When it Comes to Emergency Department Operations, What You Don’t Know Can Hurt You ...And Your Patients!

EDDI
Emergency Department Data Institute
Measure – Compare – Excel

A service of the...
American College of Emergency Physicians®
ADVANCING EMERGENCY CARE
Do you want your emergency department operating at top efficiency?

Do you know what operational “best practices” you can adopt to create a more effective department?

Do you have the answers to these key questions about your emergency department and, more importantly, how your ED compares with similar EDs?

- Door-to-provider time
- ED hold times after admission
- Average length of stay by disposition/day of the week
- Average length of stay by utilization of lab/imaging
- Patients in the ED by hour of the day
- Average RVUs per patient
- Comparative utilization of drugs and tests
- Relative staffing costs per patient/per RVU/per hour
- Most frequently ordered/prescribed drugs
- RVUs generated per patient/per hour
- Utilization of analgesics by frequency and type

Ongoing answers to these questions and more can be yours when you become a participant in the ACEP Emergency Department Data Institute project!
**About the EDDI**

The EDDI is the data collection, analysis and reporting arm of the American College of Emergency Physicians (ACEP). Founded in 1968, ACEP has more than 26,000 member physicians who practice and teach the specialty of emergency medicine and manage emergency departments throughout the nation.

Known world-wide for its standard-setting clinical policies, quality improvement initiatives, physician education and patient advocacy efforts, ACEP has established the EDDI to fill a critical void in ED operations data that has existed far too long. Until now, there has not been a central collection point for comparison of normative data on emergency departments. This has contributed to a severe limitation on planning, operations and process improvement in EDs across America.

*The EDDI offers you the solution.*

**The EDDI Mission**

Through a comprehensive process of collection and analysis, the mission of the Emergency Department Data Institute is to become the premier source and provider of normative data concerning hospital emergency department operations in the United States and Canada.

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**The EDDI Methodology**

- First, participating hospitals complete a comprehensive survey of their emergency department to help provide the ability to compare similar EDs.
- Second, participating hospitals complete a brief, ongoing monthly survey.
- Third, participating hospitals submit a specified sample of two days worth of patient charts to the EDDI.
- Fourth, the EDDI coordinates extraction of all available data from charts for analysis and reporting.
- Fifth, a careful, thorough integration of data from multiple sources is performed and reports and analysis generated.

**The EDDI Deliverables**

As a participating hospital, you’ll receive:

- Reports that enable you to drill down and compare your EDs performance with other similar emergency departments.
- EDDI assistance in facilitating adoption of best practices identified through the data collection and analysis process.
- Ongoing ability to measure and assess the effect of process change on the efficiency of your ED.
- A more effectively operated and managed emergency department and improved patient care!

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If your ED and hospital leadership is interested in learning more, please visit our website at [www.acep.org](http://www.acep.org) *(Click on EDDI).* Or, you may contact ACEP at 800-798-1822, ext. 3234 – Marilyn Bromley, RN or email mbromley@acep.org

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• Emergency Departments – what thoughts cross the minds of many of our patients when they consider going to an emergency department? Emergency service is viewed by most as an essential community resource that everyone wants to count on when there is a need for emergency care.

• Yet, as hospitals become fewer in number and the population grows and ages, emergency departments have become progressively strained in their ability to deliver the care that we all want for ourselves and our families. The public all too often perceives the emergency department as crowded waiting rooms, long waits for care, and a staff that seems harried and pressed.

• Yet, not all emergency departments fit this stereotype. Many emergency departments are able to consistently exceed the expectations of their patients. Many have adopted policies and procedures that allow them to score high in patient satisfaction surveys month after month. Many have adapted to the challenges that they have faced and have become top performers.

• Do you know where your emergency department stands with regard to its performance? Do you want to provide better, more consistent service and, at the same time, be able to provide care for more patients? Do you have a sense that your staffing mix is right for your department’s volume and acuity? Are you aware of what others have done to become consistent top performers?

• If your emergency department is typical of most, it has little normative data to compare its performance with comparable departments. And without data, the roadmap to optimize your department’s care and efficiency becomes a series of trial and error. But there is a credible, low-cost solution.

