



# Research Week 2020

## An Ambulatory Intensive Care Unit (“A-ICU”) for Medically and Socially Complex Patients Improved Mental Health Functioning, Patient Well-Being, and Outpatient Engagement at 6-months: Interim Results of SUMMIT Randomized Controlled Trial.

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### Keywords

social determinants of health, addiction, primary care, improving quality of care

### Abstract

#### Background

People experiencing homelessness, co-morbid chronic medical conditions, and substance use disorder (SUD) make up a disproportionate number of high-cost, high-need patients. Intensive ambulatory care unit (“A-ICU”) interventions aim to improve patient engagement, quality of care, and reduce hospitalizations.

#### Methods

This is a preliminary analysis of a randomized trial of SUMMIT, an A-ICU for high-utilizers at a federally qualified health center that serves patients with high rates of poverty. SUMMIT is a stand-alone team consisting of care coordinators, an addictions-boarded physician, social workers, complex care nurse, pharmacist, and team manager, with a low staff-to-patient ratio and increased appointment flexibility. Patients were randomized to enroll in SUMMIT immediately or to remain in usual care. We assessed functional status using the 12-item short form survey (SF-12) and wellbeing from the Edmonton Symptom Assessment System (ESAS) at 6-months. We also examined primary care (PCP), mental health (MH), and hospital utilization.

#### Results

Of 139 patients enrolled, 52% (n=73) were randomized to SUMMIT. Average age was 54.7 years (+/-10.1), with the majority male (62.6%); a majority (60.4%) had high school education or less, 84.2% had very low income (<\$1000/month), 27.3% reported having an opioid use disorder, and 51.1% reported being homeless within the past year. In the six months prior to enrollment, participants averaged 7.3 (+/-1.2) PCP visits and 2.6 (+/-1.7)

hospitalizations. At follow up, SUMMIT patients had higher SF-12 Mental Health scores (46.5 vs 42.0,  $P<0.01$ ), and higher self-reported wellness rating (ESAS 6.3 vs 4.9,  $P<0.01$ ). SUMMIT patients had higher number of PCP visits (12.3 vs 4.9,  $P<0.01$ ) and MH visits (7.8 vs 6.4,  $P<0.01$ ) but hospital admissions did not differ between groups (1.94 vs 1.91,  $P=0.72$ ).

### Conclusions

SUMMIT improved mental health functional status and well-being, perhaps mediated through increased engagement in outpatient care. Six-months may be too soon for SUMMIT to impact utilization.