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The Institutional Determinants of Health Insurance: Moving Away from Labor Market, Marriage, and Family Attachments under the ACA

Carmen M. Gutierrez[a]

[a]University of North Carolina at Chapel Hill

Abstract

For more than a century, the American welfare state required working-age adults to obtain social welfare benefits through their linkages to employers, spouses, or children. Recent changes to U.S. healthcare policy prompted by the Patient Protection and Affordable Care Act (ACA), however, provide adults with new pathways for accessing a key form of social welfare—health insurance—*decoupled from* employers, spouses, and children. Taking advantage of this fundamental shift in the country's system of social welfare provision, I use data from the National Survey on Drug Use and Health (NSDUH) to explore patterns of health insurance coverage from before and after the ACA became active in 2014. The results show that the salience of labor market, marriage, and family attachments as pathways to coverage significantly declined in the first three years following passage of the ACA. By providing adults with a new route to coverage *decoupled from* their institutional attachments, the ACA helped narrow health insurance inequalities across gender, race and ethnicity, and education. Given the strong association between health insurance and health outcomes, the results from this study raise important questions about the centrality of institutional attachments for our knowledge of health inequalities.

Keywords

welfare state; health care; stratification; inequality

For more than a century, the American welfare state required working-age adults to access social welfare benefits through their labor market, marriage, and family attachments (Béland and Waddan 2017; Skocpol 1995). These social policy arrangements helped support employed, married, and parenting adults, but offered unemployed, unmarried, and childless adults little protection against key social risks (Hacker 2004). As labor market, marriage, and family outcomes are themselves highly stratified, the provision of social welfare benefits was unequal across gender, race and ethnicity, and education (Quadagno 2005). Recent changes to U.S. healthcare policy prompted by the Patient Protection and Affordable Care Act (ACA), however, provide adults with a new pathway for accessing a key form of social welfare—health insurance—*decoupled from* employers, spouses, and children.

Corresponding Author: Carmen Gutierrez, University of North Carolina at Chapel Hill, Department of Public Policy, Abernethy Hall, 131 S. Columbia Street, Chapel Hill, NC 27599, carmen.gutierrez@unc.edu.

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Taking advantage of this fundamental shift in the country's system of social welfare provision, I use data from the National Survey on Drug Use and Health (NSDUH) to explore patterns of health insurance coverage from before and after activation of the ACA in 2014. To investigate the extent to which the historically constructed categories linking adults to social welfare benefits are dissolved by the ACA, I first compare whether and how the ACA differentially affects health insurance coverage among adults with and without certain labor market, marriage, and family attachments. Mapping these historically constructed linkages to patterns of durable inequality (Tilly 1998), I then examine the extent to which changes in health insurance vary across sociodemographic groups and test the extent to which the ACA contributes to sociodemographic disparities in coverage.

The passage of the ACA provides a unique opportunity to explore the effects of policy reform on the historically constructed categories linking American adults to social welfare benefits and raises important questions about the centrality of the country's welfare state in the formation of social inequalities, especially in the domain of health. Health insurance is a key aspect of the welfare state and a significant determinant of health. Compared to adults with health insurance coverage, uninsured adults experience worse health outcomes and shorter life expectancies (Institute of Medicine 2002). Expanding health insurance should improve uninsured adults' health by enabling access to more and higher-quality health services (Freeman et al. 2008; Hadley 2003; Levy and Meltzer 2008; McWilliams 2009).

From a policy perspective, this research provides an important snapshot of the short-term effects of the ACA that may endure in the long-run. Using the NSDUH's most recently available data, the analysis accounts for the first three years of change in the distribution of health insurance coverage since implementation of the ACA in 2014. By the end of this period (December 2016), about 12 percent of adults remained uninsured (Cohen, Zammitti, and Martinez 2017). According to projections from the Congressional Budget Office (CBO) (2016), the share of adults without health insurance is expected to stay at this level in the years ahead.

Exploring the impact of the ACA on the relationship between health insurance and institutional attachment is especially important as the current political climate casts doubt over the ACA's future. The ACA builds on, rather than eliminates, the traditional structuring of health insurance, so most people will continue accessing health insurance through existing institutional pathways (Quadagno 2010; Rosenbaum 2011). The extent to which adults will continue qualifying for coverage through their employers, spouses, and children, however, is unclear given how these life-course outcomes have become increasingly precarious in recent decades (Kohli 2007; Mayer 2004; Shanahan 2000). Understanding how the ACA affects health insurance coverage among adults can therefore deepen and advance our knowledge of population disparities in health, and, in the context of a dramatic and precarious shift in the U.S. healthcare system, has significant theoretical and policy relevance.

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THE MAKING OF THE WELFARE STATE

The United States never came close to adopting a “modern welfare state” whereby entitlements to social benefits are derived from citizenship or residency (Béland and Waddan 2017; Skocpol 1995). Rather, the U.S. welfare state developed unevenly in response to different historical conditions and pressure from different collective actors (Quadagno 2005; Skocpol 1995). Much of the making of the contemporary American welfare state can be summarized in three key phases of social policy development that were carried out over a century ago (Skocpol 1995).

The earliest phase of social policy that shaped the welfare state cemented a pathway for elderly adults and individuals with disabilities to receive government assistance. Fueled by political party competition during the late nineteenth century, the first national program of public social welfare provision in the United States developed through the expansion of Civil War pensions (Skocpol 1984, 1993). The federal government initially designed Civil War pensions to support veterans injured during the war as well as the surviving dependents of those killed in battle. In an effort to mobilize support from the country’s all male and mostly White democracy, eligibility for Civil War pensions expanded to include all Union veterans who *ever* became disabled and could not perform manual labor, regardless of whether they had been hurt in any way during their military service. Eventually, old age alone became a sufficient justification for veterans to receive pensions (Skocpol 1993, 1995).

Carried out in the early twentieth century, the second phase of social policy helped establish a place for children and single parents with dependents in the contemporary welfare state. During this period, as women remained excluded from the democratic process, elite and middle-class White women formed highly organized political alliances in an effort to promote their domestic and maternal values within national politics. These reformers successfully launched labor regulations for female workers, pensions for widowed wives and partners, and benefits and services for mothers and children. Social policies enacted during this period reflected maternalist values and reached broader categories of women than if these policies had been oriented more exclusively around wage-earning men (Skocpol 1995).

The third phase in the development of the American welfare state created a national private system of social welfare and, in turn, established the labor market as the primary source of social protection for the broader class of working-age adults. Unlike women reformers during the early twentieth century, working men of this era lacked a unified political consciousness that was required to establish social benefits through the welfare state (Skocpol 1995). Working men instead organized locally and demanded social welfare benefits from their employers. As the creation of this private system of social welfare took place at a time when women were largely absent from the labor force, employer-sponsored benefits were designed to support not just workers but also their wives.

The failure to adopt an inclusive welfare system for all workers is the predominant factor that prevented the United States from evolving into a social democratic welfare state with universal public social welfare benefits (Skocpol 1987, 1995). Underlying the lack of mobilization among working men was White workers’ resistance to unify with men

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of color, especially African American men. Government stakeholders also perpetuated a system of racially biased welfare throughout the history of social policy development. As the social security of African Americans—especially wage-earning, or sharecropping, men—threatened White supremacy, the formation of the contemporary American welfare state at the hands of mostly White political actors ensured social benefits for only certain groups of adults (Quadagno 2005).

HEALTH CARE AND HEALTH: A GLOBAL PERSPECTIVE

A key feature of contemporary welfare states in all advanced industrialized countries is the provision of health care (Bambra et al. 2010; Beckfield et al. 2015). In most of these "rich democracies" (Wilensky 2002), access to health care is equally distributed as a social right of citizenship through universal health insurance programs (Bambra 2005; Esping-Andersen 1990). The provision of health care in the United States, by contrast, is distinctly unequal (Quadagno 2005). Without a universal system of health care, U.S. citizens do not share an entitlement to health insurance coverage or a requirement to be covered (Hacker 2004).

The absence of a universal system of health insurance in the United States generates harmful consequences for the population, especially adults of working age. Compared to their peers in other high-income countries, adults in the United States are more likely to delay or forgo needed care and to experience financial debt from medical bills (Schoen et al. 2010). U.S. adults also receive fewer routine and preventive services, experience worse continuity of care, and are more likely to seek care in emergency departments (Blackwell et al. 2009; McCarthy et al. 2011; Organization for Economic Cooperation and Development 2017; Schoen et al. 2010).

With respect to measures of physical health, adults in the United States consistently rank at or near the bottom across a broad range of outcomes (Avendano and Kawachi 2014; Banks et al. 2006; Bezruchka 2012; Chung and Muntaner 2007; Coburn 2004; Kangas 2010; Korpi and Palme 1998; Lundberg et al. 2008; Navarro et al. 2006; Navarro and Shi 2001; Wolf-Maier et al. 2004; Woolf and Aron 2013). These gaps in health are especially pronounced when comparing deaths amenable to medical care, which suggests differences in the availability of health insurance explain at least part of the health disadvantages experienced by U.S. adults (Mackino, Starfield, and Shi 2003; Nolte and McKee 2008, 2012).

HEALTH INSURANCE IN THE UNITED STATES

Consistent with the general organization of the welfare state, U.S. healthcare policies have traditionally required working-age adults to access health insurance through their employers, spouses, or children. Access to health insurance in this system is available predominately through private sources and minimally through public programs.

The primary way U.S. adults obtain health insurance is by purchasing coverage in the private market through an employer-sponsored group plan (Fronstin 2007, 2012). In 2009, almost half (48 percent) of the adult population with health insurance gained coverage through their own employer-sponsored plans (Flood et al. 2018). An additional 29 percent of insured

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adults received coverage through a family member's or spouse's employer-sponsored plan. Employer-sponsored plans provided coverage to over 70 percent of insured adults (Flood et al. 2018). Adults without access to employer-sponsored health insurance have the option of purchasing individual coverage in the private "nongroup" market, but this coverage is more expensive and more difficult to obtain than employer-sponsored coverage (Pauly and Percy 2000). In 2009, only about 7 percent of adults were insured this way (Flood et al. 2018).

For individuals unable to obtain private coverage, limited access to public programs is available (Starr 2013). In the past, non-disabled adults were generally prohibited from using public health insurance except under strict circumstances. Pregnant women and parents with dependent children were eligible to qualify for Medicaid, but only if they met very low income requirements—often below half the poverty line (Davidoff, Yemane, and Adams 2005).[1] Access to Medicaid for adults without dependent children was even more limited. In 2009, childless adults with income below the poverty line were eligible to qualify for coverage comparable to Medicaid in just five states (Artiga and Schwartz 2009). As a result of such stringent eligibility criteria, in 2009 only about 13 percent of insured adults had coverage through Medicaid (Cohen and Martinez 2012; Flood et al. 2018).

