

# Baseline Data Collection Tool

Endorsed by the Vanderbilt Department of Emergency Medicine  
Research Partner of the ED Benchmarking Alliance

The data collected via this form is the baseline member data for your emergency department (ED) and affiliated hospital. The data elements have been selected to measure and comparatively benchmark clinical care processes within the ED. In addition to being the basis for the Comparative Reports that each member ED receives, this data becomes part of a dataset used by the Health Services Research Data Coordinating Center (HSR-DCC) at Vanderbilt University. This database is used to general evidence-based research hypotheses for how to improve emergency medical care processes in EDs. Accuracy is paramount.

## MEMBERSHIP

- Are you a new or existing EDOSG member? (select one) New Existing

## CONTACT INFORMATION

- ED facility \_\_\_\_\_
- Mailing Address \_\_\_\_\_
- Site PI \_\_\_\_\_
- Title \_\_\_\_\_
- Phone \_\_\_\_\_
- Email \_\_\_\_\_
- Fax \_\_\_\_\_
- Assistant or Secondary Contact \_\_\_\_\_
- Email \_\_\_\_\_

## EMERGENCY DEPARTMENT DEMOGRAPHICS

- |   | 2015   | 2016            |  |
|---|--------|-----------------|--|
| US Region (select one) <span style="margin-left: 20px;">Northeast, South, West, Midwest</span>  | _____  | _____           |  |
| Connection to an academic medical center (AMC):<br><span style="margin-left: 40px;">Primary AMC ED    Affiliated AMC ED    None</span>  | _____  | _____           |  |
| Primarily Pediatric or Adult  | _____  | _____           |  |
| Urban/Rural   | _____  | _____           |  |
| Trauma center designation (level)   | _____  | _____           |  |
| American Hospital Association (AHA) Number  | _____  | _____           |  |
| How many different EMS agencies transport to your ED?   | _____  | _____           |  |
| If yes, how many EMS Agencies that transport your ED can activate your cath lab directly?   | _____  | _____           |  |
| Primary PCI center  | Yes/No | Yes/No          |  |
| Stroke Center?  | Yes/No | Yes/No          |  |
| Ownership Status? (select one)<br><span style="margin-left: 20px;">Private non for profit    Private for-profit    Primarily federally funded</span><br><span style="margin-left: 20px;">Primarily state or county funded    Other (explain)</span> | _____  | _____           |  |
| ED size (square footage)  | _____  | sq. ft. _____   |  |
| Number of ED beds   | _____  | tot. beds _____ |  |
| Dedicated Rooms   | _____  | beds _____      |  |
| Hallway Beds  | _____  | beds _____      |  |
| Curtained Spaces  | _____  | beds _____      |  |
| Vertical Space (Chairs)   | _____  | beds _____      |  |

**PATIENT POPULATION CHARACTERISTICS**

**AGE and SEX**

▪ Mean Age	_____		_____	
▪ Age Standard Deviation	_____		_____	
▪ Median Age (50th percentile)	_____		_____	
▪ Age Interquartile Range (25th percentile)	_____	%ile	_____	%ile
▪ Age Interquartile Range (75th percentile)	_____	%ile	_____	%ile
▪ Percentage of Male Patients	_____	%	_____	%
▪ Percentage of Children	_____	%	_____	%

**RACE DISTRIBUTION**

▪ White	_____	%	_____	%
▪ Black/African American	_____	%	_____	%
▪ Asian	_____	%	_____	%
▪ Non-White Hispanic	_____	%	_____	%
▪ Native Hawaiian/Other Pacific Islander	_____	%	_____	%
▪ More than one race	_____	%	_____	%
▪ Other	_____	%	_____	%
▪ Unknown	_____	%	_____	%
▪ Total		100 %		100 %

**ED PAYER MIX**

▪ Private	_____	%	_____	%
▪ Medicaid	_____	%	_____	%
▪ Medicare	_____	%	_____	%
▪ Self Pay	_____	%	_____	%
▪ Other	_____	%	_____	%
▪ Total		100 %		100 %

