



## HEALTH INSURANCE EXPANSION AND INCIDENCE OF OUT-OF-HOSPITAL CARDIAC ARREST: A PILOT STUDY IN A US METROPOLITAN COMMUNITY

Poster Contributions

Poster Hall, Hall C

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**Background:** Health insurance has many benefits for individuals and populations, including improved financial security and better access to preventive care. However, the influence of health insurance on mortality and major health outcomes is unclear. We sought to examine changes in out-of-hospital cardiac arrest (OHCA) incidence after an abrupt expansion of Medicaid in a metropolitan area. We compared OHCA incidence among the non-elderly (who experienced a rapid reduction in rates of uninsurance) with the elderly (who had stable, near-universal insurance).

**Methods:** We conducted a pre-post study with control group examining OHCA among adult residents of Multnomah County, Oregon (2014 adult population 605,000). Two time periods surrounding implementation of the Affordable Care Act were evaluated: 2011-12 ("pre-expansion") and 2014-15 ("post-expansion"). The year 2013 was excluded as a transition year. The change in OHCA incidence for the middle-aged population (45-64 years old) with expanded access to insurance was compared to the elderly population (age ≥65 years old) with constant, near-universal insurance coverage

**Results:** Rates of OHCA among middle-aged individuals decreased from 102 per 100,000 (95% CI: 92 to 113 per 100,000) pre-expansion to 85 per 100,000 (95% CI: 76 to 94 per 100,000) post-expansion, p-value 0.01. The elderly population experienced no change in OHCA incidence, with rates of 275 per 100,000 (95% CI: 250 to 300 per 100,000) and 269 per 100,000 (95% CI: 245 to 292 per 100,000), p-value 0.70. In secondary analyses, OHCA incidence decreased by 15% (95% CI: 3.3% to 34%) among the all non-elderly adults ages 18-64.

**Conclusions:** Health insurance expansion for non-elderly residents of Multnomah County Oregon was associated with a significant reduction in incidence of OHCA of primary cardiac etiology. Further investigation is required to determine whether this improvement is directly related to improved cardiovascular preventive care.