



# Health-insurance Coverage for Lowwage Workers, 1979-2010 and Beyond

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## **Abstract**

This paper uses data from the Current Population Surveys for 1980 through 2011 to review trends in health-insurance coverage rates for low-wage workers (defined as workers in the bottom fifth of the wage distribution in each survey year). In 2010, over 38 percent of low-wage workers lacked health insurance from any source, up from 16 percent in 1979. The biggest reason for the decline in coverage is the erosion of employer-provided health insurance, either through a worker's own employer or as a dependent on another family member's employer-provided policy. Over the last three decades, the role of public insurance in providing coverage for low-wage workers has increased, though not nearly enough to offset the declines in private insurance. In 2010, about 10 percent of low-wage workers had coverage through Medicaid, double the share in 1979. While a great deal of uncertainty still surrounds the Affordable Care Act (ACA) and its likely impact on employers and workers, reasonable estimates based on consensus projections suggest that the ACA will have a substantial positive effect on health-insurance coverage rates for low-wage workers. Even so, the ACA will likely leave an important share of low-wage workers, especially low-wage Latino, African American, and Asian workers, as well as many immigrant workers, without coverage. At the same time, if the ACA is blocked - in the courts or in Congress - there is every indication that coverage rates for low-wage workers will continue their long, steady decline.

### **Introduction and Overview**

About half of all U.S. residents without health insurance are workers.<sup>1</sup> Indeed, non-elderly workers are less likely to have health insurance than many groups generally viewed as more economically vulnerable. According to the most recent Census data, for example, only 2 percent of adults age 65 and older – and about 10 percent of children under the age of 18 – lacked health-insurance coverage in 2010. Meanwhile, about 20 percent of workers age 18 to 64 – and 15 percent of full-time workers in the same age range – had no health insurance in the same year.<sup>2</sup>

Yet, we know surprisingly little about workers and their health insurance or how their coverage has changed over the last three decades. In recent years, the annual reports on health-insurance coverage produced by the Census Bureau have included a brief mention of the share of workers with health insurance, but these same published data give no breakdowns by workers' earnings, gender, race, or education level, and no breakdowns by the source of coverage (their own employer, a spouse's employer, Medicaid, Medicare, directly purchased private insurance, or other sources). Moreover, consistent, publicly available data for workers' coverage start only in the late 1990s, long after the decline in overall health-insurance rates was well underway.

The most important attempt to fill this data gap has been the regular estimates produced by the Economic Policy Institute (EPI) for their biennial publication, *The State of Working America*. The EPI figures, however, focus exclusively on own-employer-provided coverage for private-sector workers. These data provide important information about compensation, employer costs, and job quality, but don't tell us about the strategies that workers, especially low-wage workers, who are least likely to have employer-provided insurance, use to secure coverage through other means. <sup>6</sup>

All coverage estimates must also contend with several important changes over time in the Current Population Survey (CPS), the large, nationally representative survey that is the source of official health-insurance coverage numbers.<sup>7</sup> Over the last three decades, the Census Bureau has made improvements to the survey methodology, most of which have increased the ability of the survey to identify health-insurance coverage. The improvements are welcome, but can make it much more difficult to track trends. If the Census Bureau were to travel back in time to 1980, the first year the

<sup>1</sup> See, for example, Hye Jin Rho and John Schmitt, "Who are the 46.3 million Uninsured?" http://www.cepr.net/index.php/graphic-economics/who-are-the-463-million-uninsured/, accessed January 16, 2012. 2 U.S. Census Bureau (2011), Table 8, pp. 26-27.

<sup>3</sup> See, for example, U.S. Census Bureau (2011), Table 8, p. 27. The Census, instead, devotes extensive analysis to health-insurance coverage by age (particularly for the population 0 to 17 and 18 to 64) and other demographic characteristics.

<sup>4</sup> See, for example, the historical data tables available here at the Census Bureau's web site: http://www.census.gov/hhes/www/hlthins/data/historical/HIB\_tables.html

<sup>5</sup> The State of Working America has been published biennially for two decades, but the most recent data are now housed at http://www.stateofworkingamerica.org/.

<sup>6</sup> Fronstin (2000, 2009) tracks health-insurance coverage of workers and examines workers' coverage through all possible sources, not just employer-provided insurance. Clemans-Cope and Garrett (2006) analyze coverage rates for adults, workers, and children through employer and other sources. This paper differs from this earlier research in two key ways. First, this paper divides workers into wage quintiles and focuses on low-wage workers; Fronstin and Clemans-Cope and Garrett analyze all workers as a group. Second, this paper produces consistent estimates from 1979 through 2010; Fronstin (2000) covers the period 1987 through 1998; Fronstin (2009), the period 1994 through 2008; and Clemans-Cope and Garrett, 2001 through 2005.

<sup>7</sup> See Rho and Schmitt (2010) for a review of changes in the CPS methodology related to health-insurance coverage.

CPS asked respondents about their health insurance, and field the same survey it uses today, the Census Bureau would almost certainly find a higher health-insurance coverage rate in that year than what was actually found using the earlier version of the survey. As a result, comparing current coverage estimates with older estimates – without adjusting for the methodological changes – systematically understates the long decline in health coverage. The Census Bureau typically sidesteps this methodological challenge by reporting coverage rates only over the recent period when the survey design has been stable (since 1999). EPI takes a more conservative route and reports the changes as they appear in each year's survey, which has the effect of underestimating the decline in coverage over time.<sup>8</sup>

This paper seeks to paint a more complete picture of trends in health-insurance coverage for workers, especially low-wage workers. To do so, the paper first calculates low-wage workers' coverage rates from all sources of health insurance, including workers' own employers, other family members' employers, directly purchased policies, Medicaid, and other public sources, with separate breakdowns for the most important of these categories. The paper then adjusts these data to reflect changes in the survey methodology over time.

In order to give some idea of the likely future path of coverage rates for low-wage workers, the paper also summarizes outside projections of the impact on coverage rates of the Affordable Care Act (ACA) of 2010. Given the strong similarities between the ACA and health-insurance reforms passed in Massachusetts in 2006, the paper also reviews the experience of workers there.