The historically constructed categories associated with health insurance provision in the United States generate two additional empirical observations that are important for understanding disparities in coverage prior to the ACA. First, U.S. healthcare policies have guaranteed near-universal health insurance coverage for elderly adults (ages 65 and older) (Currie and Gruber 1996) and children (under age 18) (Martinez and Cohen 2012) but have traditionally failed to protect working-age adults (ages 18 to 64) from the risk of being uninsured. As shown in Figure 1, health insurance coverage among adults peaked in the early 1980s and declined through the first decade of the 2000s as employer contributions toward the cost of coverage declined, the nature of the employment contract became more tenuous, and the economy stagnated (Buchmueller and Monheit 2009; Currie and Yelowitz 2000; Farber and Levy 2000; Gruber 2000). Trends in the insured rates of working-age adults who rely on employer-sponsored policies, spousal coverage, or programs targeting parents contrast sharply with those of groups guaranteed coverage through government-supported plans.

Coverage rates among adults over age 65 increased dramatically after amendments to the Social Security Act introduced Medicare in 1965, such that by 2009, 99 percent of the elderly population had coverage (see Figure 1; see also Cohen and Martinez 2012; Davis, Schoen, and Bandeali 2015). Similarly, children under age 18 experienced increases in insurance coverage through the creation of the State Children's Health Insurance Program (SCHIP), which was signed into law as part of the 1997 Balanced Budget Act (Aizer 2007; Sasso and Buchmueller 2004). In the years leading up to enactment of the ACA, over 90 percent of children under age 18 had some form of health insurance (see Figure 1; see also Cohen and Martinez 2012).

[1] In 2009, 14 states limited eligibility to parents with incomes less than 50 percent of the federal poverty line (FPL) (about $9,000 for a family of three), 34 states expanded eligibility to parents with incomes less than 100 percent of the FPL, and 17 states allowed parents with incomes above 100 percent of the FPL to qualify for Medicaid (Artiga and Schwartz 2009).

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Second, access to health insurance for U.S. adults is highly stratified. Table 1 shows the insured rates of adults by gender, race and ethnicity, and education prior to passage of the ACA. In 2009, 78 percent of U.S. adults had health insurance. Over 80 percent of women, but only three-quarters of men, were insured. Over 84 percent of White adults had coverage, compared to 73 percent of Black adults and 57 percent of Latino adults. Health insurance coverage varied widely by education. Only 58 percent of adults with less than a high school diploma had health insurance in 2009, compared with over 90 percent of adults with a bachelor's degree.

Table 1 also shows the mechanisms by which adults across sociodemographic groups received health insurance coverage prior to implementation of the ACA. Just over 39 percent of women with health insurance gained coverage through their employers, compared with 57 percent of insured men. Marriage was a greater source of coverage for women than for men (Levy 2007; Patchias and Waxman 2007). Women were also more likely than men to be insured by Medicaid due to their greater likelihood of qualifying for this coverage as parents of dependent children (Davidoff et al. 2005). Employment was the primary source of coverage for all racial and ethnic groups, although the relative importance of other sources varied. The highest levels of health insurance coverage obtained through employers and spouses were found among adults who completed college. Medicaid was the most common source of coverage for adults without a high school diploma.

DECOUPLING HEALTH INSURANCE FROM HISTORICAL LINKAGES

The ACA fundamentally restructured the availability of health insurance in the United States. Since its enactment, adults—who are U.S. citizens or authorized residents—may gain health insurance through two newly established pathways (Fried et al. 2014). The first is through the Medicaid expansion, which increased Medicaid eligibility to include not just parents but all adults with annual household income levels up to 138 percent of the federal poverty line (FPL) (Wachino, Artiga, and Rudowitz 2014). The second pathway is through the creation of the Health Insurance Marketplace (Marketplace), which established a group pooling mechanism outside the labor market that allows individuals to purchase private health insurance. To help people pay for health insurance purchased through the Marketplace, the ACA offers monthly subsidies to individuals with annual household income levels up to 400 percent of the FPL (Garfield, Licata, and Young 2014).

Although policymakers intended to implement the ACA uniformly across states, the U.S. Supreme Court ruled the federal mandate to expand Medicaid as unconstitutional. This ruling made participation in the expansion optional for states (Shaw et al. 2014). Accordingly, when the ACA went into effect on January 1, 2014, an estimated 4.8 million adults fell into a "coverage gap": their income would have qualified them for Medicaid under the ACA's new eligibility rules, but their state declined to expand Medicaid (Wachino et al. 2014). Nevertheless, nearly 30 million uninsured adults qualified for partially or completely subsidized health insurance on January 1, 2014, under the ACA (Garfield et al. 2014).[2] The share of uninsured adults newly eligible for health insurance has since grown, with many states adopting the Medicaid expansion after initially opting out. By the end

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of 2016, the number of adults estimated to be in the coverage gap was about 2.4 million (Garfield and Damico 2017).

DATA, MEASURES, AND METHODS

Data

To investigate the impact of the ACA on routes to and disparities in health insurance coverage, I use data from the National Survey on Drug Use and Health (NSDUH). The NSDUH is a nationally representative survey of the non-institutionalized U.S. population, conducted annually by the Substance Abuse and Mental Health Services Administration (SAMHSA). Previous research on health insurance often uses other data sources, like the Current Population Survey (CPS), but data from the NSDUH are particularly useful for investigating health insurance access in the context of the ACA, because the survey identifies and oversamples populations who share traits with institutionally unattached and traditionally uninsured adults.

For example, through its use of an independent, multistage area probability sample of all states and the District of Columbia, the NSDUH was designed to oversample young adults age 18 to 25, Black and Latino individuals, and residents of rural areas (Gfroerer, Larson, and Colliver 2007). To promote their inclusion in the survey and to accommodate the cultural and linguistic needs of the Latino population, interviews are available in English and Spanish (Kennet and Gfroerer 2005). The NSDUH also prioritizes the inclusion of harder-to-reach populations by surveying individuals living in non-institutionalized group quarters and temporary housing, including shelters, college dormitories, migratory worker camps, and halfway houses (Center for Behavioral Health Statistics and Quality 2017).

This study uses samples of the adult population drawn from before and after their access to health insurance was transformed by the ACA. The ACA mandated several major changes to the U.S. healthcare system, but the reforms related to this research include only the creation of the Health Insurance Marketplace and the Medicaid expansion. These policy changes are considered the most comprehensive reforms of the ACA and were intended to make adequate and affordable health insurance accessible for nearly all U.S. adult citizens (Garfield et al. 2014).

The ACA was enacted in 2010 and was designed to roll out its reforms on the U.S. healthcare system over four years and beyond. The enrollment period for new insurance plans through the Marketplace began in 2013, but the benefits of this coverage did not start until January 1, 2014. Likewise, individuals newly eligible for Medicaid could begin their enrollment in 2013 but could not access their benefits until January 1, 2014 (Wachino et al.

[2]In 2013, 39.5 million adults did not have health insurance (Flood et al. 2018). Of these adults, 23 million met income requirements (household income greater than 100 percent FPL and less than 400 percent FPL) to qualify for federal subsidies in the Marketplace, and about 16 million met income requirements (less than 138 percent FPL) to qualify for expanded Medicaid (Flood et al. 2018; Garfield et al. 2014). Excluding the overlap of adults with income greater than 100 percent of the FPL and less than 138 percent of the FPL, the total number of uninsured adults with income below 400 percent of the FPL in 2013 was about 34.3 million (87 percent of the total population of uninsured adults). Of these 34.3 million adults, 4.8 million fell into the coverage gap (Wachino et al. 2014). The total number of adults who qualified for partially (health insurance with subsidies through the Marketplace) or completely (Medicaid) subsidized health insurance on January 1, 2014, was about 29.5 million (Flood et al. 2018; Garfield et al. 2014).

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2014). In view of these rollout arrangements, I treat 2013 as a washout period and exclude the entire calendar year from my analyses. I define the period *after* adults' access to health insurance was transformed by the ACA as January 2014 through December 2016 (*post-ACA* study period). To include the period before the ACA was signed into law in 2010, and to appropriately compare years close together in time, I define the period *before* access to health insurance among adults was transformed by the ACA as January 2009 through December 2012 (*pre-ACA* study period).

The analytic sample consists of adults age 18 to 64 years who reported their race and ethnicity as non-Hispanic White (White), non-Hispanic Black (Black), or Hispanic or Latin origin of any race (Latino). To account for only those whose access to health insurance was transformed by the ACA, the sample excludes adults who reported they were currently disabled or pregnant. Respondents from the cross-sectional waves of the 2009 to 2012 NSDUH data make up the sample in the pre-ACA period (n = 130,989); respondents from the 2014 to 2016 waves comprise the sample in the post-ACA period (n = 104,837). Excluding individuals classified as disabled or pregnant, as well as those whose racial and ethnic identity was not White, Black, or Latino, left out 9 percent (n = 21,084) of the total sample of adults between the ages of 18 and 64 (n = 235,826). Results including all respondents are substantively identical to those presented here and are available upon request.

Measures

The outcome of interest is the likelihood of being *uninsured*, which I measure using a single binary variable that indicates whether a person did (0) or did not (1) have health insurance coverage in the past year. I classify individuals as being uninsured if they reported being without health insurance at the time of the interview, based on their responses to a set of questions asking about their state of coverage across multiple different plans. The *uninsured* measure provides a snapshot view of the size and scope of the population without any form of health insurance coverage on a given day. Creation of this variable is based on information from survey questions that were asked of respondents in the same way each year of the study period.

The treatment and control group variables are designed to measure the labor market, marriage, and family categories that have historically provided adults with opportunities to access health insurance. I constructed three dummy variables to measure these categories independently. Individuals are coded as attached to the *labor market* if they indicate full-time employment in the study year. I also coded respondents reporting full-time enrollment in school or the military as attached to the labor market to more carefully consider how those connections grant access to health insurance. Legally recognized marriage confers unique benefits, like access to a spouse's employer-sponsored health insurance plan (Doan, Loehr, and Miller 2014; Gonzales and Blewett 2014; Hatzenbuehler et al. 2012). Therefore, I constructed a variable *marriage* to distinguish respondents who reported being married from all other union statuses. The variable *family* measures if a respondent is a custodial parent of at least one child under age 18, a status that provided privileged access to state-supported health care prior to the ACA (Holahan, Kenney, and Pelletier 2010; Huberfeld

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2015). In addition to the labor market, marriage, and family indicators, I also constructed a single binary variable, *overall* attachment, to estimate the effects of having any of these institutional connections: being employed or enrolled in school or in the military on a full-time basis, being married, or being a custodial parent of at least one of their own children under age 18.

