



Eastern Association for the Surgery of Trauma  
Advancing Science, Fostering Relationships, and Building Careers

## CONTEMPORARY MANAGEMENT OF RIGHT UPPER QUADRANT GUNSHOT WOUNDS

### EAST MULTICENTER STUDY DATA COLLECTION TOOL/DATA DICTIONARY (*definitions in italics*)

Enrolling Center: \_\_\_\_\_  
Enrolling Co-investigator: \_\_\_\_\_

#### Demographics

MRN/Study ID #) \_\_\_\_/\_\_\_\_ (*MRN for local use only, will not be shared*)  
Admission date/time \_\_\_\_/\_\_\_\_ (*for local use only, will not be shared*)  
Age \_\_\_\_ (*age of subject at time of injury*)  
Sex \_\_\_\_ (*sex of subject at birth*)  
BMI \_\_\_\_ (*body mass index of subject in kg/m<sup>2</sup>*)

#### Initial Emergency Department (ED) Physiology

Heart rate (HR) \_\_\_\_ (*first recorded HR in ED*)  
Systolic blood pressure (SBP) \_\_\_\_ (*first recorded systolic blood pressure in ED*)  
Glasgow Coma Scale (GCS) score \_\_\_\_ (*first recorded GCS score in ED*)

#### Initial ED Laboratory Analysis (*first recorded lab values from ED, leave blank if did not obtain*)

pH \_\_\_\_ Base deficit \_\_\_\_ Lactate \_\_\_\_ Hemoglobin \_\_\_\_ AST \_\_\_\_

ALT \_\_\_\_ Bilirubin \_\_\_\_ INR \_\_\_\_

#### Initial Blood Product Usage (*first 24 hours from admission, # units/packs*)

Whole blood \_\_\_\_ Packed red blood cells \_\_\_\_ Fresh frozen plasma \_\_\_\_ Platelets \_\_\_\_

Cryoprecipitate \_\_\_\_

#### Pre-Injury Medical/Medication History (*check all that apply*)

- \_\_\_\_ Cirrhosis (*any previously known diagnosis of cirrhosis or end-stage liver disease whether biopsy proven or not*)
- \_\_\_\_ Chronic kidney disease (*pre-admission GFR <90 ml/min/1.73 m<sup>2</sup> or previously known diagnosis of CKD*)
- \_\_\_\_ Chronic obstructive pulmonary disease (*any previously known diagnosis of COPD*)
- \_\_\_\_ Active use of anticoagulant (*vitamin K antagonist, direct thrombin inhibitor, factor Xa inhibitor*)
- \_\_\_\_ Active use of anti-platelet medication (*aspirin, clopidogrel, or related medication*)
- \_\_\_\_ Any previous abdominal operation (*including open or laparoscopic*)
- \_\_\_\_ Previous thoracotomy or sternotomy

## Overall Injury Characteristics

Injury severity score (ISS) \_\_\_\_\_ (*numerical value for calculated ISS*)

Chest abbreviated injury scale (AIS) \_\_\_\_\_ (*numerical value for chest AIS*)

Abdomen AIS \_\_\_\_\_ (*numerical value for abdomen AIS*)

Number of penetrating wounds to RUQ \_\_\_\_\_ (*number of ballistic injuries noted in the RUQ during the initial evaluation—see definitions of RUQ in text*)

## Initial ED Management

FAST obtained \_\_\_\_\_ Yes \_\_\_\_\_ No (*yes if FAST exam performed by any provider during initial evaluation*)

If yes, positive for intra-abdominal fluid in any abdominal quadrant \_\_\_\_\_ Yes \_\_\_\_\_ No

Right thoracostomy tube placed in ED \_\_\_\_\_ Yes \_\_\_\_\_ No (*yes if a RIGHT sided chest tube was placed in the emergency department during initial evaluation*)

If yes, indication (*check all that apply*):

\_\_\_\_\_ Hemothorax (*any amount of blood in the chest based on imaging and/or chest tube output*)

\_\_\_\_\_ Pneumothorax (*diagnosed based on imaging, exam, and/or “rush of air”*)

