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# The Affordable Care Act's Impacts on Access to Insurance and Health Care for Low-Income Populations

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## Abstract

The Patient Protection and Affordable Care Act (ACA) expands access to health insurance in the United States, and, to date, an estimated 20 million previously uninsured individuals have gained coverage. Understanding the law's impact on coverage, access, utilization, and health outcomes, especially among low-income populations, is critical to informing ongoing debates about its effectiveness and implementation. Early findings indicate that there have been significant reductions in the rate of uninsurance among the poor and among those who live in Medicaid expansion states. In addition, the law has been associated with increased health care access, affordability, and use of preventive and outpatient services among low-income populations, though impacts on inpatient utilization and health outcomes have been less conclusive. Although these early findings are generally consistent with past coverage expansions, continued monitoring of these domains is essential to understand the long-term impact of the law for underserved populations.

## INTRODUCTION

The Patient Protection and Affordable Care Act of 2010, more commonly known simply as the Affordable Care Act (ACA), is intended to expand access to health insurance coverage primarily for those who fall through the cracks of the private and public insurance mechanisms in the United States. The law targets primarily low- and middle-income individuals and families because they constitute the vast majority of the uninsured (75, 81). The ACA uses two primary approaches to increase access to health insurance: It expands access to Medicaid, based solely on income, for those with incomes up to 138% of the federal poverty level (FPL), and creates eligibility for those with incomes from 139% to 400% FPL to apply for subsidies [in the form of advance payment tax credits (APTCs)] to purchase qualified health plans (QHPs) in state Marketplaces known as health insurance exchanges. When the law was enacted in 2010, almost 50 million Americans were uninsured—about 19% of the nonelderly population—and among the uninsured, an estimated 91% had incomes below 400% FPL and thus were potentially eligible for benefits under the ACA (52% for expanded Medicaid and 39% for exchange subsidies) (75). As a result, the ACA has great potential to improve access to health insurance for low-income populations. However, the ACA’s two primary methods for expanding coverage are quite different and, thus, have faced different barriers to implementation that have affected either access to health insurance or access to services once insured. These barriers, in turn, may reduce the potential health benefits of expanded coverage.

With regard to the state Marketplaces, the ACA introduced a much greater degree of standardization of benefits and cost-sharing levels for QHPs than existed in all but a few states prior to 2010. QHPs must provide essential health benefits in 10 categories of health services and must be designed according to 4 standard metal tiers based on cost-sharing levels. Bronze plans are designed to require 40% of spending, on average across all policy holders, to come from out-of-pocket (OOP) cost sharing; Silver plans, 30%; Gold plans, 20%; and Platinum plans, 10%. Metal tiers, therefore, allow purchasers a choice of trade-offs between lower monthly premiums with higher OOP spending at the low end (i.e., Bronze plans) and higher monthly premiums with lower OOP spending at the high end (i.e., Platinum plans). In addition to subsidies, low-income individuals and families with incomes from 139% FPL to 250% FPL can qualify for additional cost-sharing reductions but only if they choose a Silver plan.

Despite the availability of subsidies and cost-sharing reductions, the reliance of the ACA on health insurance exchanges may both increase access to health insurance and simultaneously pose unintended barriers to access, particularly for low-income populations. These barriers can arise in two ways. The most publicized method is through the creation of narrow networks, where insurers offer plans and policies with fewer doctors and hospitals in an effort to keep premiums as competitive as possible. Whether narrow networks create actual, rather than perceived, barriers to care has not been well established yet through research. Nevertheless, the existence of narrow networks has created the perception that exchange-based QHPs are limiting access to a greater extent than did pre-ACA policies, despite the absence of adequate baseline data from pre-ACA years.

The second way that exchanges may create unintended barriers to access to care, particularly for low-income populations, is through the existence of high-deductible Bronze plans. Despite the availability of cost-sharing reductions for those who choose Silver plans, Bronze plans are still the second most popular choice; of the 12.7 million people who enrolled in exchange plans as of March 2016, 68% selected Silver plans while 23% selected Bronze plans (70). Because the deductibles for Bronze plans generally exceed \$5,000 for an individual and \$10,000 for a family, they effectively serve as catastrophic insurance and, thus, may create barriers to access for most



services except preventive services, which are exempt from deductibles and copayments under the ACA.