To control for the confounding effects of factors related to the outcome of interest, the analyses account for a battery of sociodemographic traits and health status measures. These covariates include individual measures of gender, race and ethnicity, age, educational attainment, receipt of government assistance, household income, self-rated health (SRH), and incidence of a chronic health condition. In addition to being included in the set of control variables for the analyses addressing how the ACA influences the relationship between institutional attachment and health insurance coverage, the variables measuring gender, race and ethnicity, and educational attainment are also used to examine the extent to which the ACA's impact on institutional attachment varies across sociodemographic groups. Table 2 shows the qualitative descriptions and coding schemes for the sociodemographic traits and health status measures mentioned here, as well as the weighted means of these variables in the pre- and post-ACA study periods.

Methods

I begin my analysis by considering the extent to which labor market, marriage, and family categories historically linked to social welfare benefits are dissolved by the ACA. To do so, I leverage the timing of the ACA as a natural experiment using a difference-in-differences (DID) framework. The basic approach in a DID analysis is to compare the difference in outcomes between a treatment group and a control group at time points before (difference 1) and after (difference 2) a policy intervention. The average difference between the treatment and control group in the post-intervention period is then subtracted from the average difference between these groups in the pre-intervention period (difference 2 – difference 1).[3] The resulting value (the DID estimator or the treatment effect) is a measure of the difference between the treatment and control groups that would still exist if neither group experienced the policy intervention (Angrist and Pischke 2008).

In this case, I apply a DID framework to estimate changes in the likelihood of being uninsured among adults *without* institutional attachments (treatment group) from the pre- to post-ACA study period, relative to changes among adults *with* institutional attachments (control group). These contrasts are made through a series of multivariate logistic regression models designed to identify the impact of the ACA on the health insurance status of adults with and without (1) *overall*, (2) *labor market*, (3) *marriage*, and (4) *family* attachments. Regression models for each measure of institutional attachment are specified as follows:

$$logit(p_i) = \beta_0 + \beta_1 I_i + \Upsilon_0 T_i + \Upsilon_1 T_i \times I_i + \beta_2 X_{it} \quad (1)$$

3. We produce the same results in a DID analysis by comparing outcomes at time points before and after a policy intervention between a control group (group A) and a treatment group (group B), where the effect of the policy intervention is estimated by subtracting average changes over time in the outcomes of the control group from average changes over time in the outcomes of the treatment group: (B2 − B1) − (A2 − A1) (Angrist and Pischke 2008).

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$$logit(p_i) = \beta_0 + \beta_1 I_{LM_i} + \Upsilon_0 T_i + \Upsilon_1 T_i \times I_{LM_i} + \beta_2 X_{it} \quad (2)$$

$$logit(p_i) = \beta_0 + \beta_1 I_{Mar_i} + \Upsilon_0 T_i + \Upsilon_1 T_i \times I_{Mar_i} + \beta_2 X_{it} \quad (3)$$

$$logit(p_i) = \beta_0 + \beta_1 I_{Fam_i} + \Upsilon_0 T_i + \Upsilon_1 T_i \times I_{Fam_i} + \beta_2 X_{it} \quad (4)$$

where p_i represents the dichotomous outcome variable ($y = 1$ if uninsured; $y = 0$ otherwise) for individual i at time T ($T = 1$ for the post-ACA study period; $T = 0$ for the pre-ACA study period). Υ_1 is the treatment effect and X is a vector of the control variables. The models differ by the measures capturing institutional attachment: I represents overall institutional attachment; I_{LM}, I_{Mar}, and I_{Fam} measure attachments to labor market, marriage, and family institutions, respectively. As indicated by their unique specifications, sorting of the treatment (unattached) and control (attached) groups varies across models to account for differences in the pathways connecting adults to health insurance.

Note that the DID approach is only valid if the trends in the outcome between the treatment and control groups are similar in the pre-intervention period. If this assumption is met, then we may reasonably assume these parallel trends would continue for both groups if the policy had not been implemented. However, if one group's outcomes are already improving relative to another group before the policy, then using a pre-post analysis would lead to the biased conclusion that the policy was associated with better outcomes. Because I found no significant differences in the coverage trends between my designated treatment and control groups, I assume that outcomes in health insurance would have trended similarly for both groups in the absence of the policy, and thus I consider my models unbiased.[4] In Table 4, I report the model results as adjusted probabilities rather than as odds ratios. This approach enables me to provide intuitive measures of effect sizes and allows me to avoid the difficulty of interpreting interaction terms from nonlinear models (Karaca-Mandic, Norton, and Dowd 2012).

To explore how changes in the relationship between institutional attachment and health insurance coverage vary across sociodemographic groups, I first compare whether and how the ACA differentially affects health insurance coverage for adults across gender, race and ethnicity, and education. I use the logistic regression coefficients from the DID models described in Equations 2, 3, and 4 to estimate the predicted probabilities of being uninsured for the four levels of the interaction terms measuring the joint effects of the ACA and institutional attachment, specified for each combination of gender, race and ethnicity, and education. This procedure allows me to compare the average probability of being uninsured in the pre- and post-ACA study periods for adults across institutional attachment and sociodemographic categories. Estimated group differences in the probability of being

4. To further test the sensitivity and robustness of my results, I estimated models using linear probability regression. A drawback of using linear probability modeling with a binary outcome is that it can produce predicted probabilities that lie outside the [0–1] interval. However, in my case, the true probabilities were in a range where linear approximation generally performs well, as no predicted probabilities fell outside the [0–1] interval. Results estimated from the logit and linear models were comparable. I also computed robust standard errors to correct for heteroskedastic variance present under the linear model.

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uninsured are shown in Table 6. Values representing the estimated probability of being uninsured in the pre- and post-ACA study periods for each group are provided in Appendix Table A1.

I then perform a two-factor decomposition analysis to more closely illustrate the extent to which the ACA's influence on health insurance contributes to sociodemographic disparities in coverage. This method allows me to partition the total change in health insurance inequality between sociodemographic groups by changes in coverage observed among those with and without institutional attachments, while adjusting for differences in specific rates (Gupta 1993; Kitagawa 1955). The decomposition technique enables me to estimate, for example, the ACA's impact on Black–White disparities in coverage associated with marriage. Results from this example will show, in percentage terms, the extent to which the racial gap in health insurance observed in the post-ACA period was caused by changes over time in coverage among married White adults, unmarried White adults, married Black adults, and unmarried Black adults. Figure 2 displays results from this analysis; the corresponding estimates used to produce these findings are provided in Appendix Table A2.

RESULTS

The share of U.S. adults without health insurance dramatically declined in the first three years following the ACA's 2014 implementation. Table 3 shows that nearly 1 in 5 adults (19.7 percent) were uninsured in the pre-ACA study period. The share of adults without health insurance fell to 13.6 percent in the period following implementation of the ACA. Put in relative terms, the uninsured rate for the total population of adults in the study sample dropped by 31 percent. Table 3 further reveals that the decline in the rate of adults without coverage—or, the greatest increases in coverage—took place among the institutionally unattached. Adults unattached to the labor market witnessed the greatest increase in health insurance coverage, as the uninsured rate of this group fell by 35 percent (from 27.7 to 18.1 percent).

Consistent with the descriptive results shown in Table 3, Table 4 shows that the ACA significantly reduced the size of the relationship between institutional attachment and health insurance coverage. Table 4 reports differences in the estimated probability of being uninsured between adults with and without institutional attachments. The first column reports this difference in the pre-ACA study period, the second column reports this difference in the post-ACA study period, and the third column reports the difference between the differences observed in the pre- and post-ACA study periods (the DID estimator or treatment effect). Model 1 estimates these differences as they relate to the effect of *overall* institutional attachment. In the pre-ACA study period, the probability of being uninsured was approximately 17 percentage points higher among adults without any institutional attachments than among adults with one or more of the measured attachments to labor market, marriage, and family institutions. In the post-ACA study period, the probability of being uninsured was almost 6 percentage points greater among institutionally unattached adults. Inequality in health insurance coverage between adults with and without institutional attachments, in turn, fell by approximately 11 percentage points. This change represents a decline of 69 percent in relative terms.

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Models 2, 3, and 4 estimate the differences in the probability of being uninsured for adults with and without attachments to *labor market, marriage*, and *family* institutions, separately. These results provide evidence to identify *how* the ACA modifies the link between institutional attachment and health insurance coverage among adults. The results from Model 2 show that, relative to their attached counterparts, adults unattached to the *labor market* were almost 11 percentage points more likely to be uninsured in the pre-ACA period and fully 4 percentage points more likely to be uninsured in the post-ACA study period. This drop of nearly 7 percentage points suggests that the ACA decreased the effect of *labor market* attachment on health insurance coverage by 61 percent. Models 3 and 4 similarly provide evidence that the probability of being uninsured was greater for adults unattached to *marriage* and *family* institutions than for adults with such attachments, and that the uninsured gap between these groups narrowed substantially from the pre- to post-ACA period. The ACA decreased the effects of attachments to *marriage* and *family* institutions on health insurance coverage by 78 percent (4.8 percentage points) and 45 percent (2.5 percentage points), respectively. Together with the descriptive results reported in Table 3, the results in Table 4 indicate that changes in the relationship between institutional attachment and health insurance coverage were largely driven by increases in coverage among adults without labor market and marriage attachments.

All sociodemographic groups experienced a significant decline in their risk of being uninsured after passage of the ACA. Panel A of Table 5 shows that in *absolute* terms men exhibited greater increases in coverage than women, Latinos witnessed greater increases than other racial and ethnic groups, and adults with less than a high school diploma experienced greater increases in coverage than those with higher levels of formal schooling. *Relative* to coverage rates prior to passage of the ACA, however, women experienced greater gains than men (34.1 percent decrease compared with 28.3 percent decrease), Black adults experienced comparatively large decreases (33.6 percent), and adults who completed college had the largest increase in coverage of all education groups. Taken together, these results suggest the ACA will reduce previously observed sociodemographic disparities in coverage. Panel B of Table 5 shows that the gender gap in insurance declined nearly 5 percent, racial and ethnic differences in coverage declined roughly one-third, and educational gaps in coverage declined between 16 and 30 percent.