**STAFFING**

▪ Average hours of attending coverage per 24 hrs	_____	hrs/day	_____	hrs/day
▪ Average resident hours of coverage per 24 hrs	_____	hrs/day	_____	hrs/day
▪ Average PA/NP hours of coverage scheduled per 24 hrs	_____	hrs/day	_____	hrs/day
▪ Average nursing hours of coverage per 24 hrs	_____	hrs/day	_____	hrs/day
▪ Is your nursing staff unionized?	Yes/No		Yes/No	
▪ Are your ED physicians employees of the hospital?	Yes/No		Yes/No	
▪ Total number of staff/faculty physicians	_____		_____	
▪ Total number of staff/faculty physicians FTE	_____		_____	
▪ Hrs per year for a physician clinical faculty time equivalent (FTE) (100% clinical)	_____	hours	_____	hours
▪ Do you have provider incentives for increased throughput/volume? If yes, which structure does your incentives target? (Write all that apply) Individual Providers    Group Productivity    No Incentive Structure	Yes/No		Yes/No	
▪ Do your physicians use scribes?	Yes/No		Yes/No	

**PROCESS, THROUGHPUT AND DISPOSITION**

▪ Annual emergency department (ED) volume	_____	pts/day	_____	pts/day
▪ Average Door-to-Doctor Time	_____	minutes	_____	minutes
▪ Door-to-Doctor standard deviation	_____		_____	
▪ Median Door-to-Doctor time	_____		_____	
▪ Door-to-Doctor Interquartile Range (25th percentile)	_____		_____	
▪ Door-to-Doctor Interquartile Range (75th percentile)	_____		_____	
▪ First point of contact for arriving ambulance/EMS patients?	_____		_____	
Greeter	Registration Clerk	Registered Nurse		
Check-in Kiosk	Physician	Mid-level Provider		
▪ First point of contact for arriving walk-in patients				
Greeter	Registration Clerk	Registered Nurse	Mid-level Provider	Physician
Check-in Kiosk				
▪ How would you characterize your triage model? (circle all that apply)				
Nursing triage?	Direct to room triage?	Physician triage?		
Other: _____				
▪ Do you use the ESI triage classification system?		Yes/No		Yes/No
Number of ESI 1 Patients	_____		_____	
Number of ESI 2 Patients	_____		_____	
Number of ESI 3 Patients	_____		_____	
Number of ESI 4 Patients	_____		_____	
Number of ESI 5 Patients	_____		_____	
Missing Unknown, or Unbilled	_____		_____	
▪ Changed your triage model in the past 5 years?		Yes/No		Yes/No
▪ Average ED Length of Stay (EDLOS) for:				
All patients	_____	hours	_____	hours
Inpatient admissions?	_____	hours	_____	hours
Observation admissions?	_____	hours	_____	hours
Discharged patients?	_____	hours	_____	hours
Behavioral health patients (psych, SI, detox, etc.)	_____	hours	_____	hours
▪ Median ED Length of Stay (EDLOS) for:				
All patients	_____	hours	_____	hours
Inpatient admissions?	_____	hours	_____	hours
Observation admissions?	_____	hours	_____	hours
Discharged patients?	_____	hours	_____	hours
Behavioral health patients (psych, SI, detox, etc.)	_____	hours	_____	hours
▪ Average number of ED boarder hrs per 24 hr period	_____	patients	_____	patients
▪ Median number of ED boarder hrs per 24 hr period	_____	patients	_____	patients
▪ Average number of staffed hospital beds	_____	beds	_____	beds
▪ Median number of staffed hospital beds	_____	beds	_____	beds
▪ ED discharge rate	_____	%	_____	%
▪ Left ED without completing treatment rate	_____	%	_____	%

- Do you have an observation unit?
  - If yes:
    - Observation Unit admission rate \_\_\_\_\_ % \_\_\_\_\_ %
    - Percent of hospital observation pts admitted to the Observation Unit \_\_\_\_\_ % \_\_\_\_\_ %
    - Is it managed by emergency medicine? Yes/No Yes/No
    - Is it staffed by emergency medicine? Yes/No Yes/No
    - Is it staffed by (select all that apply):
      - Physicians \_\_\_\_\_
      - Physician-extenders \_\_\_\_\_
      - Both \_\_\_\_\_
      - Other \_\_\_\_\_
- Total in-hospital admission rate (ED obs, obs, inpatient) \_\_\_\_\_
- Inpatient admission rate \_\_\_\_\_
- Observation admission rate \_\_\_\_\_
- Percent of patients transferred out of the ED \_\_\_\_\_ % \_\_\_\_\_ %
- Percent of patients transferred into the ED \_\_\_\_\_ % \_\_\_\_\_ %
- Percentage of hospital patients (observation + inpatient status) that were admitted from the ED? \_\_\_\_\_ % \_\_\_\_\_ %
- obs                      inpatient                      obs                      inpatient
- Hospital's average operating occupancy \_\_\_\_\_ % \_\_\_\_\_ %
- Hospital case mix index (CMI) \_\_\_\_\_ \_\_\_\_\_