If yes, initial blood output (ml) \_\_\_\_\_ (*based on initial drainage into collection chamber and/or suction canister. If no hemothorax put “0”*)

If yes, was thoracic suction evacuation performed \_\_\_\_\_ Yes \_\_\_\_\_ No (*yes if blood from thoracic cavity removed with suction prior to placing chest tube*)

If yes, was thoracic irrigation performed \_\_\_\_\_ Yes \_\_\_\_\_ No (*yes if thoracic cavity was irrigated with saline prior to chest tube placement*)

## Post-ED Management

Abdominal/pelvic computed tomography (CT) scan obtained immediately after ED evaluation \_\_\_\_\_ Yes \_\_\_\_\_ No (*yes if the decision was made to proceed immediately with CT scanning from the emergency department resuscitation area/trauma bay as opposed to operating room or admission*)

If yes, injuries identified (*check all that apply, regardless of injury grade*):

\_\_\_\_\_ None (*if only abdominal wall injured check “none”*)

\_\_\_\_\_ Liver

If yes,

Active vascular extravasation/blush \_\_\_\_\_ Yes \_\_\_\_\_ No (*yes if active contrast blush/extravasation on contrasted scan. If non-contrasted scan please indicate*)

Hemoperitoneum distant from right upper quadrant (RUQ) \_\_\_\_\_ Yes \_\_\_\_\_ No (*defined as remote from area immediately surrounding liver or right kidney*)

Pseudoaneurysm \_\_\_\_\_ Yes \_\_\_\_\_ No (*yes if pseudoaneurysm identified. If non-contrasted scan please indicate*)

AAST Grade \_\_\_\_\_ (*AAST grade of liver injury based on CT imaging findings*)

\_\_\_\_\_ Right kidney

If yes,

Active vascular extravasation \_\_\_\_\_ Yes \_\_\_\_\_ No (*see above*)

Active urinary extravasation \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Unknown (*urine leak seen on delayed images. Check “unknown” if delayed images not obtained*)

Pseudoaneurysm \_\_\_\_\_ Yes \_\_\_\_\_ No (*see above*)

Hemoperitoneum distant from right upper quadrant (RUQ) \_\_\_\_\_ Yes \_\_\_\_\_ No (*see above*).

AAST Grade \_\_\_\_\_ (*see above*)

\_\_\_\_\_ Right adrenal gland

\_\_\_\_\_ Obvious right diaphragm injury (*either diaphragm injury visualized on CT or implied injury if single missile tract with right chest and abdominal injuries identified*)

Pneumoperitoneum \_\_\_\_\_ Yes \_\_\_\_\_ No (*yes if any amount of pneumoperitoneum identified*)

Addition injuries (*check all that apply, includes ANY grade of injury*):

- \_\_\_\_\_ Hollow viscus (*obvious injury to esophagus, stomach, small bowel, colon/rectum based on CT imaging. This includes obvious bowel mesenteric injuries.*)
- \_\_\_\_\_ Pancreas
- \_\_\_\_\_ Major abdominal vascular (*IVC, aorta, iliac arteries/veins, SMV/SMA, portal triad*)
- \_\_\_\_\_ Spleen
- \_\_\_\_\_ Bladder/Ureter
- \_\_\_\_\_ Left diaphragm
- \_\_\_\_\_ Left kidney/adrenal gland
- \_\_\_\_\_ Common hepatic duct/common bile duct

**\*\*\*If abdominal injuries identified beyond liver, right kidney/adrenal gland, and/or right diaphragm on CT then stop here\*\*\***

Chest CT scan obtained after trauma bay evaluation \_\_\_\_\_ Yes \_\_\_\_\_ No (*yes if CT scan obtained after initial resuscitation*)

Is yes, injuries identified (*check all that apply*):