With respect to trends in coverage over the last three decades, the main findings are:

- Only about one-fourth of low-wage workers (those in the bottom 20 percent of the wage distribution) currently have health insurance through their own employer. By contrast, about half of workers in the next quintile and just over three-fourths of workers in the top quintile have coverage through their employer.
- The share of workers with own-employer insurance has dropped sharply since 1979 for workers at all wage levels. Own-employer coverage has fallen 17 percentage points for lowwage workers; 14 percentage points for workers in the second quintile; and 13 percentage points for workers in the top quintile.
- For low-wage workers, coverage through a spouse's (or another family member's) employer has not made up for the decline in own-employer insurance. In fact, for low-wage workers, coverage through a spouse or other family member fell 10 percentage points between 1979 and 2010.
- Currently, about one of every eight (12.8 percent) low-wage workers has some form of public health insurance. Almost one-tenth of low-wage workers (9.6 percent) have coverage through Medicaid, with the rest covered by the Veterans Administration, Medicare, and

<sup>8</sup> Schmitt (2008) uses the same approach. Using unadjusted CPS data, Rho and Schmitt (2010) find a 7.5 percentage-point decline between 1979 and 2008 in overall coverage rates for workers ages 18 to 64 (see their Table 2); after adjusting for survey changes, they estimate the decline was 10.2 percentage points – about 36 percent higher than the unadjusted estimate.

other public sources. For low-wage workers, coverage through Medicaid has more than doubled since 1979.

- Almost 40 percent of low-wage workers have no health-insurance coverage from any source, private or public. This figure is more than double the rate in 1979 (about 16 percent). By contrast, less than 5 percent of high-wage workers are without any form of coverage.
- Coverage problems are particularly severe for Latino workers. Almost 40 percent of *all* Latino workers (not just low-wage workers) have no health insurance of any form. African American (about 22 percent) and Asian (about 17 percent) workers are also much less likely to have coverage than white workers (about 12 percent).
- Moving forward from 2014, the full implementation of the ACA would reverse the long-term slide in coverage for low-wage workers. Based on Congressional Budget Office estimates for changes in coverage for non-elderly adults, implementation of the ACA would cut non-coverage rates for low-wage workers by about one-fourth, using conservative assumptions, and by more than one-half, using more reasonable assumptions.

Based on public and private forecasts of the impact of the ACA – and on the concrete experience of Massachusetts, which implemented a series of reforms similar to those incorporated into the ACA – the full implementation of recent health-care reforms would substantially increase health-insurance coverage for low-wage workers. The main mechanisms for raising low-wage workers' coverage under the ACA would be expanded eligibility for Medicaid for low-wage workers in families below 133 percent of the federal poverty line and federal subsidies for the purchase of private insurance for low-wage workers in families between 100 and 400 percent of the poverty line. If, however, full implementation of the ACA is blocked by judicial or legislative action before 2014, every indication is that low-wage workers will continue to lose access to health insurance.

# **Data and Methods**

The source of all estimates of health-insurance coverage presented here is the Current Population Survey (CPS), a nationally representative survey of 50,000 to 60,000 households conducted monthly by the Census Bureau. Since 1980, the March version of the CPS has asked respondents detailed questions about their health-insurance coverage during the preceding calendar year. These responses serve as the basis for the official annual estimates for health-insurance coverage in the United States.

Over the past 30 years, the March CPS has undergone several important methodological changes that have had an impact on the survey's estimates of health-insurance coverage rates. Most of these changes had the effect of raising the reported coverage rate for health insurance, with the effect that comparisons of recent coverage rates with those of three decades ago systematically understate the decline in health-insurance coverage that actually took place over the period. Rho and Schmitt (2010) provide a detailed summary of these changes and propose a methodology for adjusting results

<sup>9 &</sup>quot;Compilation of Patient Protection and Affordable Care Act," as amended through May 1st, 2010, p. 113, http://housedocs.house.gov/energycommerce/ppacacon.pdf.

from the raw CPS data to make earlier survey data more directly comparable with the current survey methodology. All estimates below use their recommended adjustment procedure.

The main focus here is on low-wage workers, defined as those in the bottom quintile of the hourly earnings distribution in each year of the survey. <sup>10</sup> For purposes of comparison, all figures also report results for the second quintile of wage earners (the quintile immediately above the bottom quintile), as well as the top quintile. Following Gould (2009), the analysis is limited to "attached workers," defined as those who worked at least 26 weeks in the year and usually worked at least 20 hours per week. Since the interest here is in low-wage employees, the data exclude self-employed workers.

All the data reported here refer to workers between the ages of 18 and 64. Younger workers may be covered under parental plans or through government programs aimed at children (most notably the Children's Health Insurance Program). Almost all workers (and all U.S. residents) age 65 and older are covered by Medicare, the universal, single-payer, health-insurance program for the elderly, established in 1965.

# Coverage Levels and Trends, 1979-2010

As **Figure 1** shows, in 2010, only about one-fourth (25.9 percent) of low-wage workers had health-insurance through their own employer, down from 42.9 percent in 1979 (see also **Appendix Table 1**). The 2010 rates for low-wage workers were well below even those in the next quintile up, where just over half (51.8 percent) of workers had coverage through their own employer (see also **Appendix Table 2**). In the same year, 78.9 percent of workers in the top quintile had health insurance through their employer (see also **Appendix Table 5**).

<sup>10</sup> Hourly wages are calculated in the standard way by dividing each worker's annual earnings from work by the product of their total number of weeks worked in the year and their usual hours per week. The upper limit for hourly wages received by workers in the bottom wage quintile in 2010 was \$10.10; the upper limit for the second wage quintile in the same year was \$14.96; and workers in the top quintile made at least \$30.77 per hour (all in 2010 dollars).

<sup>11</sup> A worker is covered if the employer offers a plan and the employer participates in that plan. Low-income workers are both less likely to be in a job that offers health insurance and less likely to accept coverage when it is available (Clemans-Cope, Kenney, Pantell, and Perry, 2007, p. 1).

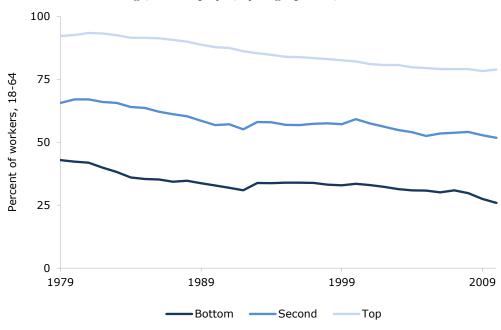


FIGURE 1 Health-insurance coverage, own-employer, by wage quintile, 1979-2010

The last three decades have seen substantial erosion in employer-provided coverage across workers at all pay levels. Low-wage workers saw the biggest decline in own-employer coverage – about 17.0 percentage points between 1979 and 2010. But, coverage losses were almost as large for workers in the second quintile (down 13.8 percentage points) and the top quintile (down 13.3 percentage points).

A rise in families with second earners, particularly women in married couple families, could arguably have reduced the need for own-employer coverage, because second earners may be able to obtain coverage through their spouse (or, in some cases, through another family member). **Figure 2** shows that for low-wage workers, coverage through a spouse's (or another family member's) employer has not made up for the decline in own-employer insurance. In fact, for low-wage workers, coverage through a spouse or other family member actually fell 10 percentage points between 1979 and 2010. Workers in the second quintile saw a similar, but smaller decline. Coverage through another family members' employer, however, did increase for workers in the top quintile (and, to a smaller degree, for workers in the fourth quintile, not shown).<sup>12</sup>

<sup>12</sup> For details on coverage for workers in the fourth quintile, see Appendix Table 4. Coverage through a spouse or other family members' employer was basically unchanged for workers in the middle quintile; see Appendix Table 3.

