td><td colspan="2"></td><td colspan="2"></td></tr>
<tr><td>Small bowel</td><td colspan="2"></td><td colspan="2"></td></tr>
<tr><td>Large bowel</td><td colspan="2"></td><td colspan="2"></td></tr>
<tr><td>Other, please indicate</td><td colspan="2"></td><td colspan="2"></td></tr>
<tr><td colspan="6">Duration of surgery ______(hours)________(minutes)</td></tr>
<tr><td colspan="6">ICU admission Date: ______(day)________(month)________(year)<br>Time: ______(hours)________(minutes)</td></tr>
<tr><td colspan="6">Number of units of blood patient received during the intra-operative phase:<br>__________ units</td></tr>
<tr><td colspan="6">Post-operative HB level on admission to ICU: ________g/dL</td></tr>
<tr><td colspan="2" rowspan="2">Indicate type of vasopressor administration in after surgery:<br><br>PHENYLEPHRINE ☐<br>VASOPRESSIN ☐</td><td colspan="2">Start</td><td colspan="2">Discontinue</td></tr>
<tr><td colspan="2">Date:<br>_______(day)_______<br>(month)______(year)</td><td colspan="2">Date:<br>________(day)_______<br>(month)_____(year)</td></tr>
</table>

<table>
<tr><td></td><td>Time:<br>_____(hours)____(minutes)</td><td>Time:<br>____(hours)_____(minutes)</td></tr>
<tr><td rowspan="2">Indicate type of positive inotrope administration in after surgery:<br>ADRENALINE ☐<br>NOR-ADRENALINE ☐<br>DOBUTREX ☐</td><td>Start</td><td>Discontinue</td></tr>
<tr><td>Date:<br>________(day)________<br>(month)______(year)<br><br>Time:<br>_____(hours)____(minutes)</td><td>Date:<br>_________(day)________<br>(month)_____(year)<br><br>Time:<br>____(hours)_____(minutes)</td></tr>
<tr><td>Mechanical Ventilation:</td><td>Yes ☐</td><td>No ☐</td></tr>
<tr><td rowspan="3">If yes, specify:</td><td colspan="2">Invasive: ☐<br><br>Non-invasive ☐</td></tr>
<tr><td>Start</td><td>Discontinue</td></tr>
<tr><td>Date:<br>________(day)________<br>(month)______(year)<br><br>Time:<br>_____(hours)____(minutes)</td><td>Date:<br>________(day)________<br>(month)______(year)<br><br>Time:<br>_____(hours)____(minutes)</td></tr>
</table>

**Section B: Process: Implementation of ERAS interventions**

**NURSING INTERVENTIONS**

**Intervention: Thermoregulation**

***Record core body temperature*** *(DEGREES CELCIUS)*

| DAY/DATE: | | 06H00 | 10H00 | 14H00 | | 22H00 | 02H00 | 04H00 |
|---|---|---|---|---|---|---|---|---|
| DAY 0: ___*(day)*____*(month)*_____*(year)* | | | | | | | | |
| DAY 1: ___*(day)*____*(month)*_____*(year)* | | | | | | | | |
| DAY 2: ___*(day)*____*(month)*_____*(year)* | | | | | | | | |
| DAY 3: ___*(day)*____*(month)*_____*(year)* | | | | | | | | |

**Intervention: Avoid fluid overload**

***Calculate the accumulative intake and output:***

Intra-operative intake and output: Total intake: ___________

Total output: ___________

Accumulative balance: ______________

| INTAKE | | | | | OUTPUT | | | BALANCE |
|---|---|---|---|---|---|---|---|---|
| DATE/TIME | MAINTENANCE *(mL)* | RESUS FLUID *(mL)* | | OTHER *(mL)* | URINE *(mL)* | NGT *(mL)* | DRAINS (mL) | *(mL)* |
| | | crystalloid | colloid | | | | | |
| DAY O<br>DATE:______ *(dd/m/yy)*<br>TIME:__*h*__*m* | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DAY 1<br>DATE:______ (dd/m/yy)<br>TIME:__h__m | | | | | | | | |
| DAY 2<br>DATE:______ (dd/m/yy)<br>TIME:__h__m | | | | | | | | |
| DAY 3<br>DATE:______ (dd/m/yy)<br>TIME:__h__m | | | | | **TOTAL:** ***(INTRA-OPERATIVE ACCUMULATIVE BALANCE + DAY 0 + DAY 1 +DAY 2 + DAY 3)*** | | | |

