was not altered by treatment plan. In conclusion, the results of this study show that a delayed cardioversion approach to management of recent-onset atrial fibrillation is not inferior in obtaining sinus rhythm at 4 weeks.

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Commentary: Much debate exists about whether or not cardioversion should be attempted in the emergency department for recent onset atrial fibrillation. While a larger patient sample would be needed to ensure safety of a delayed cardioversion, this well-done trial shows that the delayed approach may be promising given that both groups had similar rates of returning to sinus rhythm at 1 month and low rates of adverse events. Showing noninferiority may be particularly helpful for those who are practicing in centers where early cardioversion is not always feasible or where resources are limited. This is also helpful to provide clinicians an opportunity to better practice shared decision making when it comes to the treatment options.

☐ DIFFERENCES IN HOSPITAL OUTCOMES FOLLOWING TRAUMATIC INJURY FOR PATIENTS EXPERIENCING IMMEDIATE TRANSFER TO A LEVEL 1 TRAUMA FACILITY VERSUS RESUSCITATION AT A CRITICAL ACCESS HOSPITAL (CAH).

Windorski J, Reyes J, Helmer SD, et al. *The American Journal of Surgery.* 2019;217:643-647

It is well accepted that trauma patients have better outcomes when they receive definitive care by a specialized trauma team. However data is conflicting on whether initial trauma resuscitation also needs to happen at a specialized trauma center or if critical access hospitals can provide comparable, efficient care with subsequent transfer for definitive care.

The objective of this study was to determine if rural trauma patients who were initially resuscitated at a critical access hospital then subsequently transferred to a tertiary center had similar outcomes compared to patients who were initially transported to a level 1 trauma center from the scene. A retrospective database review was completed of adults trauma patients between January 1, 2009 to May 31, 2014 who arrived at a level 1 trauma center in Kansas either directly from the scene or transferred from a critical access hospital. Critical access hospitals were defined as those having no trauma designation. Out of state and local ground EMS trauma patients were excluded. Patients were stratified within each group based on injury severity score, presence of shock (systolic blood pressure <90), and initial Glasgow coma scale (GCS). The primary outcomes measured were mortality, ventilator duration, intensive care unit length of stay, and hospital length of stay.

Ten thousand one hundred and thirty two trauma patients were identified however after the exclusion of local ground transport, out of state transports, and patient from a hospital with a trauma designation, only 1,478 patients were included in this study. Three hundred and ninety four (26.7%) patients were transported directly to a level one trauma center and the other 1,084 (73.3%) patients were first resuscitated at a critical access hospital and then transferred to a level one trauma center for definitive care. Overall, the patients transported directly to a level 1 trauma center were younger ($p<0.001$), had a larger percentage with a GCS <9 ($p<0.001$), were more frequently hypotensive ($p<0.001$), and had a higher injury severity index ($p<0.001$). Almost all of the patients in both groups sustained blunt trauma ($p=0.282$). Patients triaged at a critical access hospital had a similar mortality (OR 0.7, 95% CI 0.41-1.2) and hospital length of stay (OR 0.82, 95% CI 0.7-0.97) to patients triaged at a level one trauma center when adjusted for age, index severity score, GCS score, and hypotension. The use of a critical access hospital was associated with decreased intensive care days (<0.001) but no difference in ventilator days ($p=0.082$), however neither of these were adjusted for age, index severity score, GCS score, or hypotension.

There were a few limitations to the study. To start with this study was retrospective which introduces both selection bias and information bias. The study also did not include any information regarding pre-hospital interventions, resuscitation details at the critical access hospital, or transport time. All of these factors could better explain the comparable mortality between the groups and the decreased morbidity in the critical access hospital group.

The authors concluded that the use of critical access hospitals for the initial resuscitation of trauma patients with subsequent transfer to a tertiary care center for definitive care did not increase mortality after adjusting for age, injury severity, hypotension, and GCS. They also concluded critical access hospitals improved morbidity as shown by both decreased hospital and intensive care unit length of stay, but not ventilator days.

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Comment: Given these data showing morbidity benefits without mortality differences, this study highlights the importance of triage and initial trauma resuscitation at a critical access hospitals. However, these differences could also be due to the fact the group transferred directly to the level one trauma center was sicker as evidenced by a lower GCS, more hypotension, and a higher index of injury severity. Also this study was completed within the state of Kansas only so the generalizability of this data to other areas may be difficulty depending on the type of trauma network available. Finally, this was a small retrospective study and needs to be reproduced with larger, multi-center prospective studies to better elucidate mortality and morbidity benefits.

☐ PREGNANCY-ADAPTED YEARS ALGORITHM FOR DIAGNOSIS OF SUSPECTED PULMONARY EMBOLISM.

Van der Pol LM, Tromeur C, Bistervels IM, et al. *N Engl J Med.* 2019 Mar 21; 380:1139. (https://doi.org/10.1056/NEJMoa1813865)

Pregnancy is associated with an increased risk of thromboembolic events, including pulmonary emboli. This study