• To address the national void in comprehensive, normative data – data that are essential to optimize the operation of your emergency department, the American College of Emergency Physicians has developed the Emergency Department Data Institute (EDDI). The 26,000-member College has recognized that the nation’s emergency departments must have comprehensive, normative data that can be used to facilitate decisions regarding the optimization of our emergency departments.
Over the past 4 years, the American College of Emergency Physicians has developed, tested, and refined a methodology that, for surprisingly little effort on the part of hospital and emergency department staff, can be used to comprehensively compare emergency departments that are similar. Similar in volume, similar in acuity, similar in whether they are teaching hospitals and similar in other important areas of comparison.

The process is straightforward. A baseline survey is conducted that details the operation of your emergency department so that it can be compared with similar departments across a variety of important metrics. Then a straightforward monthly survey is completed that provides information that is readily obtainable by most hospitals. What are your staffing hours for the month – by nurses, clerks, techs, registration clerks, physicians, and the like? And finally, the key element of the program – we want to analyze two specific 24-hour periods of your charts. In a HIPAA-compliant method, the EDDI will pull key times off your charts, chronicle the utilization of resources and the treatment rendered for this sample of patients, and estimate the work performed by calculating RVUs for each chart. This chart abstraction will be provided by a vendor contracted by the College that has demonstrated the ability to perform the needed data abstraction consistently and accurately.

With this unique combination of staffing, throughput, work, and clinical data, the EDDI will provide its clients with an extraordinary array of detailed normative data from emergency departments that are fundamentally similar. Through a process that has been designed to protect the hospital’s information, each hospital will be able to confidentially compare the performance of its emergency department with that of a similar hospital in a manner that is currently unavailable.

**Sample Reports**

**Lab / X-rays Testing per hospital**

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<th>Visits</th>
<th>Lab Tests</th>
<th>Per Visit</th>
<th>Xrays</th>
<th>Per Visit</th>
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<td>1.2</td>
<td>77</td>
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</table>

**Top Administered Drugs**

**Hospital 1**
- Zofran 41.4%
- Morphine 20.4%
- Toradol 7.4%
- Rocephin 7.9%
- Phenergan 3.6%
- Tetanus 2.8%
- DILAUDID 2.9%
- Benadryl 1.9%
- Tylenol 1.4%
- Albuterol MDI 1.3%
- Ancef 1.1%
- Vicodin 1%
- Ativan 0.9%
- Reg Insulin 1.1%
- Zofran 9%
- Toradol 6.4%
- Tylenol 4.1%
- Ibuprofen 3.8%
- Reglan 3.8%
- Percocet 3.4%
- Albuterol MDI 3.2%
- DILAUDID 2.2%
- Morphine 3.2%
- Percocet 3.1%
- Ibuprofen 2.9%
- Solu-Medrol 2.3%
- Ativan 2.1%
- Morphine 1.4%
- Vicodin 1.2%
- Ativan 1.1%
- Flexeril 1.1%
- DILAUDID 2.2%
- Phenergan 1.4%
- Phenergan 1.4%
- Flexeril 1.1%
- Ativan 1.2%
- Ativan 1.1%

**Hospital 2**
- Tylenol 7.3%
- Tetanus 6.3%
- Ibuprofen 6.1%
- Toradol 5.2%
- Reglan 4.2%
- Percocet 3.8%
- Morphine 3.9%
- Vicodin 3.5%
- Percocet 5.4%
- Levaquin 2.6%
- Albuterol MDI 2.6%
- Ativan 2.1%
- DILAUDID 2.2%
- Morphine 2.1%
- Flexeril 1.1%
- DILAUDID 2.2%
- Ativan 1.2%
- Phenergan 1.4%
- Flexeril 1.1%
- Albuterol MDI 1.1%