- \_\_\_\_\_ None
- \_\_\_\_\_ Right hemothorax
- \_\_\_\_\_ Right pneumothorax
- \_\_\_\_\_ Right pulmonary contusion
- \_\_\_\_\_ Right lung laceration
- \_\_\_\_\_ Obvious right diaphragm injury
- \_\_\_\_\_ Rib fracture(s)
- \_\_\_\_\_ Left sided intra-thoracic injuries
- \_\_\_\_\_ Cardiac injury
- \_\_\_\_\_ Other (*please specify*) \_\_\_\_\_

**\*\*\*If thoracic injuries identified beyond right chest wall, lung, or diaphragm then stop here\*\*\***

Does the patient have spinal cord injury \_\_\_\_\_ Yes \_\_\_\_\_ No (*motor deficit below level of spine injury found on CT/MRI*)

If yes, spine AIS score \_\_\_\_\_ (*numerical value for spine AIS*)

If yes, please select,

- \_\_\_\_\_ Incomplete paraplegia (*complete function of upper extremities, some motor function of lower extremities*)
- \_\_\_\_\_ Complete paraplegia (*complete function of upper extremities, no motor function of lower extremities*)
- \_\_\_\_\_ Incomplete quadriplegia (*upper and lower extremity motor deficits with some motor function of upper and/or lower extremities*)
- \_\_\_\_\_ Complete quadriplegia (*complete loss of motor function in upper and lower extremities*)

## Operative Management

Initial abdominal operative management immediately from ED or CT scan \_\_\_\_\_ Yes \_\_\_\_\_ No (*yes if initial plan for operative intervention either from the initial resuscitation in the ED or immediately from the CT scan. This indicates initial plan for operative management*)

If yes, please indicate:

- \_\_\_\_\_ Laparoscopy
- \_\_\_\_\_ Laparotomy

\_\_\_\_ Laparoscopy converted to laparotomy  
\_\_\_\_ Other (*please specify*) \_\_\_\_\_

If yes, reason for initial operative management (*check all that apply*):

\_\_\_\_ No immediate CT availability  
\_\_\_\_ Concerning exam or change in exam  
\_\_\_\_ Change in hemodynamics  
\_\_\_\_ To evaluate trajectory (*without pre-operative CT scan*)  
\_\_\_\_ Concerning trajectory on CT scan or plain films in ED without obvious injury  
\_\_\_\_ Injury identified on CT scan requiring operative intervention  
\_\_\_\_ Surgeon preference  
\_\_\_\_ Other (*please specify*) \_\_\_\_\_

If yes, details of abdominal operative intervention:

Please select:

\_\_\_\_ Therapeutic (*injury found and required intervention*)  
\_\_\_\_ Non-therapeutic (*injury found but did not require intervention*)  
\_\_\_\_ Negative (*no injuries identified*)

Damage control operation \_\_\_\_ Yes \_\_\_\_ No (*fascia not closed, temporary dressing placed for planned return to OR*)

*Please indicate the following injuries if present:*

Liver injury \_\_\_\_ Yes \_\_\_\_ No

If yes,

AAST grade \_\_\_\_ (*AAST grade based on operative findings*)

Visible active bleeding \_\_\_\_ Yes \_\_\_\_ No (*active venous or arterial bleeding from liver*)

Visible active bile leak \_\_\_\_ Yes \_\_\_\_ No (*bile seen leaking from liver parenchyma*)

Management (*check all that apply*):

\_\_\_\_ Electrocautery  
\_\_\_\_ Argon beam coagulation  
\_\_\_\_ Topical hemostatic agent  
\_\_\_\_ Suture repair  
\_\_\_\_ Tractotomy with repair  
\_\_\_\_ Omental patch/plug  
\_\_\_\_ Resectional debridement  
\_\_\_\_ Temporary packing  
\_\_\_\_ Cholecystectomy  
\_\_\_\_ Other (*please specify*) \_\_\_\_\_

Diaphragm injury \_\_\_\_ Yes \_\_\_\_ No (*visualized injury to right diaphragm*)

If yes,

Able to visualize injury well enough for repair \_\_\_\_ Yes \_\_\_\_ No

AAST grade \_\_\_\_ (*based on operative findings*)

Please indicate:

