Reducing High Emergency Department Utilization at University of Colorado Hospital by Patients Experiencing Homelessness
Rebekah A. Davis, M2 MPH

Introduction
Emergency departments (EDs) across the country have been investigating who the highest utilizing patients are and how we can reduce their usage of expensive emergency care in favor of preventative and ambulatory services. Perusing the published literature, the highest ED utilizers are patients with mental health diagnoses, those with chronic conditions, especially substance use disorders, and those experiencing homelessness. The likelihood of becoming a high utilizer increases with each additional risk factor. Hospital systems have tried many different approaches to reduce ED visits. Case management was by far the most popular, though several creative solutions such as rapid primary care follow up, financial incentives and patient education were also piloted. Many studies noted that their interventions would likely be more effective if specifically designed for different subgroups. This project looked at how University of Colorado Hospital (UCH) could amend their ED flow and clinical care to better serve their patients experiencing homelessness.

Methods
The project was composed of varied methods including chart review, creation of a process map, and qualitative interviews. Chart review looked at patients designated as homeless who had visited the ED more than four times from January-June 2023 (n = 15). The needs assessment conducted in the ED consisted of 25 interviews with patients, doctors, nurses, case navigators, and social workers. The process map was created using several patient experiences to create a macro-view of the pathway through the ED.

Results
The chart review revealed that the UCH high utilizer population was in line with the broader literature; patients returned to the ED frequently due to mental health conditions, alcohol use disorder, and other complex chronic conditions. The needs assessment showed that ED providers do not know if the hospital tracks homelessness or where that information is located in the patient’s chart. The process map exposed opportunities to get the specialized Housing Transition Team involved in patient care as well as note homelessness status and future risk for the patient’s ongoing care team.

Recommendations
To begin making small changes with minimal expenditure, we saw benefit in educating clinicians on homelessness documentation, updating homelessness resources for ED providers, and improving the awareness and branding of the Housing Transition Team across the hospital network. If the organization feels it is committed to making more lasting changes, we suggest improved additional homelessness education for healthcare trainees, amending the clinical workflow to make homelessness status a more integral part of an ED visit, and data tracking to see if the efforts are working. Finally, there are high impact but high investment changes UCH could make including targeted homelessness care teams and investment in community resources and programs serving the unhoused population of Aurora, CO.