30 25 79-81 20 10 10 1979 1989 1999 2009

FIGURE 2 Health-insurance coverage, family member's employer, by wage quintile, 1979-2010

Nor have low-wage workers been able to make up for the decline in employer-provided coverage through other forms of private insurance – most importantly, individual policies purchased directly from insurers. As **Figure 3** shows, in 2010, only about one-in-twelve (8.1 percent) low-wage workers had directly purchased or other private coverage, a rate that had increased only slightly in the preceding 30 years. An even smaller share of higher-wage workers had directly purchased or other private coverage: about 5 percent of second-quintile workers and about 4 percent of those in the top quintile. (The low reliance of workers in the top quintile on non-employer based private insurance suggests that these policies are probably not as good as employer-provided coverage.)

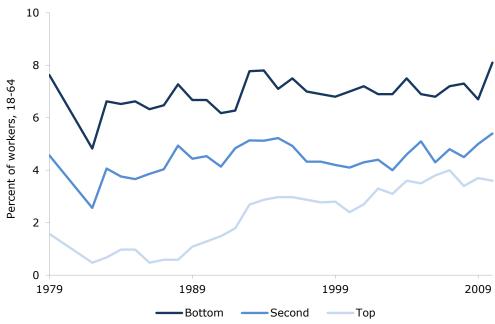


FIGURE 3 Health-insurance coverage, other private, by wage quintile, 1979-2010

The only area where low-wage workers have seen any improvement over the last three decades is in coverage through public insurance programs, particularly, Medicaid. As **Figure 4** demonstrates, in 2010, about one of every eight (12.8 percent) low-wage workers had some form of public health insurance, up from about one-in-twelve (8.8 percent) in 1979. As **Figure 5** illustrates, the vast majority of low-wage workers receiving public health insurance in 2010 had Medicaid. (Higher-wage workers with public insurance were much less likely to be on Medicaid, and more likely to have coverage through other government programs including those covering military veterans.) Currently, almost one of every ten (9.6 percent) low-wage workers is covered by Medicaid, more than double the rate in 1979 (4.7 percent).

FIGURE 4 Health-insurance coverage, all public sources, by wage quintile, 1979-2010

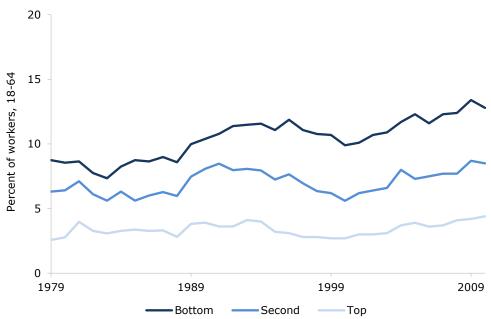
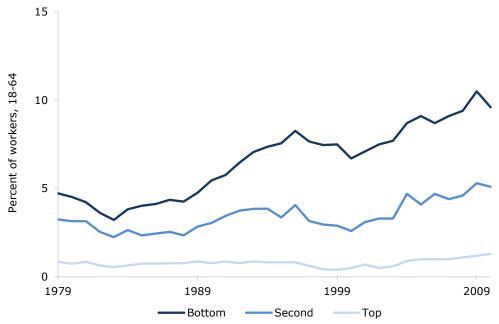


FIGURE 5 Health-insurance coverage, Medicaid, by wage quintile, 1979-2010

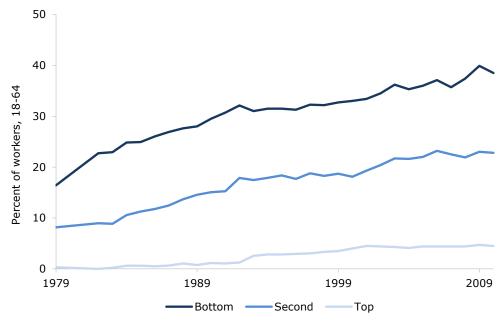


Source: Author's analysis of March Current Population Survey.

After counting coverage from all possible private and public sources, almost four-in-ten (38.5 percent) low-wage workers have no health-insurance coverage whatsoever (see **Figure 6**). This is more than double the non-coverage rate in 1979 (16.4 percent). By contrast, less than 5 percent of

high-wage workers are without any form of coverage (though up somewhat from the essentially universal coverage that prevailed for high-wage workers in 1979).

FIGURE 6 No health insurance from any source, by wage quintile, 1979-2010



Source: Author's analysis of March Current Population Survey.

Sample-size limitations make it difficult to obtain precise estimates of coverage rates for low-wage workers by race and ethnicity. Data for all workers, however, indicate that coverage problems are particularly severe for Latinos. As **Figure 7** indicates, almost 40 percent of *all* Latino workers (that is, not just low-wage Latino workers) have no health-insurance of any form. Assuming that access to health insurance for low-wage Latinos is lower than this average, a very high share of low-wage Latinos workers are completely without coverage. African American workers (about 22 percent) and Asian workers (about 17 percent) are also much more likely than whites (about 12 percent) to be without coverage. In all cases, the non-coverage rates by race and ethnicity are much higher for low-wage workers within each group.

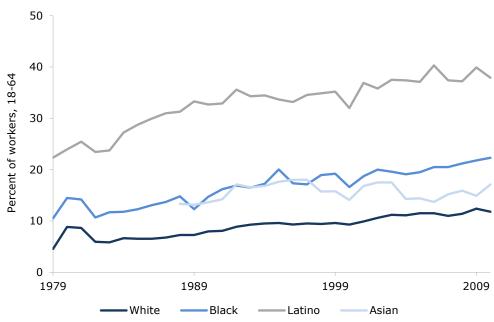


FIGURE 7 No health insurance from any source, by race/ethnicity, 1979-2010

### **Future Trends**

The decline in coverage rates has its roots in two long-standing economic processes. The first is the rising cost of health care, which has squeezed workers' wages and made it less economical for firms to offer health insurance, especially to low-wage workers. In the absence of reforms to the existing health-care system, these costs – and implicitly the pressure on workers' after-health-insurance compensation – are projected to continue rising indefinitely.<sup>13</sup>