Passage of the ACA reduced the importance of labor market, marriage, and family attachments as pathways that provide working-age adults with access to health insurance. Table 6 shows how the ACA affected sociodemographic groups differently based on inequalities in institutional attachments. For example, the gender gap in insurance coverage declined in relation to all measured institutional attachments. The gender gap in coverage associated with institutional attachment fell by 31.5 percent in relation to the labor market and declined by 32.1 percent across both marriage and family domains. Taken together, these findings show the centrality of the intersection of gender and the labor market in stratifying access to health insurance coverage. Declines in the gender gap in coverage after implementation of the ACA highlight men’s historical dependence on labor market attachment as a route to coverage and women’s more diverse pathways to coverage, rooted in the social acceptability of women as dependents and thus worthy of care (Katz 1986, 1989; Skocpol 1993, 1995).

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Reductions to racial and ethnic disparities in insurance coverage following the ACA were found in relation to all types of measured institutional attachments. The declining significance of marriage for stratifying access to health insurance was particularly important for the narrowing of the Black–White gap in coverage. Prior to passage of the ACA, marriage provided greater access to health insurance coverage for White adults than for Black adults (Montez, Angel, and Angel 2009). The racial gap in coverage was cut in half after passage of the ACA, suggesting declines in the health insurance privilege marriage provides to White adults. The ACA was associated with comparatively large absolute declines in Latino–White gaps in coverage across institutional domains. However, a high risk of being uninsured persists among Latino adults, possibly because approximately one-third of Latino adults in the United States are not citizens. Non-citizens face unique barriers to health insurance, as they are disproportionately less likely to work in jobs that offer employer-sponsored insurance, to qualify for Medicaid, and to take on coverage when eligible (Buchmueller, Sasso, and Wong 2008; Bustamante and Chen 2012; Bustamante et al. 2009).

The ACA's expansion of health insurance access decoupled from the labor market substantially reduced disparities in coverage between adults with lower and higher levels of schooling. As shown in Table 6, education differences in health insurance associated with the labor market fell between 25.0 and 29.9 percent across comparison groups. The salience of marriage and family attachments for education differences in health insurance coverage also declined following passage of the ACA. These results emphasize the ways that access to health insurance was more tightly coupled with status markers like high levels of education and the benefits derived from associated institutional attachments prior to passage of the ACA. Observed changes in the relationship between education and health insurance coverage after passage of the ACA may reduce inequality in access to health care, and health inequalities, in ways that are more comparable to other advanced industrial democratic countries with more generous welfare states (Bambra 2005, 2013; Beckfield and Krieger 2009; Olafsdottir 2007).

Sociodemographic differences in the relationship between health insurance and institutional attachment are produced by inequalities in the group-specific level of coverage among adults *with* attachments, as well as by inequalities in the group-specific level of coverage among adults *without* attachments. Figure 2 illustrates how group-specific changes in coverage contribute to health insurance disparities across sociodemographic and institutional categories generated by a two-factor decomposition analysis (Gupta 1993; Kitagawa 1955). The values in Figure 2 signify the percent of the narrowing of the gap in health insurance coverage associated with increased health insurance for each sociodemographic group.

Declines in sociodemographic disparities in health insurance coverage after passage of the ACA are disproportionately caused by increases in coverage among adults who lacked institutional attachments associated with coverage. For example, although passage of the ACA was associated with increased coverage rates among employed *and* unemployed men and women, increases in health insurance coverage among unemployed men are responsible for the largest portion (32 percent) of the decline in the gender gap in health insurance coverage associated with the labor market. Coverage increases among unattached men are

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similarly large in marriage and family domains (34 and 37 percent, respectively). Increases in coverage among married and parenting men contributed to the narrowing of the gender gap in health insurance coverage to a similar extent (34 and 35 percent, respectively). These results provide further evidence of the ways the ACA has helped increase coverage among men by giving them a new route to insurance, outside of pathways characterized by dependency.

Results indicate similar patterns for Black adults who lack institutional attachments that are historically important for the provision of health insurance. Between 36 and 46 percent of the decline in the Black–White gap in healthcare coverage is due to insurance gains of unattached Black adults. Figure 2 shows that the smoothing of the education gradient in health insurance is attributable to gains in coverage among adults with the lowest levels of formal schooling regardless of institutional attachment. These results highlight the ways that institutional attachment may be a particularly important pathway, or barrier, to health insurance for some groups. Nonetheless, these results reinforce the centrality of institutional attachments for understanding differential access to health insurance in the context of radical changes in healthcare policy in the United States.

DISCUSSION AND CONCLUSIONS

Consistent with the general organization of the welfare state, U.S. healthcare policies traditionally required working-age Americans to access health insurance through their employers, spouses, or children (Currie and Madrian 1999; Meyer and Pavalko 1996; Seccombe 1993). These policy arrangements created obvious disadvantages for unemployed, unmarried, and childless adults and left a substantial share of the adult population uninsured. In 2009, more than one in five adults in the United States lacked health insurance at any given time and were thereby vulnerable to health disadvantages (Levy and Meltzer 2008; Martinez and Cohen 2012). As the pathways expected to provide access to coverage are themselves highly stratified, the risk of being uninsured was greater for men, people of color, and adults with lower levels of formal schooling than it was for women, White adults, and individuals with higher levels of schooling.

Recent implementation of the ACA restructured the provision of social welfare benefits in the United States by extending health insurance access to adults in ways unrelated to their relationships with employers, spouses, and children. Taking advantage of this fundamental shift in the American welfare state, I used data from the national Survey on Drug Use and Health (NSDUH) to explore the ACA's impact on the historically constructed links between health insurance and attachments to labor market, marriage, and family institutions. Results from this study show that the ACA reduced the association between institutional attachment and health insurance among adults by nearly 70 percent. The ACA decreased the effects of attachments to the labor market, marriage, and family on health insurance coverage by 61 percent, 78 percent, and 45 percent, respectively.

The findings from this study provide an important snapshot of the distribution of health insurance coverage among adults in the first three years following the ACA's implementation. Changes in health insurance coverage observed in this study might endure

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in the years ahead, as the uninsured rate of adults is expected to remain stable under the ACA (CBO 2016). Even as the current political climate casts uncertainty over the ACA's future, results from this study remain critically important because the ACA builds on, rather than eliminates, the traditional structuring of health insurance. This study emphasized how most health insurance obtained by adults is still closely tied to the labor market, despite passage of the ACA. The extent to which adults maintain these attachments in the future and the future availability of health insurance outside these attachments remain uncertain.

Recent reports have begun emphasizing the potential consequences of the ACA's partial or full repeal (Blumberg, Buettgens, and Holahan 2016; Obama 2017), but no research has yet focused on the structuring of the health insurance system to highlight who might be most vulnerable without the law. The framing and results of this study have significant implications for how we approach the provision of health insurance on a global scale. In light of the deteriorating conditions of and increasingly tenuous attachments to labor market, marriage, and family domains in the United States and other high-income countries (Arnett et al. 2011; Cherlin 2010; Mayer 2004; Shanahan 2000), understanding how the ACA reaches institutionally unattached adults is important for the future creation of social policies around the world.

By providing adults with a new route to coverage decoupled from labor market, marriage, and family outcomes, the ACA helped to significantly narrow health insurance inequalities across gender, race and ethnicity, and education. The effects of the ACA were disproportionately concentrated among groups according to the unequal risks associated with being unemployed, unmarried, and childless. For example, men, Black and Latino adults, and adults with lower levels of education (i.e., less than high school and high school levels of education) experienced the greatest benefits from the ACA. Disparities in coverage between sociodemographic groups still exist, but there are important theoretical reasons to expect these findings have significant implications for our future understanding of overall health inequalities.

Scholars across disciplines have long puzzled over whether improvements in health insurance among underserved groups could reduce health disparities in the population (e.g., Card, Dobkin, and Maestas 2004; Currie and Gruber 1996; Finkelstein 2007; Hadley 2003; House 2015). Some argue that such improvements will have little impact on health inequalities, because expanding the supply of health insurance does not change the unequal distribution of its demand, which is shaped by other social, economic, and environmental determinants (House 2015). Our existing understanding of health inequalities, however, has been developed in a fundamentally different historical context. Under the previous structuring of the U.S. healthcare system, health insurance was largely concentrated among adults selected into labor market, marriage, and family institutions, who gained coverage through their institutional attachments. An individual's health insurance status was therefore "almost always determined by at least some of the same factors that determine health status" (Levy and Meltzer 2008:401).

This study makes an important contribution to sociological research on health that commonly points to proximate, horizontal mechanisms to explain how different groups

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experience varying levels of illness and disease. Such work draws attention to the ways these social determinants of health are shaped by more distal, organizational properties of society. By shifting the object of inquiry from the socioeconomic positions and material conditions of individuals and groups to the institutional processes of society, this work can improve the translation of research into policy actions, especially considering the lack of government policymaking in response to the wealth of studies on the social determinants of health (Raphael 2006).

This is not to say, however, that having health insurance guarantees better health. The health benefits associated with health insurance are mediated by increased use of higher-quality medical services (Freeman et al. 2008; Hadley 2003; Levy and Meltzer 2008; McWilliams 2009), but health insurance does not guarantee improved access to medical care. Individuals with insurance may still encounter significant barriers to accessing care, including lack of a nearby provider, limited hours of medical clinics, difficulty finding available physicians, inability to get a referral for a provider, and lack of translation services (Betancourt, Green, and Carrillo 2002; Bierman et al. 2002; Cooper and Powe 2004; Starfield and Shi 2004). Even if patients gain health insurance, their ability to pay for treatments and services may still not improve (DeVoe et al. 2007).

Nevertheless, having health insurance is considered a key determinant for access to and use of recommended and needed medical care (Freeman et al. 2008; Hadley 2003; Institute of Medicine 2002; Levy and Meltzer 2008; McWilliams 2009). By separating access to health insurance from institutional attachment, the ACA provides a new source of coverage exogenous to the typical underlying determinants of health. This study shows that the ACA profoundly increased health insurance coverage for certain groups of adults, including men, people of color, and individuals with low levels of formal schooling, who are disproportionately characterized by poor health (Wachino et al. 2014). Given the ways the distribution of coverage under the ACA aligns with the concentration of poor health among adults, researchers should expect to eventually observe significant improvements in health inequalities.

