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Title

Multimorbidity burden for adults seeking care in community health centers living in different areas of social deprivation

Priority 1 (Research Category)

Multimorbidity

Presenters

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Abstract

Context: Neighborhood characteristics play an important role in health outcomes, especially for people who access care in community health centers (CHCs). Objective: This study evaluates rates of patient-level multimorbidity (≥2 chronic diseases) among CHC patients living in different areas of community-level social deprivation. Study Design and Analysis: Retrospective cohort study using Poisson mixed effects regression of the rates of morbidities by patient- and community-level characteristics including the social deprivation index (SDI). SDI is a composite measure of community-level income, education, employment, housing, household characteristics, transportation, and demographics. Morbidities included 22 chronic diseases recommended by the Department of Health and Human Services Multiple Chronic Conditions framework. Setting or Dataset: 1,412,038 patients from 9,362 Zip Code Tabulation Areas (ZCTAs) living in 27 states. Population Studied: Patients, ≥45 years from the OCHIN and HCN practice-based research networks. Intervention/Instrument: SDI (0-100) was categorized into quartiles using the patient's ZCTA at last known address. Higher SDI quartiles denote more deprivation. Outcome Measures: Rates of morbidities at date of last known address. Results: Overall, patients averaged 2.50 morbidities (standard deviation [SD] = 2.20). Most patients were 45-54 years of age (38.2%), female (56.0%), non-Hispanic White (37.4%), spoke English (69.8%), continuously <138% of the federal poverty line (FPL) (36.5%), and continuously insured (28.8%). In analytic models, patients in SDI quartiles 3 and 4 had a 7% and 10% higher rate of morbidities compared with SDI quartile 1. Older age groups had a higher rate of morbidities than 45-54 year age group (Incident Rate Ratio [IRR] 55-64: 1.26, IRR 65+: 1.48). Patients inconsistently over or under the 138% FPL threshold had a 10% higher rate of morbidities compared with those <138% of the FPL (IRR = 1.10). Patients who were continuously or discontinuously insured experienced a 54% and 97% higher rate in morbidities (IRRs = 1.54 and 1.97), respectively, compared with continuously uninsured patients. Conclusions: Patients residing in more socially-deprived areas experienced a higher rate of morbidity burden than those in less socially-deprived areas. Community health centers should target preventive care interventions to avert further morbidity development among safety-net populations.