\_\_\_\_ Primary repair (*suture only*)  
\_\_\_\_ Mesh repair (*utilized mesh of any type*)  
\_\_\_\_ No repair performed (*i.e. if unable to visualize or access for repair*)

Right kidney injury \_\_\_\_ Yes \_\_\_\_ No

If yes,

Gerotas fascia explored \_\_\_\_ Yes \_\_\_\_ No (*Gerotas fascia opened in any capacity*)

AAST grade \_\_\_\_ (*based on operative findings*)

Collection system injury \_\_\_\_ Yes \_\_\_\_ No (*visualized urine leak*)

Management (*check all that apply*):

\_\_\_\_ Electrocautery

☐ Topical hemostatic agent  
☐ Primary repair  
☐ Partial nephrectomy  
☐ Nephrectomy  
☐ Temporary packing  
☐ Other (please specify) \_\_\_\_\_

Right adrenal gland injury ☐ Yes ☐ No

Additional injuries (check all that apply, see previous definitions above):

☐ Common bile duct or common hepatic duct  
☐ Hollow viscus  
☐ Pancreas  
☐ Major abdominal vascular  
☐ Spleen  
☐ Bladder/Ureter  
☐ Left diaphragm  
☐ Left kidney

Right thoracoabdominal injury ☐ Yes ☐ No (chest and abdominal injuries with single trajectory found on imaging or intra-operatively or obvious diaphragm injury identified on imaging or intra-operatively)

Was a right thoracotomy performed as part of this initial operation ☐ Yes ☐ No

Right sided chest tube(s) placed in OR ☐ Yes ☐ No

Intra-abdominal drain(s) placed in OR ☐ Yes ☐ No

**\*\*\*If abdominal or thoracic injuries identified beyond liver, right kidney/adrenal gland, and/or right diaphragm/lung/chest wall then stop here\*\*\***

### Post-Operative Management

If immediate operative intervention from ED or CT scan, was a planned post-operative CT chest and/or abdomen/pelvis performed ☐ Yes ☐ No ☐ N/A (yes if decision was made to empirically order CT scan after operative intervention)

If immediate operative intervention from ED or CT scan, was angiography performed post-operatively ☐ Yes ☐ No ☐ N/A (yes if angiography, excluding CT angiography, performed within 6 hours of initial operative intervention)

If yes,

Active vascular extravasation ☐ Yes ☐ No (see definitions above)

If yes, please indicate: ☐ Liver ☐ Right Kidney ☐ Both

Pseudoaneurysm ☐ Yes ☐ No (see definitions above)

If yes, please indicate: ☐ Liver ☐ Right Kidney ☐ Both

Embolization performed ☐ Yes ☐ No

If Liver, please select:

☐ Selective (common hepatic or left/right hepatic artery)

☐ Non-selective (any branch beyond left or right hepatic Arteries)

If Kidney, please select:

☐ Selective (main renal artery)

☐ Non-selective (branch beyond main renal artery)

### Initial Management (Non-Operative)

Initial trial of non-operative management \_\_\_\_ Yes \_\_\_\_ No (yes if the decision was made not to proceed to operating room/no plan for operative intervention following initial ED resuscitation/imaging)

If yes, angiography performed initially (within 6 hours of presentation) \_\_\_\_ Yes \_\_\_\_ No

If yes,

Active vascular extravasation \_\_\_\_ Yes \_\_\_\_ No (see definitions above)

If yes, please indicate: \_\_\_\_ Liver \_\_\_\_ Right Kidney \_\_\_\_ Both

Pseudoaneurysm \_\_\_\_ Yes \_\_\_\_ No (see definitions above)

If yes, please indicate: \_\_\_\_ Liver \_\_\_\_ Right Kidney \_\_\_\_ Both

Embolization performed \_\_\_\_ Yes \_\_\_\_ No

If Liver, please select:

\_\_\_\_ Selective (common hepatic or left/right hepatic artery)

\_\_\_\_ Non-selective (any branch beyond left or right hepatic Arteries)

If Kidney, please select:

\_\_\_\_ Selective (main renal artery)