Results from this study suggest that government interventions can reshape the inequality landscape by reducing disparities along institutional attachment lines, which map well on to standard stratification lines, such as gender, race and ethnicity, and education. Reducing inequalities therefore requires redistribution of the benefits derived from institutional attachment to include unattached individuals, such as those who are unemployed, unmarried, and childless. Interventions that fail to deliver resources to individuals through pathways unrelated to their preexisting institutional positions may otherwise generate unintended consequences.

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Biography

Carmen M. Gutierrez is an Assistant Professor of Public Policy at the University of North Carolina in Chapel Hill. Her research explores issues at the intersection of health, immigration, and the U.S. criminal justice system. Her work has appeared in the *American Sociological Review, Crime & Delinquency*, and *Pediatrics*. She earned her PhD in Sociology from the University of Texas at Austin.

APPENDIX

Table A1.

Estimated Probability of Being Uninsured in the Pre- and Post-ACA Study Periods, across Sociodemographic Groups and by Institutional Attachment; Adults (18 to 64), NSDUH 2009 to 2012 and 2014 to 2016

	Labor Market				Marriage				Family			
	Attached		Unattached		Attached		Unattached		Attached		Unattached	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Gender												
Female	12.6	7.8	21.1	13.9	12.4	7.7	17.1	10.9	12.3	7.6	17.1	10.8
Male	18.0	11.7	29.1	19.8	17.7	11.3	23.9	15.5	17.6	11.2	23.9	15.6
Race/Ethnicity												
White	13.0	14.4	21.8	14.4	12.8	8.0	17.6	11.3	12.7	7.9	17.6	11.2
Black	18.2	15.6	28.5	15.6	18.7	8.8	25.1	12.3	13.8	8.6	21.4	12.2
Latino	24.5	26.8	37.8	26.8	24.2	15.9	31.8	21.6	24.0	15.7	31.7	21.5
Education												
Less than HS	24.4	26.7	37.7	26.7	24.1	15.8	32.6	21.5	23.4	15.6	29.9	21.0
HS	19.6	12.8	31.4	21.6	19.4	12.5	26.0	17.2	19.2	12.3	25.9	17.1
Some College	14.0	8.9	23.4	15.5	13.8	8.7	19.0	12.2	13.7	8.5	18.9	12.1
College +	7.8	4.9	13.7	8.7	7.7	4.7	10.8	6.7	7.6	4.6	10.8	6.7

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Table A2.

Percent with and without Institutional Attachments and Percent Uninsured in the Pre- and Post-ACA Study Periods, across Sociodemographic Groups; Adults (18 to 64), NSDUH 2009 to 2012 and 2014 to 2016

	Pre-ACA		Post-ACA	
	Attached	**Unattached**	**Attached**	**Unattached**
Panel 1a. Labor Market	% with and without Labor Market Attachments			
Gender				
Female	57.5	42.5	55.7	44.3
Male	74.2	25.8	73.3	26.7
Race/Ethnicity				
White	66.7	33.3	65.9	34.1
Black	63.1	36.9	60.8	39.2
Latino	63.7	36.3	61.4	38.6
Education				
Less than HS	49.8	50.2	45.9	54.1
HS	60.6	39.4	57.7	42.3
Some College	70.5	29.5	68.2	31.8
College +	74.3	25.7	74.5	25.5
Panel 1b. Labor Market	% Uninsured			
Gender				
Female	13.0	23.8	8.3	15.7
Male	17.5	34.4	13.2	22.3
Race/Ethnicity				
White	12.1	22.2	7.7	13.7
Black	22.5	32.1	12.8	19.1
Latino	33.8	45.1	22.5	31.3
Education				
Less than HS	39.8	43.3	30.8	29.2
HS	21.0	30.5	16.0	21.1
Some College	14.2	26.4	9.8	14.2
College +	5.6	13.9	3.4	8.4
Panel 2a. Marriage	% with and without Marriage Attachments			
Gender				
Female	52.3	47.7	50.1	49.9
Male	51.8	48.2	49.6	50.4
Race/Ethnicity				
White	56.6	43.4	45.3	54.7
Black	32.4	67.6	69.2	30.8
Latino	48.5	51.5	52.1	47.9
Education				
Less than HS	42.7	57.3	57.3	42.7

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	Pre-ACA		Post-ACA	
	Attached	**Unattached**	**Attached**	**Unattached**
HS	48.4	51.6	55.6	44.4
Some College	48.7	51.3	53.9	46.1
College +	63.7	36.3	37.0	63.0
Panel 2b. Marriage	% Uninsured			
Gender				
Female	12.9	22.7	8.9	14.3
Male	15.7	30.7	9.7	21.7
Race/Ethnicity				
White	8.9	22.6	5.6	14.8
Black	19.2	27.8	10.0	18.2
Latino	34.9	40.7	24.2	27.4
Education				
Less than HS	42.5	49.7	29.5	30.2
HS	15.7	31.0	13.1	22.2
Some College	10.5	22.9	6.9	14.9
College +	3.8	14.3	2.6	8.3
Panel 3a. Family	% with and without Family Attachments			
Gender				
Female	40.6	59.4	39.9	60.1
Male	32.9	67.1	32.6	67.4
Race/Ethnicity				
White	34.8	65.2	34.0	66.0
Black	35.5	64.5	34.7	65.3
Latino	46.1	53.9	45.6	54.4
Education				
Less than HS	39.5	60.5	38.5	61.5
HS	34.0	66.0	32.3	67.7
Some College	35.7	64.3	35.2	64.8
College +	39.6	60.4	40.1	59.9
Panel 3b. Family	% Uninsured			
Gender				
Female	17.6	17.5	12.5	11.0
Male	18.6	24.5	14.3	16.3
Race/Ethnicity				
White	12.2	19.0	7.9	10.7
Black	17.6	25.8	12.4	16.7
Latino	36.6	39.0	28.1	24.1
Education				
Less than HS	42.8	40.8	34.3	27.1
HS	22.2	26.3	18.8	12.8
Some College	15.1	19.8	10.4	11.6

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	Pre-ACA		Post-ACA	
	Attached	Unattached	Attached	Unattached
College +	4.9	9.4	3.0	5.8

Note: Numbers and percentages reported are based on sample weights.

References

Aizer Anna. 2007. “Public Health Insurance, Program Take-Up, and Child Health.” The Review of Economics and Statistics 89(3):400–415.

Angrist Joshua D., and Pischke Jörn-Steffen. 2008. Mostly Harmless Econometrics: An Empiricist’s Companion. Princeton, NJ: Princeton University Press.

Arnett Jeffrey J., Kloep Marion, Hendry Leo B., and Tanner Jennifer L.. 2011. Debating Emerging Adulthood: Stage or Process? New York: Oxford University Press.

Artiga Samantha, and Schwartz Karyn. 2009. “Expanding Health Coverage for Low-Income Adults: Filling the Gaps in Medicaid Eligibility.” Washington, DC: The Henry J. Kaiser Family Foundation.

Avendano Mauricio, and Kawachi Ichiro. 2014. “Why Do Americans Have Shorter Life Expectancy and Worse Health Than Do People in Other High-Income Countries?” Annual Review of Public Health 35:307–25.

Bambra Clare. 2005. “Cash versus Services: ‘Worlds of Welfare’ and the Decommodification of Cash Benefits and Health Care Services.” Journal of Social Policy 34(2):195–213.

Bambra Clare. 2013. “In Defense of (Social) Democracy: On Health Inequalities and the Welfare State.” Journal of Epidemiology and Community Health 67(9):713–4. [PubMed: 23814270]

Bambra Clare, Gibson Marcia, Sowden Amanda, Wright Kath, Whitehead Margaret, and Petticrew Mark. 2010. “Tackling the Wider Social Determinants of Health and Health Inequalities: Evidence from Systematic Reviews.” Journal of Epidemiology & Community Health 64(4):284–91. [PubMed: 19692738]

Banks James, Marmot Michael, Oldfield Zoe, and Smith James P.. 2006. “Disease and Disadvantage in the United States and in England.” Journal of the American Medical Association 295(17):2037–45. [PubMed: 16670412]

Beckfield Jason, Bambra Clare, Eikemo Terje A., Huijts Tim, McNamara Courtney, and Wendt Claus. 2015. “An Institutional Theory of Welfare State Effects on the Distribution of Population Health.” Social Theory and Health 13(3–4):227–44.

Beckfield Jason, and Krieger Nancy. 2009. “Epi + demos + cracy: Linking Political Systems and Priorities to the Magnitude of Health Inequalities—Evidence, Gaps, and a Research Agenda.” Epidemiologic Reviews 31(1):152–77. [PubMed: 19474091]

Béland Daniel, and Waddan Alex. 2017. “Why Are There No Universal Social Programs in the United States? A Historical Institutionalist Comparison with Canada.” World Affairs 180(1):64–92.

Betancourt Joseph R., Green Alexander R., and Carrillo Juan Emilio. 2002. “Cultural Competence in Health Care: Emerging Frameworks and Practical Approaches.” New York: Commonwealth Fund.

Bezruchka Stephen. 2012. “The Hurrider I Go the Behinder I Get: The Deteriorating International Ranking of U.S. Health Status.” Annual Review of Public Health 33:157–73.

Bierman Arlene S., Lurie Nicole, Collins Karen Scott, and Eisenberg John M.. 2002. “Addressing Racial and Ethnic Barriers to Effective Health Care: The Need for Better Data.” Health Affairs 21(3):91–102. [PubMed: 12026007]

Blackwell Debra L., Martinez Michael E., Gentleman Jane F., Sanmartin Claudia, and Berthelot Jean-Marie. 2009. “Socioeconomic Status and Utilization of Health Care Services in Canada and the United States: Findings from a Binational Health Survey.” Medical Care 47(11):1136–46. [PubMed: 19786920]

Blumberg Linda J., Buettgens Matthew, and Holahan John. 2016. “Implications of Partial Repeal of the ACA through Reconciliation.” Washington, DC: Urban Institute.

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

Boyd Monica, and Norris Doug. 2000. “Demographic Change and Young Adults Living with Parents, 1981–1996.” Canadian Studies in Population 27(2):267–81.

Buchmueller Thomas C., and Monheit Alan C.. 2009. “Employer-Sponsored Health Insurance and the Promise of Health Insurance Reform.” Inquiry 46(2):187–202. [PubMed: 19694392]

Buchmueller Thomas C., Lo Sasso Anthony T., and Wong Kathleen N.. 2008. “How Did SCHIP Affect the Insurance Coverage of Immigrant Children?” The BE Journal of Economic Analysis & Policy 8(2):1–23.

