Journal of Adolescent Health ■■ (2018) ■■–■■

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JOURNAL OF ADOLESCENT HEALTH

www.jahonline.org

Original article

Health Care Coverage and Access Among Children, Adolescents, and Young Adults, 2010–2016: Implications for Future Health Reforms

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Article history: Received June 6, 2017; Accepted December 21, 2017
Keywords: Child; Adolescent; Young adult; Health insurance; Health services accessibility

A B S T R A C T

Purpose: We examine changes to health insurance coverage and access to health care among children, adolescents, and young adults since the implementation of the Affordable Care Act.
Methods: Using the National Health Interview Survey, bivariate and logistic regression analyses were conducted to compare coverage and access among children, young adolescents, older adolescents, and young adults between 2010 and 2016.
Results: We show significant improvements in coverage among children, adolescents, and young adults since 2010. We also find some gains in access during this time, particularly reductions in delayed care due to cost. While we observe few age-group differences in overall trends in coverage and access, our analysis reveals an age-gradient pattern, with incrementally worse coverage and access rates for young adolescents, older adolescents, and young adults.
Conclusions: Prior analyses often group adolescents with younger children, masking important distinctions. Future reforms should consider the increased coverage and access risks of adolescents and young adults, recognizing that approximately 40% are low income, over a third live in the South, where many states have not expanded Medicaid, and over 15% have compromised health.

IMPLICATIONS AND CONTRIBUTION

Analyses of coverage and access often group adolescents with younger children, masking important distinctions. This analysis reveals an age-gradient pattern, with incrementally worse coverage and access for young adolescents, older adolescents, and young adults. Future health reforms should consider the vulnerabilities of both adolescents and young adults.

Reports of health insurance coverage and access to health care typically provide separate rates for children and nonelderly and elderly adults, and it is well documented that young adults are among those at highest risk of uninsurance [1,2]. From birth through young adulthood, however, important shifts in insurance availability occur from "aging out" of public programs and changes in residence and income, among other factors [3–6].

Conflicts of interest: All seven authors report no conflicts of interest. The authors listed above prepared the manuscript. No honorarium, grant, or other form of payment was given to anyone to produce the manuscript. The authors acknowledge support from the Robert Wood Johnson Foundation's State Health Access Data Assistance Center (SHADAC).
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1054-139X/
https://doi.org/10.1016/j.jadohealth.2017.12.012

During this formative period, access to care also shifts due to insurance fluctuations, changing health needs, and challenges in transitioning from pediatric to adult care, including delays in finding a new usual source of care [6–9]. Linkages to insurance and care during childhood positively affect health and predict future adult health outcomes [10–12]. The National Academy of Medicine, in their groundbreaking studies on adolescent [13] and young adult health [10], acknowledged the significance and volatility of the ages from 10 to 26 and called for greater attention to the many transitions that result in gaps in insurance coverage and needed health care.

Several provisions of the Affordable Care Act (ACA) sought to improve continuity in coverage and access to care for young people. Starting in 2010, the ACA enabled individuals with employer-sponsored insurance to continue coverage of dependent children until the age of 26. The ACA also eliminated preventive care cost sharing and pre-existing condition requirements, banned annual and lifetime limits on coverage, and offered small business tax credits to make coverage more affordable. In 2011, new investments were made to increase the number of primary care practitioners and community and school-based health centers. Most other ACA expansions went into full effect in 2014, including premium subsidies for non–group health insurance purchased via marketplaces, state Medicaid expansions that some states initiated as early as 2011 to childless adults and children ages 6–18 with incomes below 133% of the Federal Poverty Level (FPL), extended Medicaid eligibility for former foster care youth, elimination of Children's Health Insurance Program (CHIP) waiting periods, and an increased federal CHIP match rate [14].

Much has been written about the effects of the ACA, with studies documenting positive effects for both children and young adults [15–28]. Although there is pre-ACA research using 2009 data from the Medical Expenditure Panel Survey [7] and 2002 and 2003 data from the National Health Interview Survey (NHIS) [5] examining access to coverage and health-care utilization among subgroups of children and young adults, there are no recently published studies that examine coverage and access differences among children, young adolescents, older adolescents, and young adults following ACA implementation.