The Medicaid expansion originally included in the ACA would have required all states to expand their Medicaid programs for all legal residents and citizens up to 138% FPL, thus limiting the considerable state-to-state variation in eligibility standards by establishing a uniform income eligibility standard in all states. However, this provision of the law was rescinded in June 2012, when the Supreme Court ruled that the proposed penalty for states failing to expand—namely, the loss of all federal funding for Medicaid to such states—was excessively coercive and thus unconstitutional. As a result, the Medicaid expansion became optional, and as of mid-2016, 19 states had still elected not to expand their programs. One consequence is that it is now possible to compare changes in health insurance and health outcomes in expansion versus nonexpansion states. Although not exactly a natural experiment, these comparisons illustrate the disturbing trends occurring in nonexpansion states at the expense of low-income individuals and families.

This article discusses the literature on the impacts, to date, of the ACA on expanding access to health insurance and the early impacts on health care for low-income populations. In the first section, we summarize the literature on expanded coverage and the remaining uninsured, including undocumented residents who are not eligible for exchange subsidies or Medicaid. In the following sections, we discuss the evidence on the ACA impacts on access to health care (e.g., ease of obtaining care and affordability), utilization (e.g., use of preventive, outpatient, and inpatient care), and finally health outcomes.

Because only two years have passed since major provisions of the ACA went into effect, it is not surprising that the health care consequences of the ACA have been difficult to document in the scientific literature. As a result, we include a brief discussion of pre-ACA studies on the utilization impacts and health benefits of health insurance, as well as a discussion of recent studies of pre-ACA and early ACA Medicaid expansions that have possible implications for the ACA. In particular, we discuss evidence from (a) Massachusetts, which implemented reforms in 2006 that served as the blueprint for the ACA; (b) the Oregon Health Insurance Experiment (OHIE), which expanded Medicaid eligibility to a random sample of a low-income eligible population in 2008; and (c) California’s Low-Income Health Program (LIHP), a Medicaid Section 1115 waiver demonstration project that provided expanded coverage in county programs to low-income adults from 2011 to 2013 prior to their becoming eligible for the state’s Medicaid expansion in 2014. Finally, we draw conclusions about the state of research findings to date and identify important areas for future research on the health care impacts of the ACA on low-income individuals and families.

## ACA IMPACTS ON COVERAGE OF LOW-INCOME POPULATIONS

Because the ACA is centered on extending coverage to the uninsured, its impact on access to health insurance among the poor has been a focal point of evaluations.

### Increased Enrollment in Medicaid and Private Insurance

An estimated 20 million uninsured adults have gained coverage under the ACA (93). Since the initial open enrollment began in October 2013, more than 15 million individuals have newly enrolled in Medicaid and the Children’s Health Insurance Program (CHIP) (18). Among the 31 states that had expanded Medicaid by mid-2016, Medicaid/CHIP enrollment increased by 36% from 2014, compared with less than 12% in the 19 nonexpansion states (18). Increased enrollment in nonexpansion states is often cited as evidence of a “welcome mat” effect, where



individuals who were previously eligible for Medicaid had not signed up for coverage until after the ACA, potentially owing to greater awareness or ease of application.

The expansion of Medicaid has been particularly effective in states that took advantage of the opportunity for early Medicaid expansion allowed under the ACA. Between 2010 and 2014, six states (California, Colorado, Connecticut, Minnesota, New Jersey, Washington) and the District of Columbia extended Medicaid eligibility for low-income adults through the early Medicaid expansion option or the Section 1115 waiver process (18). In California, the LIHP significantly increased coverage by 7.3 percentage points for poor adults (up to 138% FPL) within the first two years (38). Similarly, one year after early expansion, Medicaid coverage increased significantly in Connecticut (4.9 percentage points) and modestly in Washington, DC (3.7 percentage points) among low-income childless adults—a key subpopulation targeted by Medicaid expansion (86). Trends in coverage gains in these early expansions echoed those of the Massachusetts health reform, which was associated with an estimated 18.4-percentage-point increase in coverage among low-income adults and even larger gains among low-income childless adults (54). Though these expansions were implemented prior to the ACA, their positive findings inform potential coverage gains for the poor under the ACA.