The other force behind falling coverage rates, especially for low-wage workers, is the decline over the last three decades in the bargaining power of most workers. Beginning in the late 1970s, a set of structural changes in the economy has significantly reduced the bargaining power of workers, especially those at the middle and the bottom of the wage distribution. These structural changes include: a steep decline in unionization; an erosion in the inflation-adjusted value of the minimum wage; the deregulation of many historically high-wage industries (trucking, airlines, telecommunications, and others); the privatization of many state and local government functions (from school cafeteria workers to public-assistance administrators); the opening up of the U.S. economy to much higher volumes of foreign trade; a sharp rise in the share of immigrant workers, who often lack basic legal rights and operate in an economy that provides few labor protections regardless of citizenship; and a macroeconomic policy environment that has typically maintained the

<sup>13</sup> On the long-standing rise in health-care costs, see, for example: Congressional Budget Office (1991), Ginsburg (2008), and the Center for Economic and Policy Research's "Health Care Budget Deficit Calculator," http://www.cepr.net/calculators/hc/hc-calculator.html.

unemployment rate well above levels consistent with full employment. All of these changes have acted to reduce the bargaining power of workers, especially those at the middle and bottom of the wage distribution. As a result, workers as a group have seen their relative (and even absolute) wages fall and the availability and quality of health-insurance and retirement plans decline.<sup>14</sup>

Despite the Great Recession and the ensuing national debate on economic inequality, there are few signs – at least at the time of this writing – that any of these structural factors undermining workers' bargaining power are likely to change any time soon. The passage of the Affordable Care Act in 2010, however, holds out the prospect that low-wage workers could see a significant expansion in their health-insurance coverage rates (and at least some possibility that the rate of growth of health-care costs could be reduced relative to the long-term trend).

#### Affordable Care Act of 2010

The ACA sets in motion a large and complicated restructuring of the nation's health-care system, with a particular emphasis on the public and private health-insurance sectors. A full analysis of the ACA – particularly the measures designed to address long-term cost concerns – is beyond the scope of this paper. This paper focuses on those elements of the ACA that are most likely to affect coverage rates of low-wage workers.

The centerpiece of the ACA is a requirement that most U.S. citizens and legal residents enroll in some form of private or public health insurance.<sup>15</sup> Those without coverage would be required to pay a tax penalty of between \$695 and 2.5 percent of taxable income, when fully phased-in, and then indexed to inflation.<sup>16</sup>

Arguably, the ACA's sponsors' preferred path to coverage is through existing employer-provided private insurance. To this end, the ACA establishes a "pay or play" system for employers with 50 or more full-time employees. Employers above this size threshold – who do not offer coverage or who have employees who rely on government tax credits to fulfill their personal requirement to maintain coverage – will pay a tax penalty. Smaller employers will not face tax penalties, but many will be eligible to receive tax credits for providing coverage and will be permitted to buy insurance through newly created state-level health-insurance exchanges.

<sup>14</sup> For a longer discussion of these structural shifts, see, among others: Baker (2007), Bivens (2011), Mishel, Bernstein, and Shierholz (2009), and Schmitt (2009). For a discussion of the importance of full employment, see Bernstein and Baker (2003).

<sup>15</sup> Kaiser Family Foundation (2011) provides an excellent summary of the main provisions of the legislation.

As Kaiser Family Foundation (2011) notes: "Exemptions will be granted for financial hardship, religious objections, American Indians, those without coverage for less than three months, undocumented immigrants, incarcerated individuals, those for whom the lowest cost plan option exceeds 8% of an individual's income, and those with incomes below the tax filing threshold (in 2009 the threshold for taxpayers under age 65 was \$9,350 for singles and \$18,700 for couples)" (p. 1). See also Blue Cross/Blue Shield of Rhode Island, "Federal Healthcare Reform," p. 2, https://www.bcbsri.com/BCBSRIWeb/pdf/Individual\_Mandate\_Fact\_Sheet.pdf; and "Compilation of Patient Protection and Affordable Care Act," as amended through May 1st, 2010, p. 146, http://housedocs.house.gov/energycommerce/ppacacon.pdf.

<sup>17</sup> The tax penalty will apply (but differ) in both the case where the employer does not provide coverage and the case where the employer provides coverage but the employee does not accept it.

Expansions of coverage through the existing Medicaid program and through new health-insurance exchanges for individual and family coverage, however, are likely to provide the biggest boost in coverage to low-wage workers. The ACA will make all legal residents under the age of 65 eligible for Medicaid if their family income is less than 133 percent of the federal poverty line. Low-wage workers with family incomes above 100 percent of the poverty line and whose employers don't provide insurance (or provide insurance that is deemed too expensive by ACA criteria) will be eligible to receive a federal subsidy to buy private insurance through a health exchange, as long as their family income is less than 400 percent of the poverty line.

Two kinds of uncertainty hang over any analysis of the likely impact of the ACA on low-wage workers. The first concerns the exact nature of the final form of the law. On the judicial front, the ACA faces several court challenges centered around the constitutionality of the individual mandate. On the legislative front, Republicans in the House and Senate, as well as all the major Republican candidates for president, have vowed to repeal all or part of the ACA after the 2012 elections. The second element of uncertainty is related to the inherent difficulties in predicting individual and institutional responses to large and complex changes in existing systems, an issue compounded by the fact that many particulars of the law – especially those involving the workings of the separate state-level insurance exchanges – are still evolving. The analysis below assumes that the ACA is implemented as passed, and relies on the educated guesses made by health-care experts concerning the final features and behavioral responses to the system put in place from 2014 forward.

With these caveats in mind, the Congressional Budget Office (CBO) projects that under the ACA: "The share of legal non-elderly residents with insurance coverage in 2021 will be about 95 percent, compared with a projected share of about 82 percent in the absence of that legislation (and an estimated 83 percent currently)." Meanwhile, CBO continues, "[a]bout 23 million non-elderly residents will remain uninsured; about one-third of that group will be unauthorized immigrants, who are not eligible to participate in Medicaid or the insurance exchanges; another quarter will be eligible for Medicaid but are not expected to enroll; and the remaining fraction will include individuals who are ineligible for subsidies, are exempt from the mandate to obtain insurance, choose to not comply with the mandate (and take the risk of paying a penalty), or have some combination of those characteristics."

Other researchers generally agree with the CBO that the ACA will result in a substantial increase in coverage rates.<sup>21</sup> Disagreements arise, however, around the likely mix of coverage. The CBO, like most analysts, believe that the large majority of the increase in coverage will flow from increases in directly purchased insurance (which is particularly relevant for workers in families between 100 and 400 percent of the poverty line) and Medicaid (particularly relevant for workers in families with incomes below 133 percent of the poverty line), with only a small net decline in employer-provided

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<sup>18</sup> See, for example, "Justices to Hear Health Care Case as Race Heats Up," New York Times, November 15, 2011, p. A1. http://www.nytimes.com/2011/11/15/us/supreme-court-to-hear-case-challenging-health-law.html?pagewanted=all

<sup>19</sup> Congressional Budget Office (2011), p. 17.

