

ED Visits Increased in States That Expanded Medicaid

BY JEFF BAUER

There was a substantial increase in the number of ED visits in states that expanded Medicaid coverage in 2014, after the Affordable Care Act was implemented, and a decrease in the number of ED visits by uninsured patients, according to a study published in *Annals of Emergency Medicine*.

Researchers analyzed quarterly data on ED visits from the Agency for Healthcare Research and Quality's Fast Stats database, which is an early-release, aggregated version of the State Emergency Department Databases and State Inpatient Databases. They compared changes in ED visits per capita and changes in share of ED visits by payer (Medicaid, uninsured, and private insurance) in states that did and did not expand Medicaid coverage in 2014.

The analysis included 25 states: 14 Medicaid expansion states (Arizona, California, Hawaii, Iowa, Illinois, Kentucky, Maryland, Minnesota, North Dakota, New Jersey, Nevada, New York, Rhode Island, and Vermont) and 11 nonexpansion states (Florida, Georgia, Indiana, Kansas, Missouri, North Carolina, Nebraska, South

Carolina, South Dakota, Tennessee, and Wisconsin). Researchers defined visits that occurred during all 4 quarters of 2012 and the first 3 quarters of 2013 as the pre-expansion period, and visits from the first through fourth quarters of 2014 as the postexpansion period. Visits that occurred during the fourth quarter of 2013 were not included in the analysis because Medicaid coverage began to increase in the final quarter of 2013 for most states.

Overall, researchers found that after 2014, ED use per 1,000 people per quarter increased by 2.5 visits more in expansion states compared to nonexpansion states. Researchers estimated that 1.13 million ED visits in 2014 could be attributed to Medicaid expansion in these states. In expansion states, the share of ED visits by Medicaid patients increased by 8.8 percentage points and the share of visits by insured patients decreased by 5.3 percentage points, compared to nonexpansion states. The share of visits by insured patients did not change for expansion states but increased slightly for nonexpansion states.

An American College of Emergency Physicians press release about this study included editorial comments by Ari Friedman, MD, of Beth Israel Deaconess Medical Center in Boston, who said, "More emergency department visits by Medicaid beneficiaries is neither clearly bad nor clearly good. Insurance increases access to care, including emergency department care. We need to move beyond the value judgments that have dominated so much study of emergency department utilization towards a more rational basis for how we structure unscheduled visits in the health system. If we want to meet patients' care needs as patients themselves define them, the emergency department has a key role to play in a flexible system."

Nikpay S, Freedman S, Levy H, Buchmueller T. Effect of the Affordable Care Act Medicaid expansion on emergency department visits: evidence from state-level emergency department databases. *Ann Emerg Med*. 2017 June 26. [Epub ahead of print]. doi:<http://dx.doi.org/10.1016/j.annemergmed.2017.03.023>.



© Graphics/cleanphotos/Shutterstock

Child Firearm Suicide at Highest Rate in More Than a Decade

MOLLIE KALAYCIO

FRONTLINE MEDICAL NEWS

Boys, older children, and minorities are disproportionately affected when it comes to firearm injuries and deaths in US children and adolescents, and child firearm suicide rates are at the highest they have been in more than a decade, new study results revealed.

Approximately 19 children are either medically treated for a gunshot wound or killed by one every day in the United States. “The majority of these children are boys 13-17 years old, African American in the case of firearm homicide, and white and American Indian in the case of firearm suicide. Pediatric firearm injuries and deaths are an important public health problem in the United States, contributing substantially each year to premature death, illness, and disability of children,” said Katherine A. Fowler, PhD, of the National Center for Injury Prevention and Control, Atlanta, and her associates. “Finding ways to prevent such injuries and ensure that all children have safe, stable, nurturing relationships and environments remains one of our most important priorities.”

National data on fatal firearm injuries in 2011-2014 for this study were derived from death certificate data from the Centers for Disease Control and Prevention’s (CDC’s) National Vital Statistics System, obtained via the CDC’s Web-based Injury Statistics Query and Reporting System. Data on nonfatal firearm injuries for 2011-2014 were obtained from the National Electronic Injury Surveillance System.

“From 2012 to 2014, the average annual case fatality rate was 74% for firearm-related self-harm, 14% for firearm-related assaults, and 6% for unintentional firearm injuries,” the investigators reported.

Boys accounted for 82% of all child firearm deaths from 2012 to 2014. In this time period, the annual rate of firearm death for boys was 4.5 times higher than the annual rate for girls (2.8 vs. 0.6 per 100,000). This difference was even more pronounced by age, with the rate for 13- to 17-year-old boys being six times higher than the rate for same-aged girls. Similarly, boys suffer the majority of nonfatal firearm injuries treated in US EDs, accounting for 84% of all nonfatal firearm injuries medically treated each year from 2012 to 2014. The average annual rate of nonfatal firearm injuries for boys was five times the rate for girls at 13 vs. 3 per 100,000.

The annual rate of firearm homicide was 10 times higher among 13- to 17-year-olds vs. 0- to 12-year-olds (3 vs. 0.3 per 100,000). Unintentional firearm death rates were approximately twice as high when comparing these two groups (0.2 vs. 0.1 per 100,000).

Dr Fowler and her associates wrote, “Our findings indicate that most children who died of unintentional firearm injuries were shot by another child in their own age range and most often in the context of playing with a gun or showing it to others. More than one-third of the deaths of older children occurred in incidents in which the shooter thought that the gun was unloaded or thought that the safety was engaged.”

“Child firearm suicide rates showed a significant upward trend between 2007 and 2014, increasing 60% from 1.0 to 1.6 ($P < .05$) to the highest rate seen over the period examined,” Dr Fowler and her associates said.

Firearm suicide rates were 11 times higher among 13- to 17-year-olds vs. 10- to 12-year-olds (2 vs. 0.2 per 100,000). Older children also accounted for 88% of all nonfatal firearm injuries treated in an ED. The overall average annual rate of nonfatal firearm injuries for older children was 19 times that of younger children (24 vs. 1 per 100,000).

The annual firearm homicide rate for African American children was nearly 10 times higher than the rate for white children (4 vs. 0.4 per 100,000). However, the annual rate of firearm suicide among white children was nearly four times higher than the rate for African American children (2 vs. 0.6 per 100,000).

Awareness of the availability of firearms during times of crisis is crucial because suicides are often impulsive in young people, Dr Fowler and her associates said, “with previous findings indicating that many who attempt suicide spend 10 minutes or less deliberating. Safe storage practices (ie, unloading and locking all firearms and ammunition) can potentially be lifesaving in these instances,” as the results of previous studies in this age group attest.

Firearm deaths are the third leading cause of death overall among children in the United States aged 1-17 years, beating pediatric congenital anomalies, heart disease, influenza/pneumonia, chronic lower respiratory disease, and cerebrovascular causes. Understanding the nature, scale, and impact of firearm violence against children is an important first step, concluded Dr Fowler and her associates.

Fowler KA, Dahlberg LL, Haileyesus T, Gutierrez C, Bacon S. Childhood firearm injuries in the united states. *Pediatrics*. 2017;140(1):e20163486.