



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

**EAST MULTICENTER STUDY
DATA DICTIONARY**

Surgical Critical Care during the COVID-19 pandemic Study – Data Dictionary

Data Entry Points and appropriate definitions / clarifications:

Entry space	Definition / Instructions
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Unit Variables (Please fill for each unit separately if including more than one unit)

Unit Designation	ICU unit designation (i.e. MICU, SICU, MSICU, TICU, NSICU... etc.)
Unit Type	Open vs Closed ICU care model A closed unit is defined with an intensivist being the primary provider during ICU stay with other teams as consultants. An open unit is defined with primary teams caring for their own patients and an intensivist being a consultant.
Total Number of ICU beds	Baseline number of beds in 2019 The unit's baseline capacity: the average number of beds under this unit's care during the included months of 2019.
Extended ICU location(s)	Any new hospital space designated for critical care (i.e. PACU, OR, Floor rooms, ED... etc.) That was converted to take care of ICU level patients.
Extended ICU number of beds	Number of beds in extended location(s) Number of added ICU level beds in <i>each</i> of the extended ICU locations.



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Unit Capacity: (Please fill this form for each unit for each week included in the study)

Numbers can be taken from each morning's census, if available

Number of empty beds	Number of empty beds in each week Sum of empty beds every morning of the week
Number of patients with surgical diagnosis	Number of surgical patients in each week Sum of surgical patients every morning of the week, same patient can be counted once for each ICU day
Number of patients with non-surgical diagnosis	Number of non-surgical patients in each week Sum of non-surgical patients every morning of the week, same patient can be counted once for each ICU day
Number of patients with COVID-19 admission	Number of COVID-19 patients in each week Sum of COVID-19 patients every morning of the week, same patient can be counted once for each ICU day



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Care Teams: (Please fill this form for each unit for each week included in the study)

Total number of intensivists in the unit	Number of intensivists rotating each week
Number of medical intensivists	Number of medical intensivists rounding each week
Number of anesthesiology intensivists	Number of anesthesiology intensivists rounding each week
Number of surgical intensivists	Number of surgical intensivists rounding each week
Number of critical care fellows	Number of critical care fellows rounding each week
Number of non-ICU physicians	Number of non-ICU physicians rounding each week (as ICU team during pandemic – tiered staffing)
Total number of nurses	Total number of nurses working each week
Number of nurses working daily	Average daily number of nurses working each week
Total number of APPs	Total number of APPs working each week
Number of APPs working daily	Average daily number of APPs working each week
Number of residents	Number of residents rounding each week



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Entry space	Definition / Instructions
<u>Patient Variables</u>	
Admit Date	Admission date of the patient (DAY #1 FOR ALL HOSPITAL DAY CALCULATIONS, roll over at midnight)
Admit Time	Admission time of the patient
<u>Demographics / Diagnosis</u>	
Age	Age of patient enrolled
Gender	Gender of patient
Race/Ethnicity	Race/Ethnicity of patient
Insurance status	Insurance status of patient (Private insurance, Medicaid, Medicare, No insurance, Other “specify”)
Patient Designation	Primary reason for admission: Surgical, Non-surgical, COVID-19
Comorbidities	Comorbidities of patient
Primary diagnosis	Admission diagnosis (pre-operative diagnosis if post-operative admission)
Primary procedure performed	Index operative procedure performed (if post-operative admission)
<u>Management Variables</u>	
Patient care team	Surgical if >80% of care led by surgical intensivist or surgical team Non-surgical if <80%
Time of ICU admission	Hospital day on which patient was admitted to ICU
Admission weight	Patient weight on admission in kg

Weight on ICU discharge	Most recent weight in kg within 48 hours before ICU discharge
Volume of resuscitation in first 24 hours	Intake in mL for first 24 hours of admission to ICU
Total volume balance during ICU stay	in mL, Intake – Output for entire ICU stay
Units of pRBC transfused	Total number and volume of units
Units of FFP transfused	Total number and volume of units
Units of platelets transfused	Total number and volume of units
Volume of albumin given	Total volume given in grams and in mL
Time on vasopressors	in hours, Total time with active vasopressor infusion
Vasopressors used	list of vasopressors used, duration, highest dose for each pressor
Time of intubation	Hospital day on which patient was intubated (Excluding for procedures, unless remained intubated post-op)
Days on mechanical ventilation	Number of days requiring mechanical ventilation
Time of Tracheostomy	Hospital day of tracheostomy placement
Lowest P/F ratio	Lowest PaO ₂ /FiO ₂ ratio documented
Days with prone positioning	Number of days patient was positioned prone
Average hours of prone positioning	Average number of hours in prone position on days employed
Sedatives used	List of sedatives used
Time on sedatives	Number of hours with active sedative infusion
Antibiotics used	List of antibiotics used, start day, dose, frequency, and duration
Days on antibiotics	Number of days on antibiotics
Time of starting RRT	Hospital day when RRT was initiated
Indication for RRT	Documented indication to initiate RRT
Mode of RRT	RRT mode used (CVVH, HD, ...etc.)
Days on RRT	Number of days requiring RRT
Anticoagulation agent used	Heparin, Enoxaparin, ...etc. Start day, dose, frequency, duration
DVT/PE present on admission	Diagnosis present on admission
Time of DVT/PE diagnosis	Day since admission (if not present on admission)
Nutrition given	PPN vs TPN vs Enteral vs None. Start day and frequency
Hospital acquired infection	VAP / CLABSI / CAUTI / C.Diff / Other