<sup>20</sup> Ibid.

<sup>21</sup> The CBO cites studies by Centers for Medicare and Medicaid Services (Foster, 2010), Urban Institute (Buetgenns, Garret, and Holahan, 2010), the Lewin Group (2010), and RAND (Eibner, Hussey, and Girosi, 2010).

coverage.<sup>22</sup> The net drop in employer-based coverage, the CBO believes, will reflect declines in employer offers of coverage, which will be made up disproportionately of "smaller employers and employers with predominantly lower-wage workers—people who will be eligible for Medicaid or subsidies through the exchanges"<sup>23</sup> and largely offsetting increases in coverage through other employers responding to the "combined impact of the insurance mandate, the penalties for employers, and the tax credits for small employers."<sup>24</sup> Other analysts believe that the high costs of providing health insurance to low-wage workers will lead many employers to reduce the availability of coverage, pushing many workers currently covered by employer plans onto Medicaid and the new state-level health exchanges.<sup>25</sup>

For present purposes, the exact mix of the coverage, however, is less relevant than the net increase in total coverage for low-wage workers, which by almost all accounts is likely to be substantial. Unfortunately, neither CBO nor other sources have produced coverage projections for workers specifically, let alone for low-wage workers. The CBO estimate of a 95 percent coverage rate for the non-elderly population in 2016, however, can – with a few assumptions about the distribution of this coverage – give some general guidance about the likely improvement in health-insurance access for low-wage workers.

To produce a rough estimate of the share of low-wage workers that will remain without coverage after the implementation of the ACA, let's start with the CBO's projection that by 2016, the noncoverage rate for the non-elderly population of the United States would be 5 percent. The CBO does not provide a separate breakdown for children (ages 0 to 17) and adults (18 to 64), but we can assume that improvements in coverage maintain the same (roughly) two-to-one ratio for noncoverage rates of adults to children. Given the relative size of the child and adult populations in 2010, a 5 percent overall non-coverage rate and the two-to-one ratio implies that the non-coverage rate for all adults would be about 5.8 percent after the ACA (and a 2.9 percent rate for children). For simplicity, if we assume that all adults - workers and non-workers - have the same coverage rate, then under CBO's projections, workers as a group would have a 5.8 percent non-coverage rate after the ACA.<sup>26</sup> By comparison, in 2010, the actual non-coverage rate for all workers was about 17.7 percent. The CBO gives no guidance about how the coverage improvements for workers would be divided across the wage distribution. If, at the extreme, we assume that all of the uncovered workers are low-wage workers by our definition – that is that all 5.8 percent of workers remaining without coverage are in the bottom quintile - then the non-coverage rate for low-wage workers would be about 29.0 percent.<sup>27</sup> This would be a reduction of one-fourth in the share of low-wage workers without coverage relative to the actual non-coverage rate for low-wage workers in 2010 (38.5 percent). A less extreme assumption about the distribution of non-coverage rates by wage level after

<sup>22</sup> CBO estimates that by 2019, the ACA will reduce offers of employer-provided health insurance about 4 percent relative to what the figure would have been in the absence of the legislation.

<sup>23</sup> CBO (2011), p. 19.

<sup>24</sup> CBO (2011), p. 20.

<sup>25</sup> See, for example, Holtz-Eakin and Smith (2010) and Pizer, Frakt, and Iezzoni (2011).

<sup>26</sup> In fact, non-elderly workers in 2010 had a slightly lower non-coverage rate (19.5 percent) than non-working adults (21.8 percent). If we were to adjust for this difference, the results for workers under the ACA would be somewhat better than appears under the assumption of a uniform rate for non-elderly adults.

<sup>27</sup> Imagine that there were exactly 100 workers divided into five groups by wage level, each with 20 workers. If 6 of the total are without insurance (rounding up from 5.8 percent), and they are all in the bottom group, then 6 of 20 members of that group, or 30 percent would be without coverage.

the ACA would produce larger gains for low-wage workers. For example, if instead we assume that the top 80 percent of workers have a frictional 3 percent non-coverage rate, then an overall non-coverage rate for workers of 5.8 percent implies a 17.0 percent non-coverage rate for low-wage workers, well short of universal coverage, but a non-coverage rate that is less than half of the current rate.

#### Massachusetts

The recent experience of Massachusetts provides an important benchmark for the likely impact of the ACA.<sup>28</sup> The 2006 Massachusetts reforms included many key elements written into the ACA, including an individual mandate, a (weak) penalty for employers who fail to provide coverage, expanded eligibility for Medicaid, and government subsidies to purchase private insurance for individuals in families with incomes up to 300 percent of the federal poverty line.<sup>29</sup> Early results suggest that this combination of policies has substantially increased health-insurance coverage in the state. Long, Phadera, and Lynch (2010), for example, found that after the implementation of the reforms, the share of the state's population between the ages of 19 and 64 without coverage was less than 6 percent, compared to a 15 percent rate for the rest of the nation. Massachusetts had higher coverage rates than the rest of the country even before the 2006 reforms. But, a comparison of changes in coverage rates in Massachusetts before and after the 2008 implementation of the reforms with the change over the same period in coverage rates in New York state, which also had relatively high coverage rates, but where no reforms were implemented, suggests that the reforms did substantially increase coverage rates for non-elderly adults.<sup>30</sup> Pande and colleagues (2011) reached similar conclusions comparing adults in Massachusetts with a control group in Connecticut, New Hampshire, Rhode Island, and Vermont.

Unfortunately, evaluations of the Massachusetts experience have paid little attention to the specific outcomes for workers. The sharp declines in non-coverage rates for all working-age adults, as well as survey evidence that non-elderly workers in Massachusetts have very low non-coverage rates (3 percent in 2008, compared to about 17 percent nationally in the same year),<sup>31</sup> both suggest that the various reforms have greatly reduced non-insurance rates for workers, even for those earning low wages.<sup>32</sup>

The experience of Massachusetts, therefore, offers support for the various model-based projections that the ACA will substantially increase coverage rates for non-elderly adults, including non-elderly workers. To put the Massachusetts results into perspective, if we assume that the United States in

<sup>28</sup> In 1974, Hawaii passed a law requiring employers to provide health insurance coverage to all full-time employees. Legal challenges delayed implementation until the mid-1980s, but the law has been in place and enforced since then. The lack of an individual mandate in Hawaii significantly reduces the usefulness of the Hawaiian experience for projecting the likely effects of the ACA. For a recent and comprehensive review of the Hawaiian experience, see Buchmueller, DiNardo, and Valetta (2011).

<sup>29</sup> For a brief overview of the Massachusetts reforms, see Dorn, Hill, and Hogan (2009) and Gruber (2008)

<sup>30</sup> Long, Yemane, and Stockley (2010).