Bustamante Arturo V., and Chen Jie. 2012. “Health Expenditure Dynamics and Years of U.S. Residence: Analyzing Spending Disparities among Latinos by Citizenship/Nativity Status.” Health Services Research 47(2):794–818. [PubMed: 21644969]

Bustamante Arturo V., Fang Hai, Rizzo John A., and Ortega Alexander N.. 2009. “Understanding Observed and Unobserved Health Care Access and Utilization Disparities among U.S. Latino Adults.” Medical Care Research and Review 66(5):561–77. [PubMed: 19556553]

Card David, Dobkin Carlos, and Maestas Nicole. 2004. “The Impact of Nearly Universal Insurance Coverage on Health Care Utilization and Health: Evidence from Medicare.” Cambridge, MA: The National Bureau of Economic Research.

Center for Behavioral Health Statistics and Quality. 2017. “2016 National Survey on Drug Use and Health: Methodological Summary and Definitions.” Rockville, MD: Substance Abuse and Mental Health Services Administration.

Cherlin Andrew J. 2010. “Demographic Trends in the United States: A Review of Research in the 2000s.” Journal of Marriage and Family 72(3):403–419. [PubMed: 22399825]

Chung Haejoo, and Muntaner Carles. 2007. “Welfare State Matters: A Typological Multilevel Analysis of Wealthy Countries.” Health Policy 80(2):328–39. [PubMed: 16678294]

Coburn David. 2004. “Beyond the Income Inequality Hypothesis: Class, Neo-Liberalism, and Health Inequalities.” Social Science & Medicine 58(1):41–56. [PubMed: 14572920]

Cohen Robin A., Makuc Diane M., Bernstein Amy B., Bilheimer Linda T., and Powell-Griner Eve. 2009. “Health Insurance Coverage Trends, 1959–2007: Estimates from the National Health Interview Survey.” Hyattsville, MD: National Center for Health Statistics.

Cohen Robin A., and Martinez Michael E.. 2012. “Health Insurance Coverage: Early Release of Estimates from the National Health Interview Survey, January – March 2012.” Hyattsville, MD: National Center for Health Statistics. Retrieved October 6, 2018 (https://www.cdc.gov/nchs/data/nhis/earlyrelease/insur201209.pdf).

Cohen Robin A., Zammitti Emily P., and Martinez Michael E.. 2017. “Health Insurance Coverage: Early Release of Estimates from the National Health Interview Survey, 2016.” Hyattsville, MD: National Center for Health Statistics. Retrieved October 6, 2018 (https://www.cdc.gov/nchs/data/nhis/earlyrelease/insur201705.pdf).

Congressional Budget Office (CBO). 2016. “Federal Subsidies for Health Insurance Coverage for People Under Age 65: 2016 to 2026.” Washington, DC: Congressional Budget Office. Retrieved October 6, 2018 (https://www.cbo.gov/publication/51385).

Cooper Lisa A., and Powe Neil R.. 2004. “Disparities in Patient Experiences, Health Care Processes, and Outcomes: The Role of Patient-Provider Racial, Ethnic, and Language Concordance.” New York: Commonwealth Fund.

Currie Janet, and Gruber Jonathan. 1996. “Saving Babies: The Efficacy and Cost of Recent Changes in the Medicaid Eligibility of Pregnant Women.” Journal of Political Economy 104(6):1263–96.

Currie Janet, and Madrian Brigitte C.. 1999. “Health, Health Insurance, and the Labor Market.” Pp. 3309–3415 in Handbook of Labor Economics, edited by Ashenfelter O and Card D. Amsterdam, Netherlands: Elsevier Science.

Currie Janet, and Yelowitz Aaron. 2000. “Health Insurance and Less Skilled Workers.” Pp. 233–61 in Finding Jobs: Work and Welfare Reform, edited by Card D and Blank R. New York: Russell Sage Foundation.

Davidoff Amy, Yemane Alshadye, and Adams Emerald. 2005. “Health Coverage for Low-Income Adults: Eligibility and Enrollment in Medicaid and State Programs, 2002.” Washington, DC: Kaiser Commission on Medicaid and the Uninsured.

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

Davis Karen, Schoen Cathy, and Bandeali Farhan. 2015. “Medicare: 50 Years of Ensuring Coverage and Care.” New York: Commonwealth Fund.

DeVoe Jennifer E., Baez Alia, Angier Heather, Krois Lisa, Edlund Christine, and Carney Patricia A.. 2007. “Insurance + Access ≠ Health Care: Typology of Barriers to Health Care Access for Low-Income Families.” The Annals of Family Medicine 5(6):511–8. [PubMed: 18025488]

Doan Long, Loehr Annalise, and Miller Lisa R.. 2014. “Formal Rights and Informal Privileges for Same-Sex Couples: Evidence from a National Survey Experiment.” American Sociological Review 79(6):1172–95.

Esping-Andersen Gøsta. 1990. The Three Worlds of Welfare Capitalism. Princeton, NJ: Princeton University Press.

Farber Henry S., and Levy Helen. 2000. “Recent Trends in Employer-Sponsored Health Insurance Coverage: Are Bad Jobs Getting Worse?” Journal of Health Economics 19(1):93–119. [PubMed: 10947573]

Finkelstein Amy. 2007. “The Aggregate Effects of Health Insurance: Evidence from the Introduction of Medicare.” The Quarterly Journal of Economics 122(1):1–37.

Flood Sarah, King Miriam, Rodgers Renae, Ruggles Steven, and Warren J. Robert. 2018. Integrated Public Use Microdata Series, Current Population Survey: Version 6.0 [Annual Social and Economic Supplement]. Minneapolis, MN: IPUMS.

Freeman Joseph D., Kadiyala Srikanth, Bell Janice F., and Martin Diane P.. 2008. “The Causal Effect of Health Insurance on Utilization and Outcomes in Adults: A Systematic Review of U.S. Studies.” Medical Care 46(10):1023–32. [PubMed: 18815523]

Fried Brett, Pintor Jessie K., Graven Peter, and Blewett Lynn A.. 2014. “Implementing Federal Health Reform in the States: Who is Included and Excluded and What Are Their Characteristics?” Health Services Research 49(2):2062–85. [PubMed: 25255892]

Fronstin Paul. 2007. “Employment-Based Health Benefits: Access and Coverage, 1988–2005.” Issue Brief No. 303. Washington, DC: Employee Benefit Research Institute.

Fronstin Paul. 2012. “Employment-Based Health Benefits: Trends in Access and Coverage, 1997–2010.” Issue Brief No. 370. Washington, DC: Employee Benefit Research Institute.

Garfield Rachel, and Damico Anthony. 2017. “The Coverage Gap: Uninsured Poor Adults in States That Do Not Expand Medicaid.” Washington, DC: The Henry J. Kaiser Family Foundation.

Garfield Rachel, Licata Rachel, and Young Katherine. 2014. “The Uninsured at the Starting Line.” Washington, DC: The Henry J. Kaiser Family Foundation.

Gfroerer Joseph C., Larson Sharon L., and Colliver James D.. 2007. “Drug Use Patterns and Trends in Rural Communities.” The Journal of Rural Health 23(1):10–15.

Gonzales Gilbert, and Blewett Lynn A.. 2014. “National and State-Specific Health Insurance Disparities for Adults in Same-Sex Relationships.” American Journal of Public Health 104(2):e95–e104.

Gruber Jonathan. 2000. “Health Insurance and the Labor Market.” Pp. 645–706 in Handbook of Health Economics, Vol. 1, edited by Culyer AJ and New-house JP. Amsterdam, Netherlands: Elsevier Science.

Gupta Prithwis Das. 1993. Standardization and Decomposition of Rates: A User’s Manual. Washington, DC: U.S. Bureau of the Census.

Hacker Jacob S. 2004. “Privatizing Risk without Privatizing the Welfare State: The Hidden Politics of Social Policy Retrenchment in the United States.” American Political Science Review 98(2):243–60.

Hadley Jack. 2003. “Sicker and Poorer—The Consequences of Being Uninsured: A Review of the Research on the Relationship between Health Insurance, Medical Care Use, Health, Work, and Income.” Medical Care Research and Review 60(2):3S–75S. [PubMed: 12800687]

Hatzenbuehler Mark L., Conall O’Cleirigh Chris Grasso, Mayer Kenneth, Safren Steven, and Bradford Judith. 2012. “Effect of Same-Sex Marriage Laws on Health Care Use and Expenditures in Sexual Minority Men: A Quasi-Natural Experiment.” American Journal of Public Health 102(2):285–91. [PubMed: 22390442]

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

Holahan John, Kenney Genevieve, and Pelletier Jennifer. 2010. “The Health Status of New Medicaid Enrollees under Health Reform: Timely Analysis of Immediate Health Policy Issues.” Washington, DC: The Urban Institute.

House James S. 2015. Beyond Obamacare: Life, Death, and Social Policy. New York: Russell Sage Foundation.

Huberfeld Nicole. 2015. “The Universality of Medicaid at Fifty.” Yale Journal of Health Policy, Law, and Ethics 15(1):67–88. [PubMed: 25876374]

Institute of Medicine. 2002. Care without Coverage: Too Little, Too Late. Washington, DC: National Academy Press.

Kangas Olli. 2010. “One Hundred Years of Money, Welfare, and Death: Mortality, Economic Growth, and the Development of the Welfare State in 17 OECD Countries 1900–2000.” International Journal of Social Welfare 19:S42–S59.

Karaca-Mandic Pinar, Norton Edward C., and Dowd Bryan. 2012. “Interaction Terms in Nonlinear Models.” Health Services Research 47(1):255–74. [PubMed: 22091735]

Katz Michael B. 1986. In the Shadow of the Poorhouse: A Social History of Welfare in America. New York: Basic Books.

Katz Michael B. 1989. The Undeserving Poor: From the War on Poverty to the War on Welfare. New York: Pantheon Books.

Kennet Joel, and Gfroerer Joseph. 2005. “Evaluating and Improving Methods Used in the National Survey on Drug Use and Health.” Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies.

Kitagawa Evelyn M. 1955. “Components of a Difference between Two Rates.” Journal of the American Statistical Association 50(272):1168–94.

Kohli Martin. 2007. “The Institutionalization of the Life Course: Looking Back to Look Ahead.” Research in Human Development 4(3):253–71.

Korpi Walter, and Palme Joakim. 1998. “The Paradox of Redistribution and Strategies of Equality: Welfare State Institutions, Inequality, and Poverty in the Western Countries.” American Sociological Review 63(5):661–87.