**Hospital 3**
- Zofran 9%
- Toradol 6.4%
- Tylenol 4.1%
- Ibuprofen 3.8%
- Reglan 3.8%
- Percocet 3.4%
- Albuterol MDI 3.2%
- DILAUDID 2.2%
- Morphine 3.2%
- Percocet 3.1%
- Ibuprofen 2.9%
- Solu-Medrol 2.3%
- Ativan 2.1%
- Morphine 1.4%
- Vicodin 1.2%
- Ativan 1.1%
- Flexeril 1.1%
- DILAUDID 2.2%
- Phenergan 1.4%

**Average**
- 2.3 drugs per patient
- 1.3 drugs per patient
- 1.2 drugs per patient
Virtually all emergency departments subscribe to patient satisfaction surveys. An informal survey of College members indicated that hospitals treating 40,000 patients per year spent, on average, about $28,000 just to assess the satisfaction of their emergency department patients. But assessing whether patients are satisfied or not does not help managers achieve patient satisfaction. The roadmap is often unclear regarding the best ways to achieve high levels of patient satisfaction – especially with limited resources.

Some emergency departments consistently do achieve high patient satisfaction scores. What is their secret? Are there steps that high-achieving hospitals have taken to get where they are? What are your door-to-provider times compared to theirs? What is their staffing mix and staffing cost per patient compared to yours? What are their average lengths of stay for discharged patients compared to yours?

Many times the nuances make the difference. With the data that the EDDI will present your emergency department managers, you’ll be able to assess how similar or how different your department is from the nation’s leading emergency departments. Using this information, you’ll be able to emulate high-achieving emergency departments in a variety of ways that might not necessarily mean spending more money.

The identification and dissemination of best practices that have allowed emergency departments to become top performers will occur not just through the comparison of the data that the EDDI provides. The EDDI intends to disseminate this information to clients through a variety of educational venues, including white papers and eventually a series of conferences.

For substantially less than what most hospitals are spending on emergency department patient satisfaction surveys ($600 a month and $4 per chart abstracted or about $18,000 annually for a 40,000-visit emergency department), the EDDI will provide the informational roadmap to help achieve the elusive goal of patient satisfaction and improved operations. Through here to fore unavailable data, hospitals will be able to manage their departments to optimize their performance.
**Staffing/Productivity Reports**
- Total patients treated in the month*
  - Percentage of admitted/transferred patients*
  - Percentage of discharged patients*
  - Percentage of left without being seen patients*
- Total staffed hours per month
  - RNs*
  - LVN/LPNs*
  - ED techs*
  - ED clerks*
  - Registration clerks*
  - Scribes*
  - Other ED-based staff*
  - Physician*
  - In-department housestaff*
  - PA/NP hours*
- Staff hours per patient per month*
- RVUs per patient**
- Relative staffing costs per patient per month***
- Relative staffing costs per RVU per month****
- ED bed utilization by hour of the day**
- Ambulance runs per day**
- Percentage of ambulance patients admitted**

**Time Related Reports**
- Average LOS for all patients**
- Average LOS for admitted patients**
- Average LOS for transferred patients**
- Average LOS for discharged patients**
- Average LOS for telemetry patients**
- Average LOS for ICU/CCU patients**
- Average LOS for ward patients**
- Average door to triage time**
- Average door to provider time**
- Average time from admit decision to admission**

**Utilization Studies**
- Percentage of patients receiving (each by individual subtest):
  - Hematology studies
  - Chemistry studies:
  - Bacteriology studies
  - Respiratory studies
  - Imaging studies
    - Plain x-rays
    - CT scans
    - Ultrasound studies
    - MR imaging

**Treatment Related Studies**
- Ranking order of top 50 drugs administered
- Ranking order of top 50 drugs prescribed
- Ranking order of top 20 procedures by CPT codes
- Percentage of patients with a fever (100.4 or higher)
- Percentage of admitted patients with a fever given antibiotics in the ED
- Time to antibiotics for admitted patients with a fever by diagnosis
- Percentage of patients having blood products ordered

* Derived from monthly ED reports
** Derived from chart data abstraction
*** Derived from monthly data reports and national average salary figures
**** Derived from monthly data reports, national average salary figures and average number of RVUs per patient derived from chart data abstraction