<sup>31</sup> The Massachusetts figure is from Long, Cook, and Stockley (2009), p. 11; the national figure, from Rho and Schmitt (2010), Table 4.

<sup>32</sup> Long, Phadera, and Lynch (2010) also note that those non-elderly adults who remain uncovered are less likely to be employed than those with coverage – though this does not rule out that low-wage workers are even less likely than the non-employed to have coverage.

2010 had the same 3.0 percent non-coverage rate for workers that Massachusetts achieved in 2008, and even if we assume that all of the workers without coverage were in the bottom quintile of the wage distribution, only 15 percent of low-wage workers nationally would have been without coverage in 2010. As Figure 6 shows, the actual share of low-wage workers in 2010 was 38.5 percent, more than twice as high. If, instead, we assumed that workers at all wage levels experience at least some frictional level of non-coverage, then the Massachusetts results would imply even better outcomes for low-wage workers.

### Conclusion

Health-insurance coverage for low-wage workers has been falling steadily over the last three decades – a more exaggerated version of the trend that holds for workers across the full wage spectrum. A small rise in the share of low-wage workers receiving health insurance through Medicaid is the only exception to this long-standing deterioration in coverage. Based on reasonable projections of the impact of the Affordable Care Act, as well as the experience of Massachusetts with state-level reforms similar in spirit to the ACA, recent reforms to the health-insurance system, however, stand a reasonable chance of reversing this long-standing trend.

Low-wage workers will likely be among the biggest beneficiaries of the components of the ACA that seek to increase employer-sponsored insurance, expand access to Medicaid, and subsidize the purchase of private insurance. Low-wage workers – especially low-wage Latinos, blacks, Asians, and immigrants – will likely remain the least-insured group in the population, but after 2014, the coverage gap between low-wage workers and the rest of the workforce will almost certainly fall sharply.

The ACA will not produce universal coverage for low-wage workers. But, if the ACA is not enacted – due to judicial or legislative action – every indication is that coverage rates will continue their three-decades-long decline.

# **Appendix**

APPENDIX TABLE 1 Adjusted Health-Insurance Coverage of Low-Wage Workers, Ages 18 to 64, 1979-2010

	Health		Private Heal	th Insurance	<b>)</b>	Public Health Insurance			
Year Insurance (Total)	T . 1	Employment-based		Other			Other		
	(Total)	Total	Total	Own	private	Total	Medicaid	public	
1979	83.6	78.7	71.1	42.9	7.6	8.8	4.7	4.0	
1980	n.a.	n.a.	70.4	42.3	n.a.	8.6	4.5	4.0	
1981	n.a.	n.a.	69.7	41.9	n.a.	8.7	4.2	4.4	
1982	77.3	72.4	67.6	39.9	4.8	7.8	3.6	4.1	
1983	77.1	72.5	65.9	38.2	6.6	7.4	3.2	4.1	
1984	75.2	69.8	63.3	36.0	6.5	8.3	3.8	4.4	
1985	75.1	69.6	63.0	35.4	6.6	8.8	4.0	4.7	
1986	74.0	68.3	62.0	35.2	6.3	8.7	4.1	4.5	
1987	73.1	67.0	60.6	34.3	6.5	9.0	4.4	4.6	
1988	72.4	66.3	59.1	34.7	7.3	8.6	4.3	4.3	
1989	72.0	64.7	58.1	33.7	6.7	10.0	4.8	5.2	
1990	70.5	62.8	56.2	32.8	6.7	10.4	5.5	4.9	
1991	69.3	61.2	55.1	31.9	6.2	10.8	5.8	5.0	
1992	67.9	59.1	52.9	30.9	6.3	11.4	6.5	4.9	
1993	69.0	61.0	53.3	33.8	7.8	11.5	7.1	4.4	
1994	68.5	60.5	52.7	33.8	7.8	11.6	7.4	4.2	
1995	68.5	60.2	53.1	34.0	7.1	11.1	7.6	3.5	
1996	68.7	60.0	52.5	34.0	7.5	11.9	8.3	3.6	
1997	67.7	59.7	52.7	33.9	7.0	11.1	7.7	3.4	
1998	67.8	60.1	53.2	33.2	6.9	10.8	7.5	3.3	
1999	67.3	59.6	52.8	32.9	6.8	10.7	7.5	3.2	
2000	67.0	64.2	57.2	33.5	7.0	9.9	6.7	3.2	
2001	66.6	59.3	52.1	33.0	7.2	10.1	7.1	3.0	
2002	65.5	57.9	51.0	32.3	6.9	10.7	7.5	3.2	
2003	63.8	55.8	48.9	31.4	6.9	10.9	7.7	3.2	
2004	64.7	56.3	48.8	30.9	7.5	11.7	8.7	3.0	
2005	64.0	55.0	48.1	30.8	6.9	12.3	9.1	3.2	
2006	62.9	54.2	47.4	30.1	6.8	11.6	8.7	2.9	
2007	64.3	55.2	48.0	30.9	7.2	12.3	9.1	3.2	
2008	62.6	53.4	46.1	29.8	7.3	12.4	9.4	3.0	
2009	60.1	49.7	43.0	27.5	6.7	13.4	10.5	2.9	
2010	61.5	51.9	43.8	25.9	8.1	12.8	9.6	3.2	
1979-									
2010	-22.1	-26.8	-27.3	-17.0	0.5	4.1	4.9	-0.8	

Notes: Low-wage workers defined as those in the bottom fifth of the wage distribution. "Other private" includes directly purchased insurance; "other public" includes Medicare, Veterans Administration, and other public sources. Raw CPS data adjusted for survey changes using procedure described in Rho and Schmitt (2010). Source: Author's analysis of CEPR extract of March Current Population Survey.