**ANCILLARY SERVICE UTILIZATION & PROCESS TURN AROUND TIMES**

- Average turnaround time (TAT) for each (minutes):
  - CBC \_\_\_\_\_
  - Troponin \_\_\_\_\_
  - Urinalysis \_\_\_\_\_
  - CXR \_\_\_\_\_
  - Chem 10 \_\_\_\_\_
  - BNP \_\_\_\_\_
  - Abdominal and Pelvis CT \_\_\_\_\_
- Percentage of all ED patients that get an X-ray \_\_\_\_\_ % \_\_\_\_\_ %
- Percentage of all ED patients that get a CT \_\_\_\_\_ % \_\_\_\_\_ %
- Percentage of all ED patients that get a MRI \_\_\_\_\_ % \_\_\_\_\_ %
- Percent of all ED patients who have laboratory studies performed \_\_\_\_\_ % \_\_\_\_\_ %
- Percentage of ED patients who have a consulting service involved in their care \_\_\_\_\_ % \_\_\_\_\_ %
- Social workers/case managers available to your ED? Yes/No Yes/No
- If yes: Are they dedicated to the ED? Yes/No Yes/No
- Which best reflects your avg. social work/case management coverage schedule (select one)
  - <8hrs/day \_\_\_\_\_
  - 8-12hrs/day \_\_\_\_\_
  - 12-18hr/day \_\_\_\_\_
  - >18hrs/day \_\_\_\_\_

**DOCUMENTATION, BILLING, and MEDICAL RECORD ACCESS**

- Ambulatory Payment Classification (APC) for billed charts
  - Level 1 \_\_\_\_\_ % \_\_\_\_\_ %
  - Level 2 \_\_\_\_\_ % \_\_\_\_\_ %
  - Level 3 \_\_\_\_\_ % \_\_\_\_\_ %
  - Level 4 \_\_\_\_\_ % \_\_\_\_\_ %

Level 5	_____	%	_____	%
Critical Care level 1	_____	%	_____	%
Critical Care level 2	_____	%	_____	%
Unbilled charts	_____	%	_____	%
Total =	100	%	100	%

- Physician documentation method? (select all that apply)
  - Written template Yes/No Yes/No
  - Freehand written Yes/No Yes/No
  - Computer template Yes/No Yes/No
  - Computer free type Yes/No Yes/No
  - Scribes Yes/No Yes/No
  - Dictate Yes/No Yes/No
  - Other \_\_\_\_\_
- Note any commercial systems that you use (note all that apply)
  - T-sheet/T-system Epic PICIS Quadramed \_\_\_\_\_
  - Medhost Cerner Forerun Dragon \_\_\_\_\_
  - Powernote a home grown system \_\_\_\_\_
  - Other \_\_\_\_\_

Within your medical record system, are you able to:

- See that a particular patients has previously been in your (or another) ED within the past 12 months? Yes/No Yes/No
- Quantify the number of visits a particular patient has had in the ED within the prior 12 months? Yes/No Yes/No
- Identify patients with a high number of ED visits? Yes/No Yes/No
- Does your ED participate in a health information exchange (HIE) where you can view patient visit data from ED or hospital visits at another institution? Yes/No Yes/No

**PROCESS IMPROVEMENT TRIALS**

- Have you initiated any process improvements in any of these areas in the past 5 years?
  - Patient flow Yes/No Yes/No
  - Patient space Yes/No Yes/No
  - Fast track Yes/No Yes/No
  - Observation medicine Yes/No Yes/No
  - Laboratory Yes/No Yes/No
  - Radiology Yes/No Yes/No
  - Consultant communications Yes/No Yes/No
  - Admission process Yes/No Yes/No
  - Triage Yes/No Yes/No
  - EMR-based clinical decision support (Physician order entry, clinical documentation, or other electronic medical record (EMR) decision support) Yes/No Yes/No
  - Other: \_\_\_\_\_ Yes/No Yes/No

# MYOCARDIAL ISCHEMIA CLINICAL PRACTICE AND DIAGNOSTICS

## STEMI SCREENING

- How do you identify patients for an EKG within 10 min of arrival (STEMI screen)?  
(Select one):      Discretion of triage provider \_\_\_\_\_  
                            Established triage EKG protocol \_\_\_\_\_  
                            Other \_\_\_\_\_
- If you use a triage protocol, which elements are included in the criteria (select all that apply)
 

