

**Submission Id: 3729**

**Title**

*The impact of the Affordable Care Act Medicaid expansion on acute diabetes complications in community health center patients*

**Priority 1 (Research Category)**

Diabetes and endocrine disease

**Presenters**

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**Abstract**

Context: Acute complications are responsible for the majority of morbidity and mortality of patients with diabetes. Health insurance increases access to needed healthcare and receipt of diabetes-related preventive care. The Affordable Care Act (ACA) Medicaid eligibility provision was enacted in 2014 with the goal of expanding coverage to all US citizens and legal residents. The ACA led to improvement in healthcare access and health outcomes among patients with diabetes. Objective: To understand whether patients with diabetes in states that expanded Medicaid had greater reductions in the rate of acute complications post-ACA than those in states that did not expand Medicaid. Study Design: Retrospective observational cohort study. Setting or Dataset: Electronic health record data: 274 community health centers from the Accelerating Data Value Across a National Community Health Center Network clinical research network. Population Studied: Non-pregnant adults (n=5,176) aged 19-64 without Medicare coverage history, newly diagnosed with diabetes in 2013 with  $\geq 1$  visit in each of the following periods: 2013, 2014-2016, 2017-2019. Outcome Measures: Rates of acute complications identified using ICD-9/10-CM codes and counted distinctly if the interval between each diagnosis was at least 10 days. Patients' annual acute complication rates were compared using a covariate-adjusted GEE Poisson model clustering on patients assuming an exchangeable working correlation. Outcome trends over time between expansion and non-expansion states were tested using interaction terms for time and expansion status. Results: From 2013 through 2019, annual acute complication rates declined overall for patients in both expansion (2013: 0.35; 2019: 0.18) and non-expansion (2013: 0.13; 2019: 0.10) states, with higher observed rates of acute complications in expansion (compared to non-expansion) states throughout the study period. Trends in acute complication rates were not parallel over time between expansion and non-expansion states ( $p < 0.01$ ), with a larger decline in expansion (compared to non-expansion) states immediately following the ACA (relative rate change from 2013 to 2015: -41% in expansion vs -1% in non-expansion). Conclusions: Our findings suggest that increased

access to health insurance following the ACA was associated with a reduction in acute complications among patients with diabetes in states that expanded Medicaid.