

PittSORCe has a repository of data available to researchers. Additionally, we can facilitate obtaining, 'cleaning', and analyzing of a wide variety of data sources. View below for a brief description of data sources and links for further information. Contact us if you have any questions.

Registry Data

National Trauma Databank (NTDB)

The NTDB is a de-identified registry of trauma center and non-trauma center voluntary submission of patient level data across the United States. The data contains demographics, vital signs, injury characteristics and severity, diagnosis and procedure codes, and limited information on receiving facility characteristics. Data is linked by a de-identified key and distributed through several relational tables. Data is available from 2002 to 2016 with over 9.6 million patients. Cleaned data files in Stata format are available.

<https://www.facs.org/quality-programs/trauma/tqp/center-programs/ntdb/about>

Trauma Quality Project Public Use Files (TQP PUF)

The NTDB underwent a major structural revision and is now the TQP PUF. Several variables have changed, and the relational table format has been simplified beginning with 2017 admission data. Currently data is available from 2017.

<https://www.facs.org/quality-programs/trauma/tqp/center-programs/ntdb/datasets>

Pennsylvania Trauma Outcomes Study (PTOS)

The PTOS is the Pennsylvania state trauma registry. Data submission is mandatory for all trauma centers in the state. Data includes detailed demographics, vital signs, injury characteristics and severity, procedures and timing, imaging findings, and geographic data. Data is in a flat file format. Data is available from 2000 to 2017 with over 600,000 patients. Cleaned data files in Stata format are available.

<http://ptsf.org/index.php/resources>

UPMC Trauma Registry

The UPMC trauma registry includes injured patients across our UPMC trauma centers that are entered to the database by trained full time registrars. The database contains the most detailed patient level data including patient identifiers and can be linked to the UPMC EMR to collect additional data if required by your project.

<https://www.upmc.com/services/trauma-care-system>

National Inpatient Sample (NIS)

The NIS is an administrative database that includes a 20% sample of all-payer discharges across the US for both trauma and non-trauma centers. The data contains diagnosis and procedure codes, demographics, payer sources and charge data, comorbidities, and hospital characteristics. The NIS creates a weighted sample for analysis, and has emergency department and pediatric supplementary data. Data is available from 1988 to 2016.

<https://www.hcup-us.ahrq.gov/nisoverview.jsp>

Fatal Analysis Reporting System (FARS)

The FARS database is a government census of fatal traffic accidents across all 50 states. Crashes are included if at least one occupant died within 30 days of the incident. The FARS dataset contains unique data on detailed crash characteristics, vehicles involved, geolocation data, the contribution of speed, alcohol, or distracted driving to the accident, demographics and outcomes of involved patients. Raw data is available from 1975 through 2017 currently.

<https://www.nhtsa.gov/research-data/fatality-analysis-reporting-system-fars>

National Emergency Medical Services Information System (NEMSIS)

The NEMSIS database collects prehospital EMS data on all 911 emergency system activations from 35 states in the US. Data includes dispatch information, demographics, disposition by EMS, vital signs, prehospital procedures, prehospital provider clinical impressions, geolocation data, and limited EMS agency characteristics. The NEMSIS dataset has gone through extensive revisions and the latest data dictionary (version 3) became standard in 2017 with data available from this year forward.

<https://nemsis.org/>

Inflammation and Host Response to Injury (Glue Grant)

The Glue Grant was a large-scale collaborative of nine trauma centers that collected detailed clinical data on patients with severe blunt trauma, as well as cytokine and genetic data on a subset of these patients over several time points. Patients were enrolled from 2003 to 2010, with over 2000 patients available.

<http://www.gluegrant.org/>

Trial Databases

Prehospital Air Medical Plasma (PAMPer) Trial

The multicenter PAMPer trial included 501 severely injured trauma patients at risk for hemorrhagic shock with inclusion criteria of systolic blood pressure (SBP) <70mmHg or SBP 71-90mmHg and heart rate (HR) >108bpm. Patients were cluster randomized to receive prehospital plasma resuscitation or standard care resuscitation. The database includes detailed clinical information on vital signs, procedures, resuscitation, injury characteristics, laboratory values, a variety of in-hospital outcomes such as MOF scores and infections, and 30-day mortality. A subset of patients has cytokine and endothelial damage markers. The trial is closed and the database is available for secondary analyses with approval of the study team.

<https://crisma.upmc.com/apps/PAMPer/home/>

Study of Tranexamic Acid during Air Medical Prehospital (STAAMP) Transport Trial

The multicenter STAAMP trial is aiming to enroll 900 patients at risk for hemorrhagic shock with inclusion criteria of SBP <90mmHg or HR>110bpm. Patients are randomized to receive prehospital tranexamic acid or placebo. The database will include detailed clinical information on vital signs, procedures, resuscitation, injury characteristics, laboratory values, a variety of in-hospital outcomes such as MOF scores and infections, and 30-day mortality. The trial is in the last year of enrollment and the database will be available for secondary analyses after the results of the trial are published with approval of the study team.

<https://crisma.upmc.com/apps/staamp/>

Linking Investigations in Trauma and Emergency Services (LITES) Network

LITES is a multicenter network that is tasked by the Department of Defense to conduct high quality observational and interventional trials in trauma and prehospital care. The network is used to complete Task Order studies across multiple areas of interest. Current task orders include observational assessment of highly granular prehospital and in-hospital injury data and epidemiology, whole blood resuscitation in polytrauma and traumatic brain injury, prehospital airway management, cold stored platelet transfusion in hemorrhagic shock, and prehospital pain management. These Task Orders are in various stages of completion and portions of the datasets may be available for secondary analyses with study team approval.

<https://www.litesnetwork.org/>

ACS National Surgical Quality Improvement Program

The ACS National Surgical Quality Improvement Program (ACS NSQIP®) is a nationally validated, risk-adjusted, outcomes-based program to measure and improve the quality of surgical care. Built by surgeons for surgeons, ACS NSQIP provides participating hospitals with tools, analyses, and reports to make informed decisions about improving quality of care. Further, peer-reviewed studies have shown that ACS NSQIP is effective in improving the quality of surgical care while also reducing complications and costs.

<https://www.facs.org/quality-programs/acs-nsqip>

UPMC Clinical Analytics

UPMC's health care data and analytics activities, led by Dr. Oscar Marroquin, oversees a team of information technology infrastructure architects, analysts, statisticians and data scientists focused on applying "big data" approaches to measure and predict clinical outcomes. These data can be linked to enable near limitless possibilities to customize a database uniquely constructed to facilitate addressing an individual hypothesis.

<https://www.upmc.com/media/experts/oscar-c-marroquin>

UPMC Acute Care Surgery Registry

The UPMC ACS registry includes patients requiring emergency general surgery and surgical critical care that are entered into the database. The database contains the most detailed patient level data including patient identifiers and can be linked to the UPMC EMR to collect additional data if required by your project.

<http://www.surgery.pitt.edu/divisions/general-surgery>