\_\_\_\_ Non-selective (branch beyond main renal artery)

Failure of non-operative management \_\_\_\_ Yes \_\_\_\_ No (defined as laparotomy or laparoscopy during index admission in patient with initial plan of non-operative management)

If yes, please indicate:

\_\_\_\_ Laparotomy \_\_\_\_ Laparoscopy \_\_\_\_ Laparoscopy converted to laparotomy

If yes, hospital day of intervention (HD 1 is day of admission) \_\_\_\_

If yes, reason for operative intervention/failure (check all that apply):

\_\_\_\_ Ongoing bleeding

\_\_\_\_ Bile leak

\_\_\_\_ Intra-abdominal abscess

\_\_\_\_ Missed bowel injury

\_\_\_\_ Other (please specify) \_\_\_\_

If yes, please select:

\_\_\_\_ Therapeutic (injury found and required intervention)

\_\_\_\_ Non-therapeutic (injury found but did not require intervention)

\_\_\_\_ Negative (no injuries identified)

Damage control operation \_\_\_\_ Yes \_\_\_\_ No (fascia not closed, temporary dressing placed for planned return to OR)

If laparoscopic, was this a laparoscopic washout and drain placement without additional intervention  
Performed \_\_\_\_ Yes \_\_\_\_ No \_\_\_\_ N/A (indicates only procedure(s) performed was/were irrigation, washout, and placement of drains)

### Additional Interventions (check all that apply)

\_\_\_\_ ERCP

If yes,

Total number of procedures \_\_\_\_ (total number of ERCP during initial hospitalization)

Hospital day of first procedure \_\_\_\_ (HD 1 is day of admission)

Bile leak of any kind identified \_\_\_\_ Yes \_\_\_\_ No (during any of the procedures if more than 1)

Biliary stent placed \_\_\_\_ Yes \_\_\_\_ No (during any of the procedures if more than 1)

\_\_\_\_ Percutaneous intra-abdominal drain placement

If yes,

Total number of procedures \_\_\_\_ (total number of percutaneous intra-abdominal drains placed during initial hospitalization)

Hospital day of first procedure \_\_\_\_ (HD 1 is day of admission)

For liver abscess \_\_\_\_ Yes \_\_\_\_ No (*indication for any of the procedures if more than 1*)  
For intra-abdominal abscess \_\_\_\_ Yes \_\_\_\_ No (*indication for any of the procedures if more than 1*)  
For other indication (*please specify*) \_\_\_\_

\_\_\_\_ Percutaneous or open chest tube/chest drain placement

If yes,

Total number or procedures \_\_\_\_ (*total number of chest tube/chest drains placed during initial*)  
Hospital day of first procedure \_\_\_\_ (*HD 1 is day of admission*)

\_\_\_\_ Endoscopic ureteral stent placement \_\_\_\_ Yes \_\_\_\_ No

If yes,

Total number of procedures \_\_\_\_ (*total number of ureteral stents placed during initial hospitalization*).  
Hospital day of first procedure \_\_\_\_ (*HD 1 is day of admission*)

\_\_\_\_ Percutaneous nephrostomy tube placement \_\_\_\_ Yes \_\_\_\_ No

If yes,

Total number or procedures \_\_\_\_ (*total number of nephrostomy tubes placed during initial hospitalization*)  
Hospital day of first procedure \_\_\_\_ (*HD 1 is day of admission*)

\_\_\_\_ Laparotomy \_\_\_\_ Yes \_\_\_\_ No

If yes,

Total number of procedures \_\_\_\_ (*total number of laparotomies performed during initial hospitalization. Includes laparotomy for failure of non-operative management. Does not include take back for open abdomen. Only include if occurred after fascia closed primarily or with mesh*)  
Hospital day of first procedure \_\_\_\_ (*HD 1 is day of admission*)

\_\_\_\_ Laparoscopy \_\_\_\_ Yes \_\_\_\_ No

If yes,

Total number of procedures \_\_\_\_ (*total number of abdominal laparoscopies performed during initial hospitalization. Includes laparoscopies for failure of non-operative management*)  
Hospital day of first procedure \_\_\_\_ (*HD 1 is day of admission*)

