Ashley Regional Medical Center: Using Get With The Guidelines®-Coronary Artery Disease Rural Chest Pain and Suspected ACS Measures to Improve Overall Cardiac Risk Stratification Compliance in a Rural Emergency Department

Kathryn Kidd, RN Ashley Regional Medical Center, Dr. Nolan Brooksby, Ashley Regional Medical Center Alyssa Jenkins, American Heart Association, and Lori Hollowell, RN, American Heart Association

Background

Ashley Regional Medical Center (ARMC), located in Vernal, Utah is a 39 bed short-term acute care rural hospital serving Uintah, Duchesne and Daggett counties in Utah and Rio Blanco county in Colorado. ARMC is a Level IV trauma center, designated by the Utah State Department of Health as a stroke receiving facility and is chest pain accredited. We know that "Life expectancy gaps between rural and urban areas are increasing. Similar patterns have been seen for CVD and cardiovascular mortality, with a 40% higher prevalence of heart disease among rural residents."[1] The median 35+ heart disease/stroke age-adjusted death rate in Uintah County, UT is 355.2 per 100,000.[2] In January 2024, ARMC enrolled in the American Heart Association's Get With The Guidelines®-Coronary Artery Disease (GWTG-CAD) registry through participation in the Rural Health Care Outcomes Accelerator program. During their initial year of participation in the GWTG-CAD program, ARMC reviewed data related to Acute Chest Pain and Suspected Acute Coronary Syndrome (ACS). This evaluation revealed a chance to standardize the application of an evidence-based cardiac risk score.

Objectives

Increase the number of patients presenting to the ED with a chief complaint of chest pain or suspected ACS who have a documented HEART (History, EKG, Age, Risk Factors and Initial Troponin results) Score and to adopt care pathways that incorporate low, intermediate, or high-risk levels into 2021 Chest Pain guideline[3] directed evaluation and follow up.

Methods

- Selected the HEART Score as the preferred cardiac risk stratification scoring tool
- Developed cardiac risk stratification protocols
- Provided educational trainings to doctors, nurses, and Emergency Medical Director on the importance of performing a structured cardiac risk assessment on every applicable patient and how to utilize Chest Pain Pathway developed within electronic medical record (EMR)
- Added the HEART Score to EMR for documentation
- Began reporting chest pain/suspected ACS population to GWTG-CAD
- Established a schedule for quarterly report evaluation of the GWTG-CAD Rural Chest Pain Suspected ACS Measures
- Shared individualized feedback to ED providers

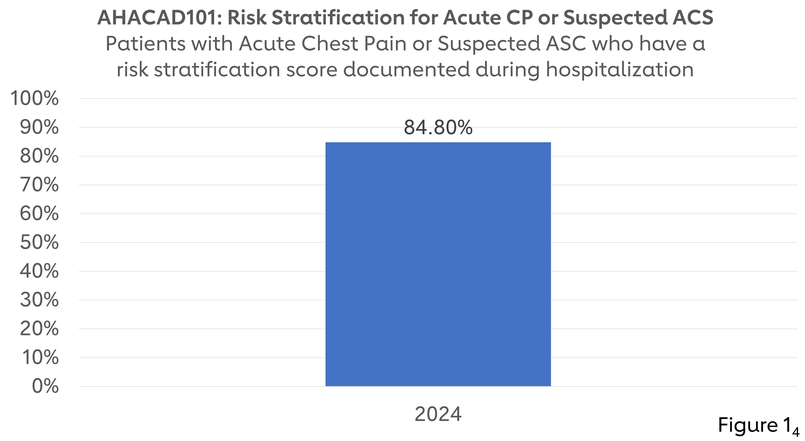

Figure 1[4]

