

**Submission Id: 4757**

**Title**

*Social Determinants of Health Correlations and Resource Usefulness at a Milwaukee Free Clinic for Uninsured Individuals*

**Priority 1 (Research Category)**

Social determinants and vulnerable populations

**Presenters**

Jessica Miller

**Abstract**

Context: Social determinants of health (SDOH) are the conditions in which people live that impact their health outcomes and functioning. Screening for SDOH needs enables delivery of comprehensive medical care and decreases morbidity and mortality. Because uninsured patients disproportionately face barriers to health care, addressing SDOH needs is especially critical in free and student-run clinics that serve this population.

Objective: We developed a process for assessing SDOH needs in a low-resource clinic. In doing so, we sought to describe the SDOH needs, SDOH need correlations, and resource utilization of Milwaukee's uninsured population.

Study Design and Analysis: In this cross-sectional study, we screened for eleven SDOH needs (medication affordability, housing, utilities, legal, education/work, substance use, mental health, health insurance, dental care, food insecurity, and other). We also assessed tetrachoric correlations between SDOH needs and patient-reported resource usefulness.

Setting: This study surveyed patients at a student-run clinic for uninsured individuals in Milwaukee, Wisconsin from October 2, 2021 to October 1, 2022.

Population Studied: This study surveyed uninsured adult patients (N=238). Respondents were mostly Black (36.6%, n=87) and female (60.9%, n=145), with an average age of 48.

Results: Dental care (64.7%) and health insurance (51.3%) were the most frequent SDOH needs (N=238). We found significant correlations ( $P \leq 0.05$ ) between various SDOH needs. Notably, mental health needs significantly correlated with dental ( $r=0.41$ ; 95% CI=0.19,0.63), medications ( $r=0.51$ ; 95% CI=0.30,0.72), utilities ( $r=0.39$ ; 95% CI=0.17,0.61), and food insecurity ( $r=0.42$ ; 95% CI=0.19,0.64). Food and housing ( $r=0.55$ ; 95% CI=0.32,0.78), housing and medications ( $r=0.58$ ; 95% CI=0.35,0.81), and medications and food ( $r=0.53$ ; 95% CI=0.32,0.74) were all significantly correlated with each other. Longitudinal assessment of patient-reported usefulness identified resource modifications that improved access to dental care and health insurance.

Conclusions: Understanding prominent SDOH needs and correlations informed resource curation and targeted interventions. Patient-reported data about resource usefulness prompted improvements in patient accessibility to various SDOH. This study is a proof-of-concept in longitudinally tracking SDOH needs at family medicine clinics to continuously improve clinical practices and psychosocial resources.