\_\_\_\_ Abdominal angiography (*Does not include CT angiography, do not include angiography performed within 6 hours of admission or within 6 hours of initial operative management as these were included above*)

If yes,

Total number of procedures \_\_\_\_ (*total number of angiographic procedures performed during initial hospitalization >6 hours from admission or initial operative intervention*)

Hospital day of first procedure \_\_\_\_ (*HD 1 is admission day*)

Embolization performed \_\_\_\_ Yes \_\_\_\_ No (*during any of the procedures if >1 procedure*)

If Liver, please select (*if >1 procedure select the most proximal level only*):

\_\_\_\_ Selective (*common hepatic or left/right hepatic artery*)

\_\_\_\_ Non-selective (*any branch beyond left or right hepatic Arteries*)

If Kidney, please select (*if >1 procedure select the most proximal level only*):

\_\_\_\_ Selective (*main renal artery*)

\_\_\_\_ Non-selective (*branch beyond main renal artery*)

\_\_\_\_ Thoracotomy

If yes,

Total number of procedures \_\_\_\_ (*Total number of thoracotomy procedures performed during Initial hospitalization*)

Hospital day of first procedure \_\_\_\_ (*HD 1 is admission day*)

\_\_\_\_\_ Video assisted thoracoscopic surgery (VATS)

If yes,

Total number of procedures \_\_\_\_\_ (*Total number of VATS procedures performed during initial Hospitalization*)

Hospital day of first procedure \_\_\_\_\_ (*HD 1 is admission*)

Please indicate any additional invasive procedures performed during initial hospitalization (*does not include central venous catheters, arterial lines, intubation*):

If damage control operative utilized at any point, please indicate total number of operations performed prior to abdominal closure \_\_\_\_\_ (*total number of operations performed prior between initial laparotomy up to and including abdominal closure. Do not count initial laparotomy*).

### Other Variables

Hospital day 3 AST \_\_\_\_\_ ALT \_\_\_\_\_ Bilirubin \_\_\_\_\_ Alkaline phosphatase \_\_\_\_\_ (*hospital day 1=admission, leave blank if did not obtain*)

Hospital day 5 AST \_\_\_\_\_ ALT \_\_\_\_\_ Bilirubin \_\_\_\_\_ Alkaline phosphatase \_\_\_\_\_ (*hospital day 1=admission, leave blank if did not obtain*)

Hospital day 7 AST \_\_\_\_\_ ALT \_\_\_\_\_ Bilirubin \_\_\_\_\_ Alkaline phosphatase \_\_\_\_\_ (*hospital day 1=admission, leave blank if did not obtain*)

Hospital length of stay \_\_\_\_\_ (*total number of days spent in the hospital during initial admission*)

ICU admission \_\_\_\_\_ Yes \_\_\_\_\_ No (*yes if patient required any admission to ICU during initial hospitalization*)

If yes, Intensive care unit length of stay (days) \_\_\_\_\_ (*total number of days patient spent in ICU during initial hospitalization*)

30 day hospital re-admission \_\_\_\_\_ Yes \_\_\_\_\_ No (*yes if patient was admitted to the hospital at least one overnight 30 days or less after initial hospital discharge*)

In-hospital mortality \_\_\_\_\_ Yes \_\_\_\_\_ No (*yes if patient died during initial admission*)

Intrathoracic complications during initial hospital stay (check all that apply):

\_\_\_\_\_ Pneumonia (*any pneumonia or presumed pneumonia based on decision to treat with antibiotics*)

\_\_\_\_\_ Biliary-pleural fistula (*based on bilious fluid draining from chest tube/drain and/or imaging/ERCP findings consistent with fistula*)

\_\_\_\_\_ Retained hemothorax (*blood density fluid remaining in chest > 72 hours post chest tube placement based on chest CT AND requiring additional drainage of any modality*)

\_\_\_\_\_ Empyema (*infected chest fluid collection based on imaging, thoracentesis, and/or clinical evaluation*)