Levy Helen. 2007. “Health Insurance and the Transition to Adulthood.” Pp. 84–106 in The Price of Independence: The Economics of Early Adulthood, edited by Danzinger S and Rouse CE. New York: Russell Sage Foundation.

Levy Helen, and Meltzer David. 2008. “The Impact of Health Insurance on Health.” Annual Review of Public Health 29(1):399–409.

Lundberg Olle, Monica Åberg Yngwe Maria Kölegård Stjärne, Jon Ivar Elstad Tommy Ferrarini, Kangas Olli, Thor Norström Jaokim Palme, and Fritzell Johan. 2008. “The Role of Welfare State Principles and Generosity in Social Policy Programmes for Public Health: An International Comparative Study.” The Lancet 327(9650):1633–40.

Mackino James, Starfield Barbara, and Shi Leiyu. 2003. “The Contribution of Primary Care Systems to Health Outcomes within Organization for Economic Cooperation and Development (OECD) Countries, 1970–1998.” Health Services Research 38(3):831–65. [PubMed: 12822915]

Martinez Michael E., and Cohen Robin A.. 2012. “Health Insurance Coverage: Early Release of Estimates from the National Health Interview Survey, January–June 2012.” Hyattsville, MD: National Center for Health Statistics.

Mayer Karl U. 2004. “Whose Lives? How History, Societies, and Institutions Define and Shape Life Courses.” Research in Human Development 1(3):161–87.

McCarthy Douglas, How Sabrina K. H., Fryer Ashley-Kay, Radley David C., and Schoen Cathy. 2011. “Why Not the Best? Results from the National Scorecard on US Health System Performance.” New York: Commonwealth Fund.

McWilliams Michael J. 2009. “Health Consequences of Uninsurance among Adults in the United States: Recent Evidence and Implications.” The Milbank Quarterly 87(2):443–94. [PubMed: 19523125]

Meyer Madonna H., and Pavalko Eliza K.. 1996. “Family, Work, and Access to Health Insurance among Mature Women.” Journal of Health and Social Behavior 37(1):311–25. [PubMed: 8997887]

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

Montez Jennifer K., Angel Jacqueline L., and Angel Ronald J.. 2009. “Employment, Marriage, and Inequality in Health Insurance for Mexican-Origin Women.” Journal of Health and Social Behavior 50(2):132–48. [PubMed: 19537456]

Navarro Vicente, Muntaner Carles, Borrell Carme, Benach Joan, Quiroga Águeda, Maica Rodríguez-Sanz Núria Vergés, and Pasarín M. Isabel. 2006. “Politics and Health Outcomes.” The Lancet 368(9540):1033–37.

Navarro Vicente, and Shi Leiyu. 2001. “The Political Context of Social Inequalities in Health.” International Journal of Health Services 31(1):1–21. [PubMed: 11271636]

Nolte Ellen, and McKee C. Martin. 2008. “Measuring the Health of Nations: Updating an Earlier Analysis.” Health Affairs 27(1):58–71. [PubMed: 18180480]

Nolte Ellen, and McKee C. Martin. 2012. “In Amenable Mortality—Deaths Avoidable through Health Care—Progress in the US Lags That of Three European Countries.” Health Affairs 31(9):2114–22. [PubMed: 22933419]

Obama Barack H. 2017. “Repealing the ACA without a Replacement: The Risks to American Health Care.” New England Journal of Medicine 376(4):297–9. [PubMed: 28058966]

Olafsdottir Sigrun. 2007. “Fundamental Causes of Health Disparities: Stratification, the Welfare State, and Health in the United States and Iceland.” Journal of Health and Social Behavior 48(3):239–53. [PubMed: 17982866]

Organization for Economic Cooperation and Development. 2017. “Health at a Glance 2017: OECD Indicators.” Paris, France: Organization for Economic Cooperation and Development.

Patchias Elizabeth M., and Waxman Judy. 2007. Women and Health Coverage: The Affordability Gap. New York: The Commonwealth Fund.

Pauly Mark V., and Percy Allison M.. 2000. “Cost and Performance: A Comparison of the Individual and Group Health Insurance Markets.” Journal of Health, Politics, Policy, and Law 25(1):9–26. [PubMed: 10804471]

Quadagno Jill. 2005. The Color of Welfare: How Racism Undermined the War on Poverty. New York: Oxford University Press.

Quadagno Jill. 2010. “Institutions, Interest Groups, and Ideology: An Agenda for the Sociology of Health Care Reform.” Journal of Health and Social Behavior 51(2):125–36. [PubMed: 20617754]

Raphael Dennis. 2006. “Social Determinants of Health: Present Status, Unanswered Questions, and Future Directions.” International Journal of Health Services 36(4):651–77. [PubMed: 17175840]

Rosenbaum Sara. 2011. “The Patient Protection and Affordable Care Act: Implications for Public Health Policy and Practice.” Public Health Reports 126(1):130–5. [PubMed: 21337939]

Sasso Anthony T. Lo, and Buchmueller Thomas C.. 2004. “The Effect of the State Children’s Health Insurance Program on Health Insurance Coverage.” Journal of Health Economics 23(5):1059–82. [PubMed: 15353193]

Seccombe Karen. 1993. “Employer-Sponsored Medical Benefits: The Influence of Occupational Characteristics and Gender.” The Sociological Quarterly 34(4):557–80.

Schoen Cathy, Osborn Robin, Squires David, Doty Michelle M., Pierson Roz, and Applebaum Sandra. 2010. “How Health Insurance Design Affects Access to Care and Costs, by Income, in Eleven Countries.” Health Affairs 29(12):2323–34. [PubMed: 21088012]

Shanahan Michael J. 2000. “Pathways to Adulthood in Changing Societies: Variability and Mechanisms in Life Course Perspective.” Annual Review of Sociology 26(1):667–92.

Shaw Frederic E., Asomugha Chisara N., Conway Patrick H., and Rein Andrew S.. 2014. “The Patient Protection and Affordable Care Act: Opportunities for Prevention and Public Health.” The Lancet 384(9937):75–82.

Skocpol Theda. 1984. “Why Not Equal Protection? Explaining the Politics of Public Social Spending in Britain 1900–1922, and the United States, 1880s– 1920.” American Sociological Review 49(6):726–50.

Skocpol Theda. 1987. “A Society without a ‘State’? Political Organization, Social Conflict, and Welfare Provision in the United States.” Journal of Public Policy 7(4):349–71.

Skocpol Theda. 1993. “America’s First Social Security System: The Expansion of Benefits for Civil War Veterans.” Political Science Quarterly 108(1):85–116.

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

Skocpol Theda. 1995. Protecting Soldiers and Mothers. Boston, MA: Harvard University Press.

Starfield Barbara, and Shi Leiyu. 2004. “The Medical Home, Access to Care, and Insurance: A Review of Evidence.” Pediatrics 113(4):1493–8. [PubMed: 15121917]

Starr Paul. 2013. Remedy and Reaction: The Peculiar American Struggle over Health Care Reform. New Haven, CT: Yale University Press.

Tilly Charles. 1998. Durable Inequality. Berkeley: University of California Press.

Wachino Vikki, Artiga Samantha, and Rudowitz Robin. 2014. “How Is the ACA Impacting Medicaid Enrollment?” Washington, DC: Kaiser Commission on Medicaid and the Uninsured.

Wilensky Harold L. 2002. Rich Democracies: Political Economy, Public Policy, and Performance. Berkeley: University of California Press.

Wolf-Maier Katharina, Cooper Richard S., Kramer Holly, Banegas José R., Giampaoli Simona, Joffres Michel R., Poulter Neil, Primatesta Paola, Stegmayr Birgitta, and Thamm Michael. 2004. “Hypertension Treatment and Control in Five European Countries, Canada, and the United States.” Hypertension 43(1):10–17. [PubMed: 14638619]

Woolf Steven H., and Aron Laudan Y.. 2013. “The US Health Disadvantage Relative to Other High-Income Countries: Findings from a National Research Council/Institute of Medicine Report.” Journal of the American Medical Association 309(8):771–2. [PubMed: 23307023]

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

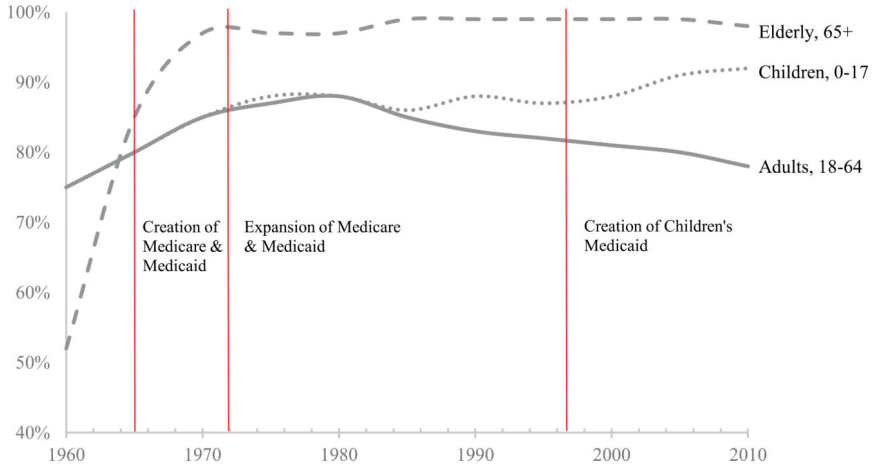

Figure 1. Health Insurance Coverage in the U.S. Population by Age Groups, 1960 to 2009

Note: The 1960 to 1974 estimates are derived from the NCHS report "Health Insurance Coverage Trends, 1959–2007: Estimates from the National Health Interview Survey" (Cohen et al. 2009). The NHIS estimates observed thereafter are based on the author's calculations.

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Figure 2. Decomposition of the Changes in Health Insurance Disparities between Sociodemographic Groups

Note: The stacked bars reflect the share of the change in the between-group gap in health insurance coverage that is attributed to adults across institutional attachment categories.

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Table 1.