With respect to ACA impacts on individuals under 18 years of age in general, published studies using nationally representative survey data from the American Community Survey and NHIS have consistently found reductions in uninsurance, increases in Medicaid/CHIP participation, and improvements in medical and dental care use [15,17,18,20]. As Urban Institute and Georgetown researchers noted, reductions in uninsurance among children began well in advance of the ACA, but new public and private insurance options for adults have had a strong "spillover effect" on continued coverage and access improvements for children [15,20]. With respect to ACA impacts on young adults, published studies based on the American Community Survey, the Medical Expenditure Panel Survey, and NHIS data have documented solid reductions in uninsurance and mixed effects related to access to care associated with expansions in dependent private coverage, Medicaid, and non–group insurance through marketplace exchanges [16,21,22,26].

We analyze trends in the level of coverage and access for young children, young adolescents, older adolescents, and young adults since the initial ACA implementation in 2010 through 2016, 3 years following full implementation. We highlight findings for adolescent and young adult age groups compared with younger children and discuss implications for future health reform. As insurance reforms unfold in the current policy environment, attention to the distinctive needs of these age groups is warranted.

Methods

We used 2010–2016 data from the NHIS, an annual health survey of a representative sample of the U.S. civilian, noninstitutionalized population [29]. The data were drawn from the IPUMS Health Surveys: National Health Interview Survey, a harmonized, multiyear version of the NHIS public-use files [30]. The sample included individuals aged 0–25 years, totaling up to 39,399 sample members per survey year. The sample was divided into four age groups: young children (0–9 years), young adolescents (10–14 years), older adolescents (15–18 years), and young adults (19–25 years). These age groups correspond closely with the World Health Organization's definition of early and late adolescence [31] and align with the young adult coverage provision associated with the ACA, which provides protections for individuals through the age of 25.

Study outcomes included point-in-time health insurance coverage and three measures of health-care access. Individuals were coded as being uninsured, having private coverage (i.e., employer-based or nongroup), or having public insurance (e.g., Medicaid or CHIP). Very few individuals (approximately 1%) had both private and public sources of insurance, and they were combined with those with public coverage. Health-care access measures included whether an individual has a usual source of care, had a doctor/provider visit (general practice, family medicine, internal medicine) in the past year, and needed but delayed care due to costs in the past year. Other variables used in the analysis were gender, race/ethnicity, percent of FPL, region, self-reported health status, and having a limitation of activity. All variables were available for all members of sampled households, with the exception of usual source of care and past year doctor visit, which were collected only for one randomly selected adult and child within a sampled household. A responsible/knowledgeable adult completes the NHIS questionnaire for children aged 17 and younger [32].

All analyses were based on weighted data and accounted for the complex sample design of the NHIS using SAS 9.4 software (SAS Institute Inc., Cary, NC) and Stata 14 software (StataCorp, College Station, TX). Bivariate analyses using z-tests of significance were conducted to compare unadjusted rates of health insurance coverage and access among age groups over time. Specifically, we compared rates of coverage and access between subsequent years in the study period and between 2010 and 2016. We fit multivariable logistic regression models to predict insurance coverage as a function of age group categories, year dummies, and their interaction, controlling for gender, race/ethnicity, percent of FPL, region, health status, and activity limitation. The interaction terms were included to test differences in trends between age groups. We fit an identical model to predict each of the three access outcomes, except that we added insurance coverage as a covariate. Standard errors were estimated clustered at the sampling strata of the NHIS to obtain estimates that were robust to the presence of heteroskedasticity and autocorrelation. Since we introduce interaction terms and our estimation was not linear, it may not be straightforward to interpret the estimated coefficients. Thus, we show the marginal effects for the age groups and year dummies. These marginal effects were estimated using the margins command in Stata (StataCorp), which takes into account the interaction terms included in the model [33]. The marginal effects indicate the change in the probability of the outcome (measured in percentage points) of a specific age group or year in