\_\_\_\_\_ Persistent air leak (*any air leak persisting 5 days or more from initial chest tube placement*)

Intra-abdominal complications during initial hospital stay (check all that apply):

\_\_\_\_\_ Bile leak (*leak detected based on bilious drainage from abdominal drain and/or leak detected on any imaging modality*)

\_\_\_\_\_ Liver or gallbladder necrosis (*based on imaging and/or intra-operative findings regardless of decision to treat*)

\_\_\_\_\_ Intra-abdominal abscess (*based on imaging or intra-operative findings when applicable. Regardless of decision to drain*)

\_\_\_\_\_ Delayed hemorrhage (*bleeding requiring operative or IR intervention or any blood product transfusion 48 hours or later after initial admission*)

\_\_\_\_\_ Pseudoaneurysm development (*development of renal or hepatic pseudoaneurysm detected on CT or angiography NOT present on initial CT scan*)



\_\_\_\_\_ Missed bowel injury (*bowel injury/leak/fistula not detected on initial CT scan or operation, diagnosed on subsequent imaging or operative intervention*)

Total number of blood products transfused during initial hospitalization (# units/packs):

Whole blood \_\_\_\_\_  
Packed red blood cells \_\_\_\_\_  
Fresh frozen plasma \_\_\_\_\_  
Platelets \_\_\_\_\_  
Cryoprecipitate \_\_\_\_\_

Surgical wound infection \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ N/A (*superficial or deep cellulitis or supra-fascial abscess based on purulent drainage, cross sectional imaging, and/or positive wound cultures*).

Abdominal wound evisceration during initial hospitalization \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ N/A (*eviscerated abdominal contents noted through abdominal wound requiring operative intervention*)

Abdominal wound dehiscence during initial hospitalization \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ N/A (*separation of abdominal fascia noted on physical exam*)

C-difficile infection (*diagnosed during initial admission based on institution specific stool testing. Not thought to be related to chronic colonization*) \_\_\_\_\_ Yes \_\_\_\_\_ No

Pulmonary embolism \_\_\_\_\_ Yes \_\_\_\_\_ No (*presumed new PE detected on CT, angiography or V/Q scan regardless of treatment. Diagnosed during initial admission.*)

Deep vein thrombosis \_\_\_\_\_ Yes \_\_\_\_\_ No (*new DVT diagnosed on US or other means during initial admission and treated with anticoagulation and/or IVC filter placement*)

Discharge disposition (*please circle*):

Home \_\_\_\_\_  
Long-term acute care \_\_\_\_\_  
Acute rehabilitation facility \_\_\_\_\_  
Skilled nursing facility \_\_\_\_\_  
Other (*please specify*) \_\_\_\_\_

Total number CT scans (*during initial hospitalization. Regardless of use of contrast.*)

Chest \_\_\_\_\_  
Abdomen/pelvis \_\_\_\_\_

Total number of abdominal MRI scans (includes MRCP) (*during initial hospitalization*) \_\_\_\_\_

Discharged with intra-abdominal drain \_\_\_\_\_ Yes \_\_\_\_\_ No (*Indicates whether or not patient was discharged from the hospital with indwelling abdominal drain, whether placed intra-operative or percutaneously*)

Discharged with chest tube/drain \_\_\_\_\_ Yes \_\_\_\_\_ No (*Indicates whether or not patient was discharged from hospital with indwelling chest tube or drain regardless of time or manner of placement*)

**Pre-Injury Functional/Work Status** (*these answers should reflect mental and physical function and work status prior to injury*).

Baseline PROMIS-29 Profile v2.1 (attached).

Work status (*please circle*):

Not working (*not currently employed in any capacity*) \_\_\_\_\_  
Part-time (*work less than 30 hours a week*) \_\_\_\_\_  
Full-time (*work 30 or more hours a week*) \_\_\_\_\_

**Long-Term Outcomes** (based on phone call 6 months from date of initial hospital discharge +/- two weeks. Can attempt to contact subject up to three times. These answers should reflect physical and mental function and work status at the time of phone call).