***Record serum albumin levels:***

| DAY | DATE (DD/M/YY) | TIME (HOUR/MIN) | ALBUMIN (g/dL) | Treatment given (YES/NO) |
|---|---|---|---|---|
| DAY 0 | | | | |
| DAY 1 | | | | |
| DAY 2 | | | | |
| DAY 3 | | | | |

***Record serum potassium levels** (K IN MMOL/L) **and K replacement** (RX) **given for hypokalemia:***

| DAY/DATE: | | 06H00-07H00 | | 08H00-11H00 | | 12H00-15H00 | | 16H00-19H00 | | 20H00-23H00 | | 24H00-03H00 | | 04H00-05H00 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (NOTE: RECORD IF TREATMENT WAS GIVEN- YES/NO) | | K | RX | K | RX | K | RX | K | RX | K | RX | K | RX | K | RX |
| DAY 0: ________ (DD/M/YY) | | | | | | | | | | | | | | | |
| DAY 1: ________ (DD/M/YY) | | | | | | | | | | | | | | | |
| DAY 2: ________ (DD/M/YY) | | | | | | | | | | | | | | | |
| DAY 3: ________ (DD/M/YY) | | | | | | | | | | | | | | | |

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***Record serum glucose levels** (HGT in mmol/L) **and treatment** (RX) **given for hyper-glycemia:***

| DAY/DATE: | | 06H00-07H00 | | 08H00-11H00 | | 12H00-15H00 | | 16H00-19H00 | | 20H00-23H00 | | 24H00-03H00 | | 04H00-05H00 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (NOTE: RECORD IF TREATMENT WAS GIVEN- YES/NO) | | HGT | RX | HGT | RX | HGT | RX | HGT | RX | HGT | RX | HGT | RX | HGT | RX |
| DAY 0: ________ (DD/M/YY) | | | | | | | | | | | | | | | |
| DAY 1: ________ (DD/M/YY) | | | | | | | | | | | | | | | |
| DAY 2: ________ (DD/M/YY) | | | | | | | | | | | | | | | |
| DAY 3: ________ (DD/M/YY) | | | | | | | | | | | | | | | |

**Intervention: Pain management (non-pharmacological)**

***Record the frequency of non-pharmacological interventions for pain management*** ***(FROM 06 AM- 06 PM) :***

| INTERVENTION: | DAY 0 ________ (DD/M/YY) | DAY 1 ________ (DD/M/YY) | DAY 2 ________ (DD/M/YY) | DAY 3 ________ (DD/M/YY) |
|---|---|---|---|---|
| MUSIC THERAPY | | | | |
| DISTRACTION EG) TV | | | | |
| MOBILIZATION | | | | |
| HEAT/ICE PACKS | | | | |
| OTHER | | | | |

If other, please specify type of intervention:

________________________________________________________________

________________________________________________________________

**Intervention: Removal of nasogastric tube**

| ***Does patient have a nasogastric tube on admission:*** | YES | | NO | |
|---|---|---|---|---|

If yes, specify date and time of removal: Date: ______(day)________(month)________(year)

Time: ______(hours)________(minutes)

**Intervention: Early removal of urinary catheter**

| ***Does the patient have a urinary catheter on admission:*** | YES | | NO | |
|---|---|---|---|---|

If yes, specify the date and time of removal: Date: ______*(day)*________*(month)*________*(year)*

Time: ______*(hours)*________*(minutes)*

**PHYSIOTHERAPIST INTERVENTIONS**

**Intervention: Early mobilization**

***Record the type and duration of post-operative mobilisation:***

| MOBILISATION (INDICATE : YES/NO) | | DAY 0 _________ (DD/M/YY) | DAY 1 _________ (DD/M/YY) | DAY 2 _________ (DD/M/YY) | DAY 3 _________ (DD/M/YY) |
|---|---|---|---|---|---|
| TURNING IN BED | | | | | |
| SITTING ON EDGE OF BEDSIDE | | | | | |
| STANDING | | | | | |
| WALKING | | | | | |
| ROCKING CHAIR | | | | | |
| OTHER | | | | | |

