

BACKGROUND

Increasing costs and lack of access to healthcare in the United States has led to many using emergency services in place of primary medicine, creating a larger strain on an already burdened hospital system. It is not uncommon for the adult emergency department (AED) at University Medical Center (UMC) to see over 200 patients on high volume days with 20-30 new patients arriving during peak hours. The assignment of only 2-4 providers to the initial triage area can easily become overwhelmed during busy hours, contributing to longer wait times, exacerbation or worsening of symptoms and ultimately poorer patient outcomes. The introduction of AED triage protocols allows emergency department nurses to implement order sets when a patient is presenting with symptoms and matches given criteria. The protocols are meant to achieve earlier identification of critically ill patients that often get missed such as NSTEMI, ectopic pregnancies, and pneumothorax patients. In addition to early identification, the protocols allow for earlier intervention leading to more efficient treatment, better patient outcomes and decreased length of stay within the emergency department.



PURPOSE

The implementation of nurse driven protocols in the AED ensures that patients are provided care in a more timely manner. This leads to improved patient care, departmental throughput, and overall satisfaction.

METHODS

Chest pain

- Insert peripheral IV
- CBC with auto differential
- Comprehensive metabolic panel
- Troponin (current time, then 2 hours after) if 3rd trop is needed, get Cardiology approval
- ECG 12-lead



Abdominal Pain

- Insert peripheral IV
- CBC with auto differential
- Comprehensive metabolic panel
- Liver Panel
- Lipase
- Urinalysis with Reflex to Microscopic
- Urine Culture
- ECG 12-lead

Sepsis Screen

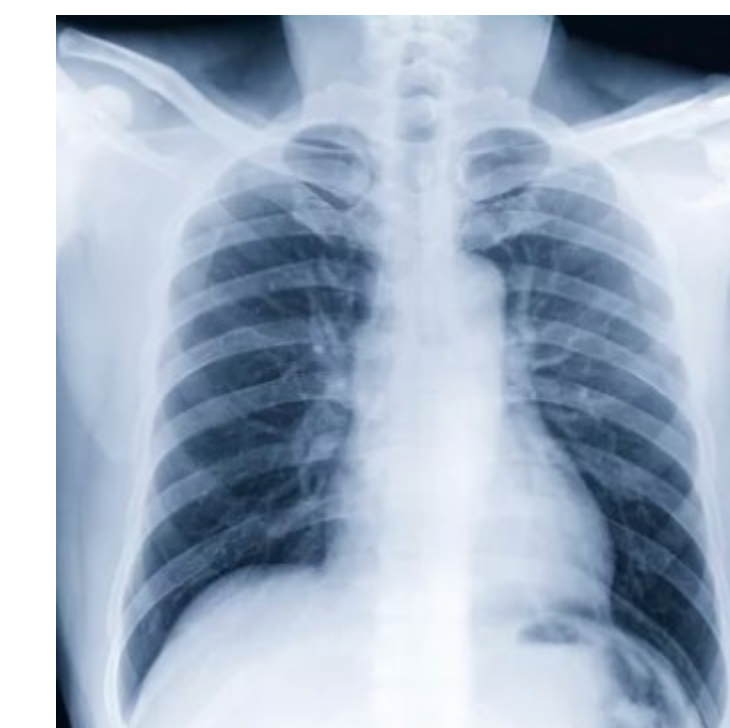
- Insert peripheral IV
- CBC with auto differential
- Comprehensive metabolic panel
- PT and APTT
- Lactic acid
- Blood gas, venous
- HIV and HIV-2 antigen and antibody screen
- Blood cultures, peripheral #1
- Blood cultures , peripheral #2
- ECG 12-lead

Vaginal Bleeding

- Insert peripheral IV
- CBC with auto differential
- Comprehensive metabolic panel
- hCG, serum, qualitative (females 55 years old or less)
- Type and screen
- Urinalysis with Reflex to Microscopic

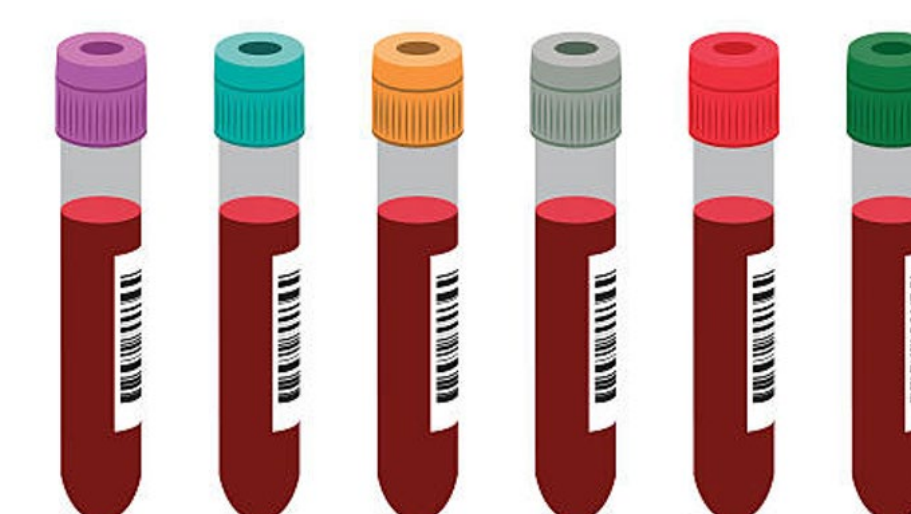
SOB/Cough/Wheezing

- Insert peripheral IV
- CBC with auto differential
- Comprehensive metabolic panel
- Lactic acid
- HIV and HIV-2 antigen and antibody screen
- Blood cultures, peripheral #1
- Blood cultures , peripheral #2
- ECG 12-lead



Syncope

- Insert peripheral IV
- CBC with auto differential
- Comprehensive metabolic panel
- Troponin (current time, then 2 hours after) if 3rd trop is needed, get Cardiology approval
- ECG 12-lead
- POCT Glucose



RESEARCH

Overcrowding is a common problem many emergency departments around the world face. Nurse driven protocols are one strategy to combat delays in care and length of stay in the AED (Douma et al, 2016).

Life-threatening conditions such as sepsis and other ambiguously presenting illnesses are more likely to have positive patient outcomes with the implementation of nurse driven protocols (Moore et al, 2019).

A systematic review of nurse driven protocols in over 26,000 studies indicated that patient length of stay was significantly shortened while prioritizing patient safety and satisfaction (Soster et al, 2022).

CONCLUSIONS

Research has shown the benefits of using nurse driven protocols in adult emergency departments. The protocols at UMC are being implemented in accordance with evidence based practice to improve patient safety and expedite care.

REFERENCES

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Moore, W. R., Vermuelen, A., Taylor, R., Kihara, D., & Wahome, E. (2019). Improving 3-hour sepsis bundled care outcomes: Implementation of a nurse-driven sepsis protocol in the emergency department. *Journal of Emergency Nursing*, 45(6), 690–698. <https://doi.org/10.1016/j.jen.2019.05.005>

Soster C.B., Anschau F, Rodrigues NH, Silva LGAD, Klafke A. Advanced triage protocols in the emergency department: A systematic review and meta-analysis. *Rev Lat Am Enfermagem*. 2022;30:e3511. doi: 10.1590/1518-8345.5479.3511. PMID: 35293563; PMCID: PMC8966058.