APPENDIX TABLE 2
Adjusted Health-Insurance Coverage of Second-Quintile Workers, Ages 18 to 64, 1979-2010

-	Health		Private Heal	th Insurance	Public Health Insurance				
Year			Insurance		Employment-based				Other
		Total	Total	Own	Other private	Total	Medicaid	public	
1979	91.8	89.5	84.9	65.6	4.6	6.3	3.3	3.1	
1980	n.a.	n.a.	86.7	67.0	n.a.	6.4	3.2	3.3	
1981	n.a.	n.a.	86.7	67.0	n.a.	7.1	3.2	4.0	
1982	91.0	88.7	86.1	66.0	2.6	6.1	2.6	3.6	
1983	91.1	89.0	84.9	65.6	4.1	5.6	2.3	3.4	
1984	89.4	87.1	83.3	64.0	3.8	6.3	2.7	3.7	
1985	88.7	86.4	82.7	63.6	3.7	5.6	2.4	3.3	
1986	88.2	86.0	82.1	62.1	3.9	6.0	2.5	3.6	
1987	87.5	85.1	81.0	61.2	4.0	6.3	2.6	3.7	
1988	86.3	84.1	79.1	60.4	4.9	6.0	2.4	3.6	
1989	85.4	81.7	77.2	58.6	4.4	7.5	2.9	4.6	
1990	84.9	81.0	76.4	56.9	4.5	8.1	3.1	5.0	
1991	84.7	80.4	76.2	57.2	4.1	8.5	3.5	5.0	
1992	82.1	77.8	72.9	55.2	4.8	8.0	3.8	4.2	
1993	82.5	78.9	73.7	58.1	5.1	8.1	3.9	4.2	
1994	82.1	78.5	73.4	57.9	5.1	8.0	3.9	4.1	
1995	81.6	78.1	72.9	56.9	5.2	7.3	3.4	3.9	
1996	82.3	78.6	73.7	56.8	4.9	7.7	4.1	3.6	
1997	81.2	78.0	73.7	57.3	4.3	7.0	3.2	3.8	
1998	81.7	78.6	74.3	57.5	4.3	6.4	3.0	3.4	
1999	81.3	78.2	74.0	57.2	4.2	6.2	2.9	3.3	
2000	81.9	81.2	77.1	59.2	4.1	5.6	2.6	3.0	
2001	80.7	77.5	73.2	57.5	4.3	6.2	3.1	3.1	
2002	79.6	76.4	72.0	56.2	4.4	6.4	3.3	3.1	
2003	78.3	74.7	70.7	54.9	4.0	6.6	3.3	3.3	
2004	78.4	73.9	69.3	54.0	4.6	8.0	4.7	3.3	
2005	78.0	73.8	68.7	52.5	5.1	7.3	4.1	3.2	
2006	76.8	72.7	68.4	53.5	4.3	7.5	4.7	2.8	
2007	77.5	72.8	68.0	53.8	4.8	7.7	4.4	3.3	
2008	78.1	73.5	69.0	54.1	4.5	7.7	4.6	3.1	
2009	77.0	71.8	66.8	52.8	5.0	8.7	5.3	3.4	
2010	77.2	72.4	67.0	51.8	5.4	8.5	5.1	3.4	
1979-									
2010	-14.6	-17.1	-17.9	-13.8	0.8	2.2	1.9	0.3	

Notes: "Other private" includes directly purchased insurance; "other public" includes Medicare, Veterans Administration, and other public sources. Raw CPS data adjusted for survey changes using procedure described in Rho and Schmitt (2010).

Source: Author's analysis of CEPR extract of March Current Population Survey.

APPENDIX TABLE 3
Adjusted Health-Insurance Coverage of Middle-Quintile Workers, Ages 18 to 64, 1979-2010

	Health		Private Health Insurance				Public Health Insurance		
Year	Insurance		Employment-based		Other			Other	
	(Total)	Total	Total	Own	private	Total	Medicaid	public	
1979	94.5	93.1	89.6	75.9	3.4	5.8	1.8	4.1	
1980	n.a.	n.a.	90.2	75.7	n.a.	5.6	1.7	4.0	
1981	n.a.	n.a.	89.7	75.4	n.a.	6.5	1.4	5.2	
1982	93.8	92.7	90.0	75.7	2.6	5.5	1.3	4.3	
1983	93.8	92.6	89.4	75.3	3.1	5.2	1.1	4.2	
1984	93.4	92.2	88.8	74.7	3.3	5.3	1.2	4.2	
1985	93.4	92.1	88.9	74.4	3.1	5.5	1.3	4.3	
1986	93.6	92.1	89.1	74.2	2.9	5.4	1.3	4.2	
1987	93.5	91.7	88.7	73.7	3.0	5.6	1.3	4.2	
1988	93.2	91.2	88.0	74.0	3.2	5.7	1.4	4.2	
1989	93.3	90.5	87.4	72.6	3.1	6.7	1.4	5.2	
1990	93.0	90.3	87.0	72.1	3.3	6.2	1.5	4.6	
1991	92.7	89.5	86.4	71.3	3.1	6.7	1.7	4.9	
1992	91.8	88.9	85.8	69.8	3.1	6.3	1.6	4.6	
1993	91.0	88.5	84.4	70.7	4.1	6.2	1.8	4.3	
1994	90.7	88.3	84.1	70.5	4.1	5.9	1.8	4.1	
1995	90.1	87.9	83.2	69.4	4.6	5.5	1.7	3.8	
1996	90.2	88.0	83.3	68.8	4.6	5.7	1.7	4.0	
1997	90.5	88.5	84.8	69.6	3.6	4.7	1.4	3.3	
1998	90.2	88.3	84.7	70.7	3.6	4.6	1.3	3.3	
1999	89.9	88.1	84.6	70.5	3.5	4.5	1.3	3.2	
2000	89.5	89.0	86.1	71.1	2.9	4.2	1.3	2.9	
2001	89.8	87.9	84.4	70.8	3.5	4.3	1.4	2.9	
2002	88.9	86.8	83.3	68.7	3.5	4.7	1.6	3.1	
2003	88.4	86.6	82.9	69.0	3.7	4.8	1.7	3.1	
2004	88.2	86.0	82.5	69.2	3.5	5.7	2.5	3.2	
2005	88.4	86.0	82.3	68.6	3.7	5.7	2.4	3.3	
2006	87.7	85.4	81.8	68.0	3.6	5.4	2.4	3.0	
2007	88.0	85.6	81.7	67.9	3.9	6.0	2.6	3.4	
2008	87.5	84.7	81.1	67.4	3.6	6.1	2.7	3.4	
2009	87.2	84.0	80.2	66.8	3.8	6.9	3.3	3.6	
2010	86.8	83.6	79.6	66.0	4.0	6.4	2.9	3.5	
1979-			400						
2010	-7.7	-9.5	-10.0	-9.9	0.6	0.6	1.1	-0.5	

Notes: "Other private" includes directly purchased insurance; "other public" includes Medicare, Veterans Administration, and other public sources. Raw CPS data adjusted for survey changes using procedure described in Rho and Schmitt (2010).

Source: Authors' analysis of CEPR extract of March Current Population Survey.

