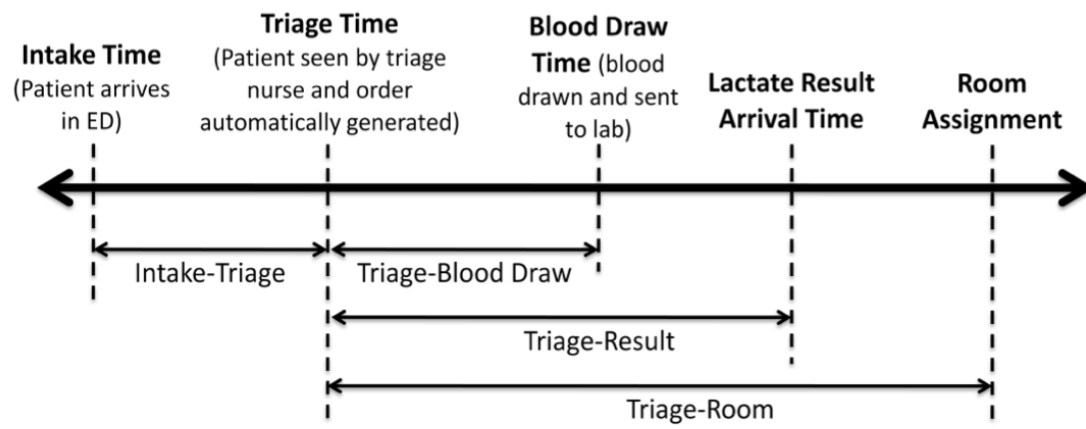


Advanced Triage Protocol: The Role of an Automated Lactate Order in Expediting Rapid Identification of Patients at Risk of Sepsis in the Emergency Department

Supplementary Material:

- 1. Time Points from Intake to Room Placement**
- 2. Supplemental Table 1: Forty-Two Chief Complaints Encompassing > 99% of Sepsis Patients Admitted to the Hospital**
- 3. Supplemental Table 2: Sepsis vs. Non-Sepsis Discharge Codes**



Supplemental Table 1: Forty-Two Chief Complaints Encompassing > 99% of Sepsis Patients Admitted to the Hospital

1. Abdominal Distention
2. Abdominal Pain
3. Abscess
4. Chills
5. Cough
6. Chest Pain
7. Cerebral Vascular Accident/Transient Ischemic Attack
8. Dehydration
9. Diarrhea
10. Difficulty Breathing
11. Dizzy
12. Dyspnea on Exertion
13. Fatigue
14. Fever
15. Flank Pain
16. Genitourinary Complaint
17. Headache
18. Hematuria
19. Hemoptysis
20. Hyperglycemia
21. Hypoglycemia
22. Infection, any location
23. Infection, Arm
24. Infection, Extremity
25. Infection, Eye
26. Infection, Leg
27. Infection Wound
28. Lightheadedness
29. Lethargy
30. Mental Status Change
31. Nausea and Vomiting
32. Nausea, Vomiting, and Diarrhea
33. Neutropenia
34. Shortness of Breath
35. Sore Throat
36. Swelling
37. Upper Respiratory Infection
38. Upper Respiratory Infection Signs and Symptoms
39. Urinary Tract Infection
40. Vomiting
41. Weakness
42. Wound Check

Supplemental Table 2: Sepsis vs. Non-Sepsis Discharge Codes								
	Total	p Value^	Lactate > 2	p Value^	Lactate > 3	p Value^	Lactate > 4	p Value^
Total Cohort								
Patients, n (%)	6906							
Lactate Performed, n (%)	5179 (74.1)	p < .0001	1344 (26)	p = .1069	444 (8.6)	p = .3227	188 (3.6)	p = .3064
Admit, n (%)	4161 (60.2)		1101 (82.3)		397 (89.2)		171 (91)	
ICU, n (%)	343 (5.0)		175 (15.9)		102 (22.9)		65 (34.6)	
IHM^{&}, excluding HC period, n (%)[#]	275/4053 (6.8)		103/1080 (9.5)		58/389 (14.9)		35/167 (21)	
Sepsis Diagnosis Assigned								
Patients, n (%)	2665 (38.6)		488 (18.3)		162 (6.1)		66 (2.5)	
Lactate Performed, n (%)	2089 (78.4)							
Admit, n (%)	1491 (56)		409 (83.8)		151 (93.2)		63 (95.5)	
ICU, n (%)	154 (10.5)		89 (21.8)		50 (33.1)		39 (61.9)	
IHM, excluding HC period, n (%)	94/1416 (6.6)		43/397 (10.8)		28/147 (19)		18/59 (30.5)	
No Sepsis Diagnosis Assigned								
Patients, n (%)	4241* (61.3)		858 (20.2)		285 (6.7)		123 (2.9)	
Lactate Performed, n (%)	3133 (73.9)	p = .1142						

Admit, n (%)	2737 (64.5)	p = .0035	697 (81.2)	p = .7109	245 (86)	p = .5709	111 (90.2)	p = .7981
ICU, n (%)	178 (6.5)	p < .0001	79 (9.2)	p < .0001	51 (20.1)	p = .0376	34 (30.6)	p = .0122
IHM, excluding HC period, n (%)	187/2625 (7.1)	p = .5891	60/688 (8.7)	p = .3003	31/242 (12.8)	p = .1561	17/110 (15.5)	p = .0665
&IHM, In-Hospital Mortality; #Excludes patients from HC period, with no IHM information								
*Includes 9 patients with no discharge ICD-9 codes								
^Chi-square test								