



# Research Week 2021

## An Ambulatory “A-ICU” Team for High-Utilizers in a Healthcare for the Homeless Setting: the SUMMIT Trial

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### Keywords

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### Abstract

**Background:** Medically complex patients experiencing homelessness make up a disproportionate number of high-cost, high-need patients. Ambulatory care unit (“A-ICU”) interventions aim to reduce excess hospitalizations.

**Objective:** To assess whether an A-ICU improves outcomes for high-utilizers with high poverty rates.

**Study Design:** Randomized Controlled Trial.

**Setting:** Urban Federally Qualified Health Center.

**Population:** Referred if patients had 1+ hospitalizations in prior six months, or had 2+ chronic medical conditions and/or active substance use or a mental health condition.

**Intervention:** SUMMIT is a stand-alone primary care team of care coordinator, an addictions-boarded physician, social workers, complex care nurse, pharmacist, and team manager, with a low staff-to-patient ratio and flexible scheduling versus treatment as usual care patient centered medical home.

**Outcomes/Analysis:** We assessed number of hospitalizations, ED visits, and primary care and behavioral health visits at 6-months. We also assessed patient reported outcomes including patient activation measure (PAM-10), patient experience (CAHPS), functional status (SF-12), and wellbeing question from the Edmonton Symptom Assessment System (ESAS). We used linear mixed effects models to examine mean change (95% CI) between arms in the intention-to-treat (ITT) group.

**Results:** 159 patients were enrolled with 80 randomized to SUMMIT. At six month, SUMMIT patients had higher hospitalization utilization (0.3 (-1.0, 1.5)) and primary care

visits (6.1 (1.8,10.4)), and lower ED visits (-1.1 (-3.7,1.6)) compared to usual care. SUMMIT participants also experienced higher patient activation (1.2 (-3.3,5.7)), improved communication (9.0 (-0.7, 18.7)) and coordination (9.2 (-3.1, 21.6)) patient experience domains, and had higher SF-12 Mental Health scores (2.2 (-2.5, 6.8)) and self-reported wellness rating (1.0 (0.1, 1.8))

**Conclusions:** SUMMIT improved mental health, functional status, and well-being, perhaps mediated through increased engagement in outpatient primary and behavioral health care. Though we did not see differences in hospitalizations at follow-up, six months may be too soon for the intervention to have an impact.