Chest pain	Abdominal Pain	Race	
Dizziness	Neck Pain	Known Comorbidities	
Back Pain	Arm Pain	Language	
Diaphoresis	Syncope	Other: _____	
Gender	Age		
- Are your triage staff **FORMALLY TRAINED** on how to identify potential STEMI patients? Yes/No
- Number of STEMI seen at your **HOSPITALS** Yes/No  
*(Include all patients with a final hospital diagnosis of STEMI using ICD9/10 provided in the Instruction Set.)*
- How many patients with a final hospital diagnosis of STEMI received their ECG within 10 minutes? \_\_\_\_\_
- How many **ED STEMI** patients with a final hospital diagnosis of STEMI DID NOT receive their ECG within 10 minutes of arrival? \_\_\_\_\_
- What is your **average** Door-to-ECG time for all **ED STEMI** patients? \_\_\_\_\_
- What is your Door-to-ECG **standard deviation** for all **ED STEMI** patients? \_\_\_\_\_
- What is your **median** Door-to-ECG time for all **ED STEMI** patients? \_\_\_\_\_
- What is your **25th percentile** Door-to-ECG time for all **ED STEMI** patients? \_\_\_\_\_
- What is your **75th percentile** Door-to-ECG time for all **ED STEMI** patients? \_\_\_\_\_

## DOOR-to-NEEDLE TIMES

- What is your hospital's **average** door-to-needle time (thrombolysis) for all hospital STEMI patients? \_\_\_\_\_
- What is your hospital's door-to-needle time **standard deviation** for all hospital STEMI patients? \_\_\_\_\_
- What is your hospital's **median** door-to-needle time for hospital STEMI patients? \_\_\_\_\_
- What is your hospital's **25th percentile** door-to-needle time for hospital STEMI patients? \_\_\_\_\_
- What is your hospital's **75th percentile** door-to-needle time for hospital STEMI patients? \_\_\_\_\_

## DOOR-to-BALLOON TIMES

- What is your hospital's **average** door-to-balloon time for all hospital STEMI patients?  
*(Answer only if you are at a PCI or cath capable center. DO NOT include the door-to-balloon times for patient's transferred to an outside facility)* \_\_\_\_\_
- What is your hospital's door-to-balloon time **standard deviation** for all hospital STEMI patients? \_\_\_\_\_
- What is your hospital's **median** door-to-balloon time for hospital STEMI patients? \_\_\_\_\_
- What is your hospital's **25th percentile** door-to-balloon time for hospital STEMI patients? \_\_\_\_\_
- What is your hospital's **75th percentile** door-to-balloon time for hospital STEMI patients? \_\_\_\_\_