PROMIS–29 Profile v2.1 (attached).

Total number hospital re-admissions since the time of initial hospital discharge \_\_\_\_\_ (based on chart review and patient recall. Admission defined as at least 1 night spent in hospital).

Total number of ED visits since initial hospital discharge \_\_\_\_\_ (based on chart review and patient recall. Defined as any visit to any emergency department).

Current Work status (please circle):

Not working (not currently employed in any capacity)

Part-time (work less than 30 hours a week)

Full-time (work 30 or more hours a week)

## PROMIS–29 Profile v2.1

Please respond to each question or statement by marking one box per row.

<b><u>Physical Function</u></b>		<b>Without any difficulty</b>	<b>With a little difficulty</b>	<b>With some difficulty</b>	<b>With much difficulty</b>	<b>Unable to do</b>
PFA11	Are you able to do chores such as vacuuming or yard work? .....	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
PFA21	Are you able to go up and down stairs at a normal pace? .....	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
PFA23	Are you able to go for a walk of at least 15 minutes? .....	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
PFA53	Are you able to run errands and shop? .....	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
<b><u>Anxiety</u></b> <b>In the past 7 days...</b>		<b>Never</b>	<b>Rarely</b>	<b>Sometimes</b>	<b>Often</b>	<b>Always</b>
EDANX01	I felt fearful .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
EDANX40	I found it hard to focus on anything other than my anxiety .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
EDANX41	My worries overwhelmed me .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
EDANX53	I felt uneasy .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
<b><u>Depression</u></b> <b>In the past 7 days...</b>		<b>Never</b>	<b>Rarely</b>	<b>Sometimes</b>	<b>Often</b>	<b>Always</b>
EDDEP04	I felt worthless .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
EDDEP06	I felt helpless .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
EDDEP29	I felt depressed .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
EDDEP41	I felt hopeless .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
<b><u>Fatigue</u></b> <b>During the past 7 days...</b>		<b>Not at all</b>	<b>A little bit</b>	<b>Somewhat</b>	<b>Quite a bit</b>	<b>Very much</b>
HI7	I feel fatigued .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
AN3	I have trouble <u>starting</u> things because I am tired .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

## PROMIS–29 Profile v2.1

### **Fatigue**

**In the past 7 days...**

		Not at all	A little bit	Somewhat	Quite a bit	Very much
FATEXP41	How run-down did you feel on average? ...	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
FATEXP40	How fatigued were you on average? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

### **Sleep Disturbance**

**In the past 7 days...**

		Very poor	Poor	Fair	Good	Very good
Sleep109	My sleep quality was .....	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1

**In the past 7 days...**

		Not at all	A little bit	Somewhat	Quite a bit	Very much
Sleep116	My sleep was refreshing.....	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
Sleep20	I had a problem with my sleep .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Sleep44	I had difficulty falling asleep .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

### **Ability to Participate in Social Roles and Activities**

		Never	Rarely	Sometimes	Usually	Always
SRPPER11 _CaPS	I have trouble doing all of my regular leisure activities with others .....	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
SRPPER18 _CaPS	I have trouble doing all of the family activities that I want to do .....	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
SRPPER23 _CaPS	I have trouble doing all of my usual work (include work at home) .....	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
SRPPER46 _CaPS	I have trouble doing all of the activities with friends that I want to do .....	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1

### **Pain Interference**

**In the past 7 days...**

		Not at all	A little bit	Somewhat	Quite a bit	Very much
PAININ9	How much did pain interfere with your day to day activities? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
PAININ22	How much did pain interfere with work around the home? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
PAININ31	How much did pain interfere with your ability to participate in social activities? .	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
PAININ34	How much did pain interfere with your household chores? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

## PROMIS–29 Profile v2.1

### Pain Intensity

**In the past 7 days...**

Global07

How would you rate your pain on average?.....

☐

0

No  
pain

☐

1

☐

2

☐

3

☐

4

☐

5

☐

6

☐

7

☐

8

☐

9

☐

10

Worst pain  
imaginable