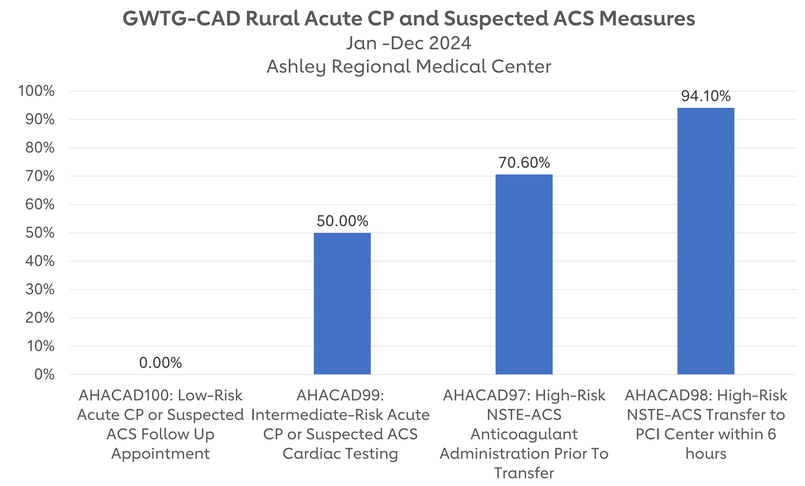

Figure 2[4]

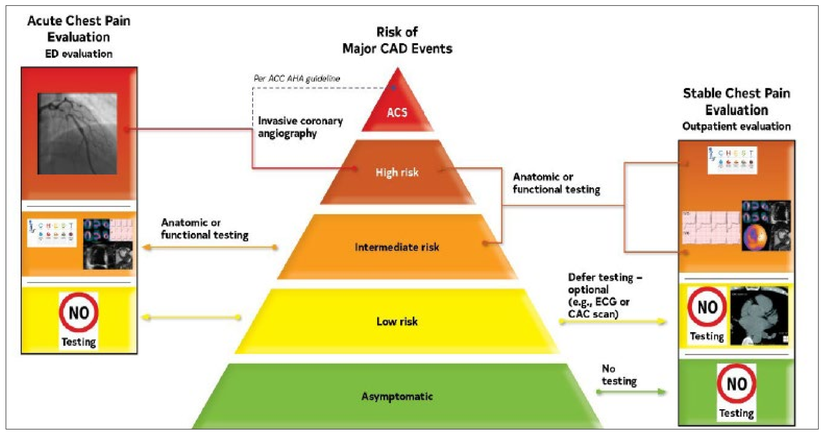

Figure 3[3]

Results

In 2024, GWTG-CAD AHACAD101 measure data showed a cardiac risk stratification score was documented in 39 of 46 (84.8%) of patients presenting to the Emergency Department with cardiac chest pain and/or suspected ACS. Within the patients who had a cardiac risk score completed 0 of 17 (0%) of the low risk patients had a documented scheduled follow up appointment with a cardiologist or primary care provider, 1 of 2 (50%) intermediate risk patients had documentation of non-invasive cardiac testing performed during stay or were transferred to another acute care hospital for advanced cardiac care, 12 of 17 (70.6%) high risk patients received an anticoagulant prior to transfer to another acute care hospital and 16 of 17 (94.1%) high risk patients were transferred out to another acute care hospital within 6 hours of arrival to ARMC.

Conclusions

ARMC has successfully implemented documentation of structured cardiac risk stratification scores resulting in more consistent and standardized management of the chest pain/suspected ACS population. Future program goals include: improved scheduling of follow up appointments and risk score documentation in low-risk patients, assuring those with intermediate risk receive appropriate and timely non-invasive cardiac testing, and to increase the rate of anticoagulant administration prior to transfer for high-risk patients. A recommendation to others looking to optimize their rural chest pain/suspected ACS programs is to use the GWTG-CAD Rural ACS measure framework as the foundation to a multidisciplinary approach for incorporating standardized ED chest pain evaluation processes.

References

1.Call to Action: Rural Health: A Presidential Advisory From the American Heart Association and American Stroke Association Originally published10 Feb 2020 https://doi.org/10.1161/CIR.0000000000000753Circulation. 2020;141:e615–e644

2.Definitive Health, 2010-2020 County 35+ Age-Adjusted Rate per 100,000 Heart Disease/Stroke Deaths, July 2022.

3. 2021 AHA/ACC/ASE/CHEST/SAEM/SCCT/SCMR Guideline for the Evaluation and Diagnosis of Chest Pain: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines. Originally published 30Nov 2021 https://doi.org/10.1161/cir.0000000000001029

4.Get With The Guidelines – Coronary Artery Disease, Ashley Regional Medical Center, Rural Achievement Measures