### NON-STEMI DIAGNOSTIC PRACTICE

- |  |                         |                         |       |       |
|--|-------------------------|-------------------------|-------|-------|
| <ul style="list-style-type: none"> <li>▪ Do you have dedicated space (stretcher or bed) for early ECGs to be performed for patients upon arrival or in triage?</li> </ul>  | Yes/No                  | Yes/No                  |       |       |
| <ul style="list-style-type: none"> <li>▪ Do you have dedicated early BCG triage technicians?</li> </ul>  | Yes/No                  | Yes/No                  |       |       |
| <ul style="list-style-type: none"> <li>▪ Do you have dedicated physicians to interpret ECGs performed for patients upon arrival or in triage?</li> </ul>   | Yes/No                  | Yes/No                  |       |       |
| <ul style="list-style-type: none"> <li>▪ Do you routinely risk stratify ED patients, being considered for ACS as the cause of their symptoms, to establish a pre-testing probability before troponin testing? (e.g. -TIMI scoring, Low risk vs. High risk criteria, etc.)</li> </ul> | Yes/No                  | Yes/No                  |       |       |
| <ul style="list-style-type: none"> <li>▪ How many patients receive an ECG at any time during their ED visit?</li> </ul>  | _____                   | _____                   |       |       |
| <ul style="list-style-type: none"> <li>▪ How many patients received both an ECG and a troponin lab test during their ED stay?</li> </ul>   | _____                   | _____                   |       |       |
| <ul style="list-style-type: none"> <li>▪ Does your department have an established definition for a “low risk” patient amongst those being evaluate for myocardial ischemia?</li> </ul>   | Yes/No                  | Yes/No                  |       |       |
| <ul style="list-style-type: none"> <li>▪ Troponin assay (type, name, and manufacturer)?                             <ul style="list-style-type: none"> <li>Type (I or T)</li> <li>Name</li> <li>Manufacturer</li> </ul> </li> </ul>  | _____<br>_____<br>_____ | _____<br>_____<br>_____ |       |       |
| <ul style="list-style-type: none"> <li>▪ What is the <b>mean</b> time interval between serum troponin samples (troponin interval) ordered for myocardial ischemia evaluations in your department?</li> </ul>   | _____                   | _____                   | hours | hours |
| <ul style="list-style-type: none"> <li>▪ What is the <b>standard deviation</b> time interval between serum troponin samples (troponin interval) ordered for myocardial ischemia evaluations in your department?</li> </ul>   | _____                   | _____                   | hours | hours |
| <ul style="list-style-type: none"> <li>▪ What is the <b>median</b> time interval between serum troponin samples (troponin interval) ordered for myocardial ischemia evaluations in your department?</li> </ul>   | _____                   | _____                   | hours | hours |
| <ul style="list-style-type: none"> <li>▪ What is the <b>25th percentile</b> time interval between serum troponin samples (troponin interval) ordered for myocardial ischemia evaluations in your department?</li> </ul>  | _____                   | _____                   | hours | hours |
| <ul style="list-style-type: none"> <li>▪ What is the <b>75th percentile</b> time interval between serum troponin samples (troponin interval) ordered for myocardial ischemia evaluations in your department?</li> </ul>  | _____                   | _____                   | hours | hours |
| <ul style="list-style-type: none"> <li>▪ Ever use coronary CT angiography as part of the evaluation of patients with potential myocardial ischemia?</li> </ul>   | Yes/No                  | Yes/No                  |       |       |
| <ul style="list-style-type: none"> <li>▪ Have criteria/policy/guidelines to cath high risk NSTEMI patients emergently from the ED?</li> </ul>  | Yes/No                  | Yes/No                  |       |       |

### UNSTABLE ANGINA

- |   |       |       |
|---|-------|-------|
| <ul style="list-style-type: none"> <li>▪ Hospital system’s first-line provocative test and/or coronary imaging for patients being evaluated for potential myocardial ischemia who are estimated to be “LOW RISK” for an acute event:                             <ul style="list-style-type: none"> <li>Exercise Treadmill Test (ETT)</li> <li>Nuclear Imaging (MIBI or SPECT)</li> <li>Cardiac MRI</li> <li>Stress Echo</li> <li>Other:</li> </ul> </li> </ul>                             | _____ | _____ |
| <ul style="list-style-type: none"> <li>▪ Most frequently used provocative testing or coronary imaging modalities used by your institution for myocardial ischemia evaluations in patients of any risk? (highest frequency)                             <ul style="list-style-type: none"> <li>Exercise treadmill test (ETT)</li> <li>Coronary CT angiography (CCTA)</li> <li>Nuclear Imaging (MIBI or SPECT)</li> <li>Stress Echo</li> <li>Cardiac MR</li> <li>Other</li> </ul> </li> </ul> | _____ | _____ |

- Second most frequently used provocative testing or coronary imaging modalities used by your institution for myocardial ischemia evaluations in patients of any risk? (second highest frequency)
 

Exercise treadmill test (ETT)	_____		_____	
Coronary CT angiography (CCTA)				
Nuclear Imaging (MIBI or SPECT)				
Stress Echo				
Cardiac MR				
Other				
- Third most frequently used provocative testing or coronary imaging modalities used by your institution for myocardial ischemia evaluations in patients of any risk? (third highest frequency)
 

Exercise treadmill test (ETT)	_____		_____	
Coronary CT angiography (CCTA)				
Nuclear Imaging (MIBI or SPECT)				
Stress Echo				
Cardiac MR				
Other				
- Of patients referred for provocative testing, what percentage receive this:
 

During their ED stay?	_____	%	_____	%
In hospital (admitted or observation status) stay?	_____	%	_____	%
Via an outpatient referral	_____	%	_____	%
Other	_____	%	_____	%
Total	100	%	100	%
- Have criteria/policies/guidelines to guide the use of the provocative ischemia and coronary imaging modalities available to your ED, for the evaluation of myocardial ischemia?
 

	Yes/No		Yes/No	
--	--------	--	--------	--
- Routinely refer patient for out patient risk factor management after a negative work up for myocardial ischemia in the ED?
 

	Yes/No		Yes/No	
--	--------	--	--------	--