The Sociodemographic Distribution of Health Insurance Coverage and the Corresponding Sources Through Which the Insured Population Received Coverage in 2009; Adults (18 to 64)

	Percent Insured				
	Total Population	Insured Population[a]			
	Insured	Employer	Spousal	Medicaid	Other[b]
Total	78.5	47.7	29.1	12.8	10.4
Gender					
Female	80.8	40.7	35.2	14.6	9.5
Male	76.1	56.9	20.8	10.8	11.5
Race/Ethnicity					
White	84.4	48.7	31.3	9.1	10.9
Black	73.3	46.7	19.1	23.6	10.6
Latino	57.1	44.5	24.3	23.4	7.8
Education					
Less than HS	58.5	24.4	25.2	39.8	10.6
HS	72.7	46.1	26.7	16.8	10.4
Some College	81.2	44.4	32.9	10.6	12.1
College +	90.5	58.6	28.8	3.7	8.9

Note: Estimated values sum to 100 percent per sociodemographic group.

[a] These values represent the share of insured adults across observed sources of health insurance.

[b] This category includes all other sources of health insurance, such as the private nongroup market, the Military Health System, the Indian Health Service, and Medicare.

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Table 2.

Qualitative Descriptions, Coding Schemes, and Weighted Means of Control Variables in the Pre- and Post-ACA Study Periods; Adults (18 to 64), NSDUH 2009 to 2012, 2014 to 2016

Concept	Variable	Description	Coding	Pre-ACA %	Post-ACA %
Gender	Female	Is the respondent female?	0 = no 1 = yes	50.8	50.9
Race/ Ethnicity	White	Is the respondent non-Hispanic White? (reference category)	0 = no 1 = yes	69.9	67 4***
	Black	Is the respondent non-Hispanic Black?	0 = no 1 = yes	13.1	13.6
	Latino	Is the respondent of Hispanic/Latin origin?	0 = no 1 = yes	17.0	19.0***
Education	Less than HS	Is the respondent's highest level of education less than high school?	0 = no 1 = yes	13.8	12.9**
	HS	Is the respondent's highest level of education high school or GED equivalent?	0 = no 1 = yes	30.3	26.7***
	Some College	Is the respondent's highest level of education some college?	0 = no 1 = yes	27.3	31.3***
	College +	Is the respondent's highest level of education college or more? (reference category)	0 = no 1 = yes	28.5	29.1
Age	18 to 25	Is the respondent 18 to 25 years old?	0 = no 1 = yes	17.8	17.6
	26 to 34	Is the respondent 26 to 34 years old?	0 = no 1 = yes	18.9	19.3
	35 to 49	Is the respondent 35 to 49 years old?	0 = no 1 = yes	32.4	30.7***
	50 to 64	Is the respondent 50 to 64 years old? (reference category)	0 = no 1 = yes	30.9	32.4**
Income	< 100% FPL	Is the respondent's household income below the Federal Poverty Line (FPL)?	0 = no 1 = yes	14.9	16.5***
	100 to 199% FPL	Is the respondent's household income greater than 100% of the FPL and less than 199% of the FPL?	0 = no 1 = yes	19.7	19.3
	< 200% FPL	Is the respondent's household income greater than or equal to 200% of the FPL? (reference category)	0 = no 1 = yes	65.4	64.2*
	Welfare	Did the respondent participate in any of the following programs in the past year: welfare or Temporary Assistance for Needy Families (TANF), Supplemental Security Income (SSI), or Supplemental Nutrition Assistance Program (SNAP) (food stamps)?	0 = no 1 = yes	19.4	21.4***
Health Status	SRH	Did the respondent report their general health status as fair or poor, rather than as excellent, very good, or good?	0 = no 1 = yes	11.5	12.3**

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Concept	Variable	Description	Coding	Pre-ACA %	Post-ACA %
	Chronic Illness	Did the respondent report having any of the following health conditions in their lifetime: asthma, chronic bronchitis, cirrhosis of the liver, diabetes, heart disease, hepatitis, hypertension, or HIV?	0 = no 1 = yes	31.4	31.6

Note: The numbers and percentages reported are based on sample weights.

Two-tailed adjusted F-test (Probability > F):

* $p < .05$

** $p < .01$

*** $p < .001$.

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Table 3.

Percent Uninsured in the Pre- and Post-ACA Study Periods for the Total Population and across Groups with and without Institutional Attachments; Adults (18 to 64), NSDUH 2009 to 2012 and 2014 to 2016

	% Uninsured		% Uninsured Pre vs. Post	
	Pre	Post	%-pt. Δ	% Δ
Total	19.7	13 6***	−6.1	−31.0
Institutional Attachment				
Overall[a]				
Attached	17.1	12.1***	−5.0	−29.2
Unattached	37.8	22.3***	−15.5	−41.0
Labor Market[b]				
Attached	15.5	11.1***	−4.4	−28.4
Unattached	27.7	18.1***	−9.6	−34.7
Marriage[c]				
Attached	13.3	9.3***	−4.0	−30.1
Unattached	26.7	17.9***	−8.8	−33.0
Family[d]				
Attached	18.1	13.3***	−4.8	−26.5
Unattached	20.6	13.7***	−6.9	−33.5

Note: Numbers and percentages reported are based on sample weights.

[a]Indicates any institutional attachment (full-time employment, full-time school or military enrollment, married, or custodial parent) versus none.

[b]Individuals who reported they were employed full-time, enrolled full-time in higher-education institutions, or enrolled full-time in the military versus those who reported otherwise, including part-time employed, unemployed, part-time students, and those completely unenrolled in both school and the military.

[c]Individuals who reported they were married versus those who reported other marital statuses, including separated, divorced, widowed, and never married.

[d]Individuals who reported they lived with at least one of their own children who were under 18 years old versus those who reported other living arrangements, including parents who did not live with their children and individuals without children.

Two-tailed adjusted F-test (Probability > F):

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* $p < .05$

** $p < .01$

*** $p < .001$.

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Table 4.

Effects of the ACA on the Probability of Being Uninsured; Adults (18 to 64), NSDUH 2009 to 2012 and 2014 to 2016

	Pre-ACA Difference[a]	Post-ACA Difference[a]	Pre- vs. Post-ACA Differences[b]
Institutional Attachment			
Model 1			
Overall	16.8*** (.004)	5.6*** (.009)	−11.2*** (.005)
Model 2			
Labor Market	10.8*** (.003)	4.2*** (.006)	−6.7*** (.003)
Model 3			
Marriage	6.0*** (.002)	1.3*** (.005)	−4.8*** (.003)
Model 4			
Family	5.6*** (.003)	3.1*** (.002)	−2.5*** (.003)

Note: Standard errors are in parentheses. All models include controls for gender, race/ethnicity, education, age, household income, receipt of government assistance, self-rated health, and chronic health conditions.

[a]Comparing differences in the probability of being uninsured between adults with (control group) and without (treatment group) institutional attachments for the pre- and post-ACA study periods.

[b]Difference-in-differences: comparing differences in outcomes for the pre- and post-ACA study periods among adults with and without institutional attachments.

*$p < .05$

**$p < .01$

***$p < .001$ (two-tailed tests).

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Table 5.

Percent Uninsured in the Pre- and Post-ACA Study Periods across Sociodemographic Groups; Adults (18 to 64), NSDUH 2009 to 2012 and 2014 to 2016

	% Uninsured		% Uninsured Pre vs. Post	
	Pre	**Post**	**%-pt. Δ**	**% Δ**
Panel A. Within-Group Differences				
Gender				
Female	17.6	11.6***	−6.0	−34.1
Male	22.9	15.7***	−7.2	−31.4
Race/Ethnicity				
White	14.7	9.8***	−4.9	−33.3
Black	26.7	15.2***	−11.5	−43.1
Latino	37.9	25.9***	−12.0	−31.7
Education				
Less than HS	41.6	29.9***	−11.7	−28.1
HS	23.6	18.1***	−5.5	−23.3
Some College	16.9	11.2***	−5.7	−33.7
College +	7.6	4.7***	−2.9	−38.2
Panel B. Between-Group Differences				
Gender				
Male – Female	5.3	4.1*	−1.2	−22.6
Race/Ethnicity				
Black – White	12.0	5.4***	−6.6	−55.0
Latino – White	23.2	16.1***	−7.1	−30.6
Education				
Less than HS – College +	34.0	25.2***	−8.8	−25.9
HS – College +	16.0	13.4***	−2.6	−16.3
Some College – College +	9.3	6.5***	−2.8	−30.1

Note: Numbers and percentages reported are based on sample weights.

Two-tailed adjusted F-test (Probability > F):

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* $p < .05$

** $p < .01$

*** $p < .001$.

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Table 6.

Regression-Adjusted Difference in the Estimated Probability of Being Uninsured by Institutional Attachment; Adults (18 to 64), NSDUH 2009 to 2012 and 2014 to 2016

	Labor Market			Marriage			Family		
	Pre-ACA	**Post-ACA**	**Pre vs. Post**	**Pre-ACA**	**Post-ACA**	**Pre vs. Post**	**Pre-ACA**	**Post-ACA**	**Pre vs. Post**
Panel A. Attached Groups									
Gender									
Male – Female	5.4***	3.7***	−1.7**	5.3***	3.6***	−1.7***	5.3***	3.6***	−1.7***
Race/Ethnicity									
Black – White	5.2***	.9**	−4.3***	5.9***	.8**	−5.1**	1.1***	.7**	−.4**
Latino – White	11.5***	8.2***	−3.3***	11.4***	7.9***	−3.5***	11.3***	7.8***	−3.5***
Education									
Less than HS – College +	16.6***	11.4***	−5.2***	16.4***	11.1***	−5.3***	15.8***	11.0***	−4.8***
HS – College +	11.8***	7.9***	−3.9***	11.7***	7.8***	−3.9***	11.6***	7.7***	−3.9***
Some College – College +	6.2***	4.0***	−2.2***	6.1***	4.0***	−2.1***	6.1***	3.9***	−2.2***
Panel B. Unattached Groups									
Gender									
Male – Female	8.0***	5.9***	−2.1***	6.8***	4.6***	−2.2***	6.8***	4.8***	−2.0***
Race/Ethnicity									
Black – White	6.7***	1.2***	−5.5***	7.5***	1.0**	−6.5***	3.8***	1.0**	−2.8***
Latino – White	16.0***	12.4***	−3.6***	14.2***	10.3***	−3.9***	14.1***	10.3***	−3.8***
Education									
Less than HS – College +	24.0***	18.0***	−6.0***	21.8***	14.8***	−7.0***	19.1***	14.3***	−4.4***
HS – College +	17.7***	12.9***	−4.8***	15.2***	10.5***	−4.7***	15.1***	10.4***	−4.7***
Some College – College +	9.7***	6.8***	−2.9***	8.2***	5.5***	−2.7***	8.1***	5.4***	−2.7***

*$p < .05$

**$p < .01$

***$p < .001$ (two-tailed tests).