

THE Value Initiative

Members in Action: Improve Quality & Patient Outcomes

Grady Health System – Atlanta, Ga. *Data Analysis Drives Population Health Efforts*

The AHA's Members in Action series highlights how hospitals and health systems are implementing new value-based strategies to improve health care affordability. This includes work to redesign the delivery system, manage risk and new payment models, improve quality and outcomes, and implement operational solutions.

Overview

Grady Health System uses artificial intelligence and predictive analytics to provide proactive care management and coordination for high-risk patients. By using data from Grady's electronic health record (EHR) system and integrating it with a vendor's patient-specific clinical and social economic data, the health system identifies patients most at risk for avoidable readmissions and preventable visits to the emergency department (ED).

The system focuses on patients with diabetes and chronic heart failure. By stratifying inpatients into red, yellow and green risk categories, Grady is able to direct assistance to the patients most in need of support. The data provides individualized patient-specific predictions, prioritizations, interventions and recommendations into the clinical workflow.

For example, patient navigators meet with these identified high-risk patients prior to discharge to offer guidance on medication management, post-discharge instructions, follow-up appointments and access to social services, such as transportation, housing or medication assistance.

Paramedics and nurse practitioners also conduct home visits following discharge to ensure patients are not experiencing negative medication side effects, wounds are healing properly, and there are no barriers to adhering to exercise and nutrition instructions. The teams also provide additional education and support to family members or caregivers and answer any questions.

Impact

Since implementing the program in 2017, Grady has reduced high utilizer inpatient utilization by 30% and ED utilization by 44%. In some cases, patients increased utilization of services because clinicians discovered previously untreated conditions.

Qualitatively, patients report high satisfaction with the program. "The team helped me understand how my medicine works, and their support gave me the strength to be an active participant in my own health. I feel like one of those posters – 'I wouldn't be here with out Grady.'" wrote one patient survey respondent.



Lessons Learned

Through the process, Grady officials learned the power of using data to guide care.

“Being able to have that data, that extra layer of information, has been really helpful,” said Shannon Sale, chief strategy officer. “Now we are able to target and use that data in a powerful way.”

Grady officials also learned it takes time for staff to trust the data and change behaviors, especially among clinicians. A third lesson learned is making sure staff are in place to act on the data and support patients’ recovery.

“That high touch – whether it’s a navigator, community health worker or social worker – has to be in place and have the right interaction with the patient to make it meaningful and have the right outcome,” said Sale.

Future Goals

With its 2019 EHR upgrade, Grady will be able to integrate data related to patients’ social determinants of health into the risk calculations, including patient-specific information on food access, housing, transportation, social support and health literacy. In addition, Grady aims to expand its predictive analytics capacity to patients at risk for pressure ulcers, falls and sepsis.

“We’re looking forward to guiding and refining both risks and interventions,” said Sale.



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