If other, specify type of mobilisation: ________________________________

**DIETICIAN INTERVENTIONS**

**Intervention: Early feeding**

***Indicate (X) the type of diet prescribed by the dietician:***

| DIET | DAY O: _________ (DD/M/YY) | DAY 1: _________ (DD/M/YY) | DAY 2: _________ (DD/M/YY) | DAY 3: _________ (DD/M/YY) |
|---|---|---|---|---|
| NPO | | | | |
| CHEWING ICE CUBES | | | | |
| CLEAR FLUID DIET | | | | |
| MIXED FLUID DIET | | | | |
| 250ML COFFEE PER DAY | | | | |
| SOFT DIET | | | | |
| NORMAL DIET | | | | |
| ENTERAL NUTRITION VIA NASOGASTRIC TUBE | | | | |
| PARENTERAL NUTRITION VIA CENTRAL VENOUS CATHETER | | | | |

***Did the patient receive the correct prescribed diet:***

| DAY | YES | NO |
|---|---|---|
| DAY 0 | | |
| DAY 01 | | |
| DAY 02 | | |
| DAY 03 | | |

**Intervention: Sham-feeding**

***Indicate (X) method of sham-feeding:***

| METHOD | DAY 0: __________ *(DD/M/YY)* | DAY 1: __________ *(DD/M/YY)* | DAY 2: ______________ *(DD/M/YY)* | DAY 3: _____________ *(DD/M/YY)* |
|---|---|---|---|---|
| CHEWING ICE CUBES | | | | |
| CHEWING SOLID FOOD | | | | |
| CHEWING GUM | | | | |

**INTENSIVIST INTERVENTIONS**

**Intervention: Prevent nausea and vomiting**

***Indicate prescribed laxatives on the prescription chart*** (type, dose, frequency)

| TYPE | YES/NO | DAY 0: __________ *(DD/M/YY)* | DAY 1: __________ *(DD/M/YY)* | DAY 2: ______________ *(DD/M/YY)* | DAY 3: _____________ *(DD/M/YY)* |
|---|---|---|---|---|---|
| LACTULOSE | | Dose: ____________ Frequency: ____________ Route: ____________ | Dose: _________ Frequency: ________ Route: __________ | Dose: ___________ Frequency: __________ Route: __________ | Dose: _________ Frequency: __________ Route: __________ |
| FLEET ENEMA | | Dose: _________ Frequency: ____________ Route: ____________ | Dose: _________ Frequency: ________ Route: _________ | Dose:_________ Frequency:_____ Route: ______________ | Dose:_________ Frequency:_________ Route: _________________ |

| OTHER | | Type: ____________ Dose: ____________ Frequency: ___________ Route:________ | Type: ________ Dose: ________ Frequency: _________ Route: ________ | Type:___________ Dose:___________ Frequency:________ Route:_________ | Type:______________ Dose:______________ Frequency:__________ Route:______________ |
|---|---|---|---|---|---|

***Were laxatives administered correctly as prescribed?***

| DAY | YES | NO |
|---|---|---|
| Day 0 | | |
| Day 01 | | |
| Day 02 | | |
| Day 03 | | |

***Indicate prescribed pro-kinetic therapy on the prescription chart*** (type, dose, frequency)

| DRUG | YES/NO | DAY 0: ____________ *(DD/M/YY)* | DAY 1: ___________ *(DD/M/YY)* | DAY 2: ______________ *(DD/M/YY)* | DAY 3: _____________ *(DD/M/YY)* |
|---|---|---|---|---|---|
| ERYTHROMYCIN | | Dose: __________ Frequency: _________ Route: _________ | Dose: _________ Frequency: ________ Route: _________ | Dose: _____________ Frequency: ___________ Route: ____________ | Dose: __________ Frequency: _________ Route: _________ |
| KYTRIL | | Dose: __________ Frequency: _________ Route: __________ | Dose: _________ Frequency: ________ Route: ________ | Dose: ____________ Frequency: __________ Route: ___________ | Dose: __________ Frequency: _____________ Route: _____________ |
| MAXALON | | Dose: __________ Frequency: __________ Route: ____________ | Dose: _________ Frequency: _________ Route: ___________ | Dose: ____________ Frequency: ____________ Route: ____________ | Dose: __________ Frequency: __________ Route: _____________ |
| OTHER | | Type: _________ Dose: __________ Frequency: __________ | Type: __________ Dose: __________ Frequency: __________ | Type: _______________ Dose: _______________ Frequency: ___________ | Type: __________ Dose: _____________ Frequency: _____________ |

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| | | Route: ___ | Route: ___ | Route: ___ | Route: ___ |
|---|---|---|---|---|---|

