



ED Visits for Ambulatory Care Sensitive Conditions are More Common when Economic Resources and Primary Care are Scarce

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RESEARCH OBJECTIVE

The AHRQ Prevention Quality Indicators in ED Settings (PQEs) find opportunities to reduce ED burden by measuring ED visits for ambulatory care sensitive conditions (ACSC). Ranging from non-traumatic dental conditions to influenza (without pneumonia), ACSC are potentially preventable and may vary from access barriers or economic conditions.

What is the association of economic conditions and healthcare access with ED visits for ACSCs, measured with the AHRQ PQEs?

STUDY DESIGN

Logistic regressions of the occurrence of AHRQ Prevention Quality Indicators in ED Settings (PQEs) on county-level economic deprivation and healthcare access measures.

- ▶ With county random effects, adjusted for age & sex.

Independent Variables	Dependent Variables
Economic Conditions: (decile rankings by county)	AHRQ Prevention Quality Indicators in ED Settings (PQEs): (probability that a resident of a given county will experience an ED visit in the year)
Proportion of residents in poverty	■ PQE 01 Visits for Non-Traumatic Dental Conditions in ED Settings
Median household income	■ PQE 02 Visits for Chronic Ambulatory Care Sensitive Conditions in ED Settings (e.g., asthma, COPD, heart failure, diabetic complications, chronic kidney disease, lower respiratory infection)
Ambulatory Care Access: (decile rankings by county)	■ PQE 03 Visits for Acute Ambulatory Care Sensitive Conditions in ED Settings (e.g., Uncomplicated cystitis, upper respiratory infection, influenza without pneumonia, cellulitis/local skin infection)
Primary Care Provider (PCP) density	■ PQE 04 Visits for Asthma in ED Settings
Proportion of residents who are uninsured	■ PQE 05 Visits for Back Pain in ED Settings

POPULATION STUDIED

AHRQ Healthcare Cost and Utilization Project (HCUP) State Inpatient Databases (SID) and State Emergency Department Databases (SEDD), 2019: **112,987,260 discharges, 41 States:** AK, AR, AZ, CA, CO, CT, DC, FL, GA, HI, LA, IL, IN, KS, KY, MA, MD, ME, MI, MN, MO, MS, MT, NC, ND, NE, NH, NJ, NV, NY, OH, OR, RI, SC, SD, TN, TX, UT, VT, WI, and WY.

PRINCIPAL FINDINGS

- ▶ Residents of the most impoverished counties (measured by the proportion of residents in poverty) were more likely to have ED visits for ambulatory care sensitive conditions than residents of the least impoverished counties. In 2019, **residing in the most impoverished decile of counties was associated with higher probabilities of ED visits, from 74% (asthma ED visits) to 114% (acute care ED visits).** These associations were statistically significant.
- ▶ The same was true by median household income decile: for residents in the **lowest income decile** counties, ED visits were higher than those in the **highest decile** by **59%** (asthma ED visits) to **133%** (dental ED visits).
- ▶ While residents in counties with the poorest ambulatory care access (measured by **PCP density**) were **significantly more likely** to have an ACSC ED visit than those with the highest access, **differences were lower in magnitude than differences by poverty or income decile**, from 16% (asthma ED visits) to 104% (back pain ED visits). When accounting for median household income, differences shrank further for chronic and acute care visits and were no longer statistically significant for dental care, asthma, and back pain visits.

CONCLUSIONS

ED visits for ambulatory care sensitive conditions are more common when community resources (especially economic resources) are lower

- ▶ With the exception of visits for back pain, economic conditions appear to have a larger association with ACSC ED visits than ambulatory care access does.
- ▶ The association between ACSC ED use and PCP access may be related to economic conditions.

Researchers and policy leaders can use the AHRQ PQEs to:

- ▶ Measure how ED care needs change with economic conditions.
- ▶ Assess the effects of population health interventions.

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Learn more about the AHRQ PQEs:

