OBJECTIVES
The aims of this analysis were to describe health outcomes and treatment-related differences among incident hyperkalemia (HK) patients diagnosed in ambulatory, inpatient, and emergency room (ER) settings.

METHODS
Patients with an incident hyperkalemia diagnosis, confirmed by serum potassium (K) ≥ 5.5 mmol/L, following a kidney disease diagnosis between 2010-2018 were identified using the TriNetX platform, a U.S.-based electronic medical record network (Figure 1).

Treatment administered on the same day, health outcomes within 30 days, and retesting of K within 30 days after the incident diagnosis of HK were compared using chi-square tests and Kaplan-Meier curves across the setting of the diagnosis: ambulatory, inpatient, and ER.

RESULTS
The mean age of patients was 68 in inpatient (N=8,875), 66 in ambulatory (N=3,471), and 67 in ER (N=1,906) care settings. ER patients were more likely to have a higher probability of a second K test experience cardiovascular complications in the 30 days following the incident diagnosis. Although ambulatory and ER patients had a lower probability of a second K test experience cardiovascular complications in the 30 days following diagnosis.

CONCLUSIONS
Treatments and outcomes differed for patients who experienced a hyperkalemia event in an inpatient, ambulatory, or ER care setting. Novel treatments for hyperkalemia require a chronic diagnosis, which entails at least two K tests. Previous studies show retesting is uncommon, especially in primary care settings. However, most patients in the US receive a second K test within a year of the incident hyperkalemia event, regardless of care setting.