***Were pro-kinetic drugs administered correctly as prescribed?***

| DAY | YES | NO |
|---|---|---|
| DAY 0 | | |
| DAY 01 | | |
| DAY 02 | | |
| DAY 03 | | |

**Intervention: Pharmaceutical pain management**

***Indicate pharmaceutical pain management on the prescription chart*** (type, dose, frequency)

| CLASSIFICATION OF DRUG | YES/NO | DAY 0: ___ *(DD/M/YY)* | DAY 1: ___ *(DD/M/YY)* | DAY 2: ___ *(DD/M/YY)* | DAY 3: ___ *(DD/M/YY)* |
|---|---|---|---|---|---|
| NSAIDS | | Type: ___ Dose ___ Frequency: ___ Route: ___ | Type: ___ Dose: ___ Frequency: ___ Route: ___ | Type: ___ Dose: ___ Frequency: ___ Route: ___ | Type: ___ Dose: ___ Frequency: ___ Route: ___ |
| MID-THORACIC EPIDURAL | | Type: ___ Dose: ___ Frequency: ___ Route: ___ | Type: ___ Dose: ___ Frequency: ___ Route: ___ | Type: ___ Dose: ___ Frequency: ___ Route: ___ | Type: ___ Dose: ___ Frequency: ___ Route: ___ |
| MAGNESIUM SULPHATE | | Type: ___ Dose: ___ Frequency: ___ Route: ___ | Type: ___ Dose: ___ Frequency: ___ Route: ___ | Type: ___ Dose: ___ Frequency: ___ Route: ___ | Type: ___ Dose: ___ Frequency: ___ Route: ___ |
| OPIOIDS | | Type: ___ Dose: ___ Frequency: ___ Route: ___ | Type: ___ Dose: ___ Frequency: ___ Route: ___ | Type: ___ Dose: ___ Frequency: ___ Route: ___ | Type: ___ Dose: ___ Frequency: ___ Route: ___ |

| | | | | | |
|---|---|---|---|---|---|
| SEDATIVES | | Type: ___________ Dose: ___________ Frequency: _________ Route: _________ | Type: ________ Dose: _________ Frequency: ________ Route: _________ | Type: _____________ Dose: ______________ Frequency: _____________ Route: ______________ | Type: ___________ Dose: ___________ Frequency: __________ Route: ____________ |
| PARALYTICS | | Type: ___________ Dose: ____________ Frequency: ___________ Route: ___________ | Type: _______ Dose: _______ Frequency: _________ Route: _________ | Type: ______________ Dose: _______________ Frequency: _______________ Route: ______________ | Type: ___________ Dose: ____________ Frequency: ____________ Route: ____________ |
| OTHER | | Type: ___________ Dose: ___________ Frequency: __________ Route: __________ | Type: _________ Dose: _________ Frequency: _________ Route: _______ | Type: ____________ Dose: ___________ Frequency: _________ Route: _________ | Type: ___________ Dose: __________ Frequency: ___________ Route: __________ |

***Was the correct pharmaceutical pain management administered according to the prescription?***

| DAY | YES | NO |
|---|---|---|
| D 0 | | |
| D 01 | | |
| D 02 | | |
| D 03 | | |

## SECETION C: OUTPUT: PATIENT HEALTH OUTCOMES

**Outcome: Patient assessment of normal gastric function on post-operative Day 4:**

| | | |
|---|---|---|
| PASSAGE OF STOOL (BOWEL MOVEMENT) | YES | NO |
| RADIOLOGIC CONFIRMATION OF AN ILEUS | YES | NO |
| EVIDENCE OF FEEDING INTOLERANCE | YES | NO |
| ABDOMINAL DISTENTION | YES | NO |
| NEED FOR NASOGASTRIC DECOMPRESSION | YES | NO |
| ***Was the patient diagnosed with a paralytic ileus:*** | YES | NO |
| ***If yes, specify date and time of diagnosis on post-operative day 04:*** | Date: __________ *(DD/M/YY)* | Time: ___H___M |

| **Outcome: Length of ICU stay:** | | |
|---|---|---|
| ***ICU discharge:*** | Date: ______________ (DD/M/YY) | Time:____H_____M |
| | | |

| **Outcome: Re-admission rate to ICU** | | | | | |
|---|---|---|---|---|---|
| ***Re-admission:*** | YES | NO | ***Paralytic ileus on re-admission:*** | YES | NO |

If yes, specify:

Re-admission Date: _________________ (DD/M/YY)

Re-admission Time: ______H_______M

| **Outcome: Patient mortality rate** | | | |
|---|---|---|---|
| ***Did the patient die?*** | YES | NO | |

***Specify date and time of death:*** Date:_______________ (DD/M/YY)

Time: _____H____M