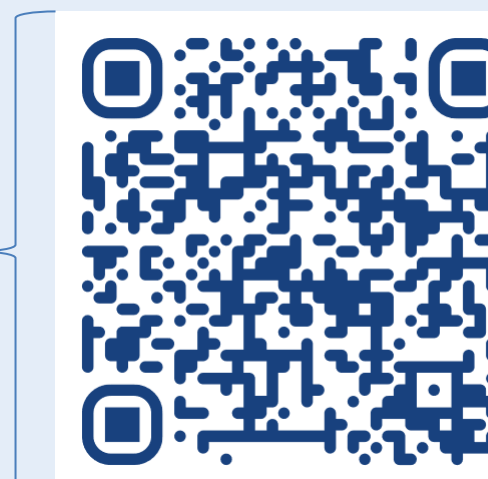
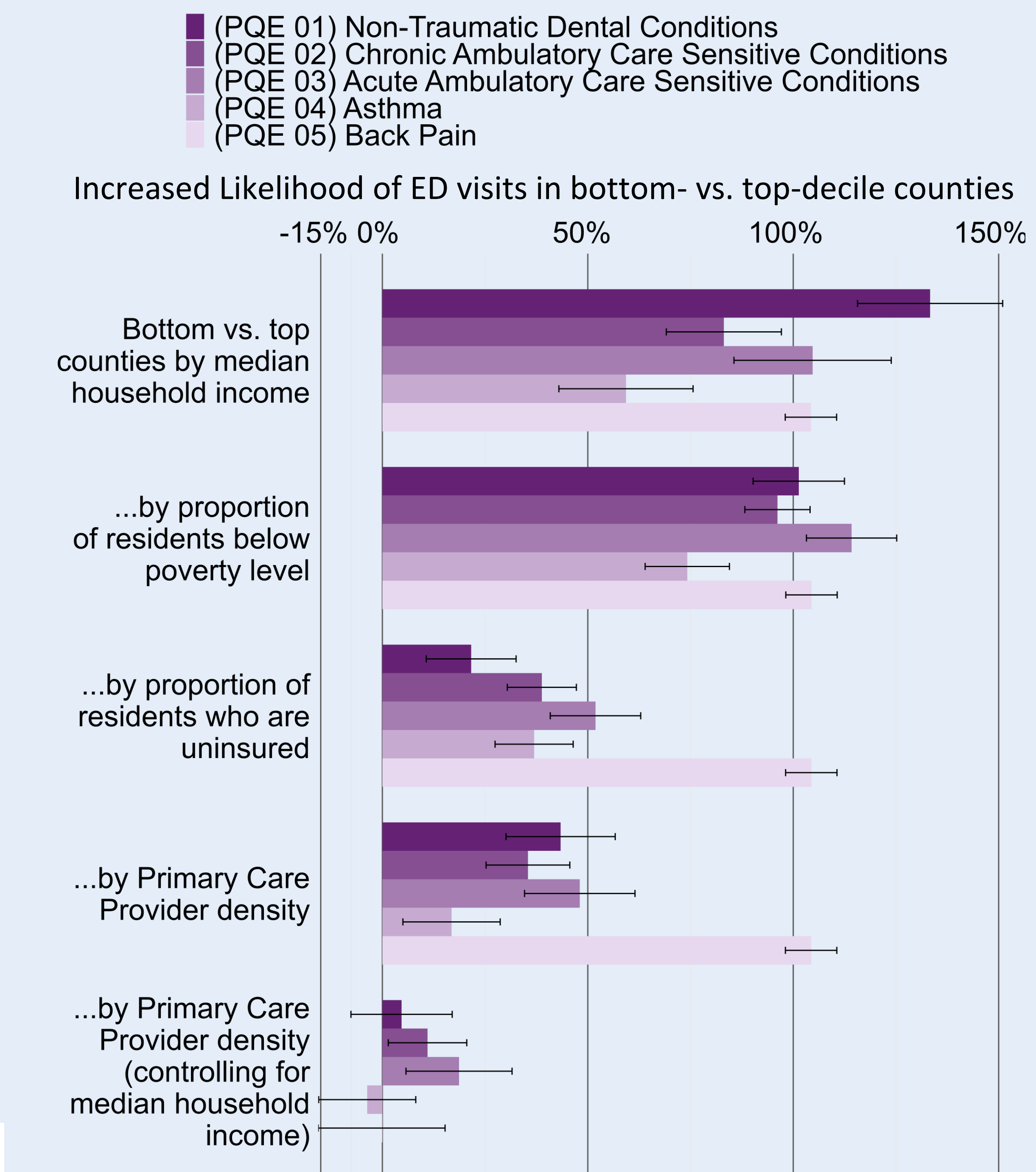


FIGURE 1. How much likelier are ED visits for ambulatory care sensitive conditions in counties with the worst economic conditions and access to care, compared to the best?



Abbreviations: ED, Emergency Department; COPD, Chronic Obstructive Pulmonary Disease; PQE, Prevention Quality Indicators in ED Settings, vs., versus.

Source: Agency for Healthcare Research and Quality (AHRQ), Healthcare Cost and Utilization Project (HCUP), State Inpatient Databases (SID), 2019, 41 States.