APPENDIX TABLE 4
Adjusted Health-Insurance Coverage of Fourth-Quintile Workers, Ages 18 to 64, 1979-2010

	Health	Private Health Insurance				Public Health Insurance		
Year	Insurance (Total)		Employment-based		Other			Other
		Total	Total	Own	private	Total	Medicaid	public
1979	97.8	96.6	95.5	87.3	1.2	4.8	1.5	3.3
1980	n.a.	n.a.	96.8	88.5	n.a.	4.7	1.3	3.4
1981	n.a.	n.a.	97.1	89.2	n.a.	4.9	1.1	3.8
1982	98.3	97.1	96.6	88.2	0.6	4.9	0.9	4.0
1983	98.2	97.2	96.6	87.6	0.7	4.4	0.8	3.6
1984	97.7	96.6	95.4	86.1	1.3	4.5	0.8	3.7
1985	98.0	96.9	96.1	86.8	0.9	4.6	0.9	3.7
1986	98.3	97.3	96.3	86.5	1.1	4.6	0.8	3.8
1987	98.2	97.2	96.0	85.9	1.2	4.7	0.8	3.9
1988	97.6	96.5	95.2	84.8	1.3	5.0	0.8	4.2
1989	98.1	96.2	94.3	84.0	1.9	5.3	0.8	4.5
1990	97.5	95.8	93.9	83.3	1.9	5.5	0.8	4.7
1991	97.6	95.9	94.5	83.1	1.4	5.6	0.8	4.8
1992	97.0	95.1	93.2	81.5	1.9	5.5	0.9	4.6
1993	96.3	94.6	92.2	81.7	2.4	5.5	1.0	4.5
1994	96.0	94.3	91.9	81.3	2.4	5.4	1.0	4.4
1995	95.4	93.6	91.2	80.1	2.4	5.1	1.2	3.9
1996	96.2	94.6	92.1	80.2	2.5	4.6	1.1	3.5
1997	95.7	94.3	91.6	79.7	2.7	4.2	0.8	3.4
1998	95.2	93.8	91.4	79.9	2.4	4.2	0.8	3.4
1999	94.9	93.6	91.1	79.3	2.5	4.0	0.8	3.2
2000	94.1	93.3	91.0	79.0	2.3	3.5	0.7	2.8
2001	94.1	93.0	90.5	78.5	2.5	3.5	0.9	2.6
2002	93.6	92.2	89.7	77.2	2.5	4.2	0.8	3.4
2003	93.5	92.2	89.2	76.3	3.0	3.9	1.0	2.9
2004	93.5	92.0	88.9	75.8	3.1	4.8	1.3	3.5
2005	92.9	91.3	88.1	75.1	3.2	4.7	1.4	3.3
2006	92.1	90.5	87.2	74.4	3.3	4.5	1.5	3.0
2007	93.2	91.7	88.5	75.9	3.2	4.5	1.3	3.2
2008	93.1	91.3	88.3	75.4	3.0	4.6	1.3	3.3
2009	92.1	90.2	86.9	74.9	3.3	5.2	1.7	3.5
2010	92.6	90.6	87.1	74.6	3.5	5.2	1.9	3.3
1979-								
2010	-5.2	-6.0	-8.3	-12.7	2.3	0.4	0.4	0.0

Notes: "Other private" includes directly purchased insurance; "other public" includes Medicare, Veterans Administration, and other public sources. Raw CPS data adjusted for survey changes using procedure described in Rho and Schmitt (2010).

Source: Authors' analysis of CEPR extract of March Current Population Survey.

APPENDIX TABLE 5
Adjusted Health-Insurance Coverage of Top-Quintile Workers, Ages 18 to 64, 1979-2010

Health			Private Heal	th Insurance	<u> </u>	Public Health Insurance			
Year	Insurance	Insurance	T-4-1	Employm	ent-based	Other	Tatal	Madiasid	Other
	(Total)	Total	Total	Own	private	Total	Medicaid	public	
1979	99.7	98.8	97.2	92.2	1.6	2.6	0.9	1.7	
1980	n.a.	n.a.	98.1	92.6	n.a.	2.8	0.8	2.0	
1981	n.a.	n.a.	98.6	93.4	n.a.	4.0	0.9	3.1	
1982	100.2	99.3	98.8	93.2	0.5	3.3	0.7	2.6	
1983	99.8	99.1	98.4	92.5	0.7	3.1	0.6	2.5	
1984	99.4	98.6	97.6	91.5	1.0	3.3	0.7	2.6	
1985	99.4	98.6	97.6	91.5	1.0	3.4	0.8	2.6	
1986	99.5	98.5	98.0	91.3	0.5	3.3	0.8	2.5	
1987	99.4	98.3	97.7	90.7	0.6	3.3	0.8	2.5	
1988	99.0	98.0	97.4	90.0	0.6	2.8	0.8	2.0	
1989	99.3	97.7	96.6	88.8	1.1	3.8	0.9	2.9	
1990	98.9	97.4	96.1	87.8	1.3	3.9	0.8	3.1	
1991	99.0	97.5	96.0	87.5	1.5	3.6	0.9	2.7	
1992	98.8	97.2	95.4	86.2	1.8	3.6	0.8	2.8	
1993	97.5	96.1	93.4	85.4	2.7	4.1	0.9	3.2	
1994	97.2	95.9	93.0	84.8	2.9	4.0	0.8	3.2	
1995	97.2	96.1	93.1	84.0	3.0	3.2	0.8	2.4	
1996	97.1	96.0	93.0	83.9	3.0	3.1	0.8	2.3	
1997	97.0	96.1	93.2	83.5	2.9	2.8	0.6	2.2	
1998	96.7	95.9	93.1	83.1	2.8	2.8	0.4	2.4	
1999	96.5	95.8	93.0	82.6	2.8	2.7	0.4	2.3	
2000	96.0	95.6	93.2	82.1	2.4	2.7	0.5	2.2	
2001	95.5	94.7	92.0	81.1	2.7	3.0	0.7	2.3	
2002	95.6	94.7	91.4	80.7	3.3	3.0	0.5	2.5	
2003	95.7	94.9	91.8	80.7	3.1	3.1	0.6	2.5	
2004	95.9	94.9	91.3	79.8	3.6	3.7	0.9	2.8	
2005	95.6	94.6	91.1	79.5	3.5	3.9	1.0	2.9	
2006	95.6	94.6	90.8	79.1	3.8	3.6	1.0	2.6	
2007	95.6	94.6	90.6	79.1	4.0	3.7	1.0	2.7	
2008	95.6	94.3	90.9	79.1	3.4	4.1	1.1	3.0	
2009	95.3	93.9	90.2	78.3	3.7	4.2	1.2	3.0	
2010	95.5	94.1	90.5	78.9	3.6	4.4	1.3	3.1	
1979-	, -								
2010	-4.2	-4.7	-6.7	-13.3	2.0	1.8	0.5	1.4	

Notes: "Other private" includes directly purchased insurance; "other public" includes Medicare, Veterans Administration, and other public sources. Raw CPS data adjusted for survey changes using procedure described in Rho and Schmitt (2010). The adjustment procedure yields a coverage rate above 100.0 percent in 1982. Source: Authors' analysis of CEPR extract of March Current Population Survey.

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