Hospital LOS

Number of days hospitalized

ICU LOS

Number of days requiring ICU admission

Mortality

Yes or No, Did patient expire during same hospitalization



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EAST MULTICENTER STUDY DATA COLLECTION TOOL

Multicenter Study: Surgical Critical Care During COVID-19 Pandemic

Study times: January to December 2019, January to December 2020

Enrolling Center: _____

Enrolling Co-investigator: _____

Patient ID: _____ (Assigned by enrolling center)

Admit Date: _____ (**DAY #1 FOR ALL HOSPITAL DAY CALCULATIONS, roll over at midnight**)

Admit Time: _____

Demographics / Diagnosis:

Age: _____ Gender: _____

Race/Ethnicity: White / African American / Hispanic / Asian / Other, Specify: _____

Insurance status: Private / Medicare / Medicaid / Uninsured / Other, Specify: _____

Patient designation: Surgical / Non-surgical / COVID-19

Comorbidities: Diabetes / HTN / COPD / CAD / CVA / CHF / A-fib / CKD / ESRD-DD / Smoking / Obesity / Asthma / HIV / Hep C / Immunosuppressed / Chronic steroid use / Other, Specify:

Primary Diagnosis (pre-operative diagnosis if post-operative admission): _____

Primary Procedure performed (if post-operative admission): _____

Management Variables:

Patient care team: Surgical / non-surgical

(Surgical if >80% of care led by surgical intensivist in closed unit, or surgical team in open units)

Time of ICU admission: _____ (hospital day)

Admission weight: _____ (kg)

Weight within 48h of ICU discharge: _____ (kg)

Volume of resuscitation in first 24 hours: _____ (mL)

Total volume balance during ICU stay: _____ (mL)

Units of pRBC: # of units _____, Total _____ (ml)

Units of FFP: # of units _____, Total _____ (ml)

Units of Platelets: # of units _____, Total _____ (ml)

Volume of albumin given: _____ (g), _____ (ml)

Time on vasopressors: _____ Days, _____ Hours

Vasopressors used:

- Norepinephrine: Date started _____, Highest dose _____ mcg/min, Date stopped _____
- Epinephrine: Date started _____, Highest dose _____ mcg/min, Date stopped _____
- Phenylephrine: Date started _____, Highest dose _____ mcg/min, Date stopped _____
- Vasopressin: Date started _____, Highest dose _____ mcg/min, Date stopped _____
- Dobutamine: Date started _____, Highest dose _____ mcg/min, Date stopped _____
- Dopamine: Date started _____, Highest dose _____ mcg/min, Date stopped _____
- _____: Date started _____, Highest dose _____ mcg/min, Date stopped _____

Time of intubation: _____ (hospital day)

Days on mechanical ventilation: _____

Time of Tracheostomy: _____ (Hospital day)

Lowest P/F ratio: PaO2 _____ FiO2 _____ PEEP _____

Days with prone positioning: _____

Average hours of prone positioning: _____ (hours/day)

Sedatives used: _____

Time on sedatives: _____ (hours)

Total days on antibiotics: _____

Antibiotics used:

- _____, start date _____, dose _____, frequency _____, stop date _____
- _____, start date _____, dose _____, frequency _____, stop date _____
- _____, start date _____, dose _____, frequency _____, stop date _____
- _____, start date _____, dose _____, frequency _____, stop date _____
- _____, start date _____, dose _____, frequency _____, stop date _____

Time of starting RRT: _____ (hospital day)

Indication for RRT: _____

Mode of RRT: _____

Days on RRT: _____

Anticoagulation agent used:

- _____, start date _____, dose _____, frequency _____, stop date _____
- _____, start date _____, dose _____, frequency _____, stop date _____
- _____, start date _____, dose _____, frequency _____, stop date _____

DVT/PE present on admission: _____

Time of DVT/PE diagnosis: _____ (hospital day)

Nutrition given: PPN / TPN / Enteral / None

Details (frequency, days stopped for intolerance): _____

Hospital acquired infections: VAP / CLABSI / CAUTI / C.Diff / Other, Specify: _____

Hospital LOS: _____ (days)

ICU LOS: _____ (days)

Mortality (circle one): YES NO



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**EAST MULTICENTER STUDY
DATA COLLECTION TOOL**

Multicenter Study: Surgical Critical Care During COVID-19 Pandemic

Enrolling Center: _____

Enrolling Co-investigator: _____

Brief description of how your facility altered its critical care capacity during the COVID pandemic:

Unit Variables, per month (each month starting in January 2019 ending December 2020):

Unit Designation: (select one) MICU / MSICU / TICU / NSICU / CTICU / Other, Specify: _____

Unit Type: (select one) Closed ICU vs Open ICU

Total Number of ICU beds: _____

Extended ICU locations: PACU / OR / IMC / Floor rooms / ED / Other, Specify: _____

Extended ICU number of beds: (for each extended location) _____



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EAST MULTICENTER STUDY DATA COLLECTION TOOL

Multicenter Study: Surgical Critical Care During COVID-19 Pandemic

Month of the study: _____

Number of empty beds: _____

Number of patients with surgical diagnosis: _____

Number of patients with non-surgical diagnosis (excluding COVID-19): _____

Number of patients with COVID-19 related admission: _____

Total number of intensivists in the unit: _____

Number of medical intensivists: _____

Number of anesthesiology intensivists: _____

Number of surgical intensivists: _____

Number of critical care fellows: _____

Number of non-ICU physicians (in COVID-19 surge): _____

Total number of nurses: _____

Number of nurses working daily: _____

Total number of APPs: _____

Number of APPs working: _____

Number of residents: _____