Approximately 12.7 million individuals signed up for or automatically renewed a Marketplace plan after the third open enrollment period ended in early 2016 (70), and an additional 15 million were newly enrolled in Medicaid, resulting in about 20 million newly insured compared with 2013 totals (not everyone enrolled in Marketplace plans or Medicaid was previously uninsured). Among these Marketplace enrollees, 4.9 million were new consumers and 10.5 million qualified for the APTC, which increases coverage affordability (70). Although Marketplace enrollment has fallen short of initial Congressional Budget Office (CBO) projections (50), it has successfully provided coverage for millions of previously uninsured or underinsured low-income individuals. Among the nearly 10 million individuals who signed up for or automatically renewed a plan using the federally operated HealthCare.gov enrollment platform during the 2016 open enrollment period, two-thirds were low-income ( $\leq 200\%$  FPL) (70).

Finally, more than 6 million young adults ages 19 to 25 have gained coverage under the ACA since 2010 (93). The dependent coverage provision was largely responsible for the 2.3 million who signed up for coverage within the first three years, prior to the implementation of other reforms in 2014 (69). This provision, which allows young adults to remain on their parents' insurance plan up to age 26 without being financially dependent, however, has benefited predominantly higher-income young adults and is thus not extensively discussed in this article (8, 27, 39, 52, 59, 61, 78).

### Overall Reductions in the Percentage of Uninsured

Since the law was implemented, rates of uninsured nonelderly adults have declined nationally (3, 22, 36, 55, 81, 84, 85, 90, 93). In addition to federal surveys [e.g., the National Health Interview Survey (NHIS) and the American Community Survey (ACS)], several nonfederal surveys [e.g., Gallup-Healthways Well-Being Index and the Urban Institute's Health Reform Monitoring Survey (HRMS)] help to provide more timely data on changes in national uninsurance rates (42). Recent estimates using Gallup data found a significant 7.9-percentage-point reduction in uninsurance among nonelderly adults by the end of the second enrollment period, after adjusting for pre-ACA trends and sociodemographic characteristics (85). Coverage rates have increased most substantially among subpopulations targeted by the ACA who have historically lacked coverage: low-income adults (25, 32, 55, 81, 85, 90), ethnic minorities (14, 19, 22, 25, 32, 55, 63, 85, 90), childless adults (80), and young adults (4, 6, 11, 17, 21, 22, 25, 27, 32, 45, 48, 49, 55, 59, 61, 87,



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90, 95), as well as those in safety net settings that care for indigent populations (2). In addition, nationally representative studies have consistently revealed larger increases in rates of insurance coverage among low-income adults in Medicaid expansion states compared with nonexpansion states (3, 22, 55, 81, 85, 90, 97). An evaluation based on the NHIS found that Medicaid expansion was associated with a 7.4-percentage-point significant increase in insurance coverage among low-income adults, as well as perceived improvements in health care coverage over the past year (97).

Importantly, differences in coverage also exist across states and can be driven by a number of factors, including variation in implementation of the law, income thresholds for public insurance programs, and levels of consumer outreach (25). For instance, in Kentucky, a state that adopted more aggressive outreach and enrollment efforts, uninsurance rates among low-income individuals declined from 35% to 11% (a 70% reduction) over a one-year period—a 25-percentage-point decrease relative to bordering nonexpansion states (7). While this example presents one exceptional success, findings from multiple studies overall consistently reinforce the ACA’s positive impact on coverage for low-income populations.

### The Remaining Uninsured

Despite large gains in coverage since implementation of the ACA, more than 32 million people in the United States remain uninsured (10, 76). Approximately 27% of the remaining uninsured are eligible for Medicaid or CHIP, and 22% are eligible for Marketplace tax credits (76). Of the nearly 9 million eligible for Medicaid/CHIP, two-thirds are adults, including those newly eligible through expansion as well as those who were eligible prior to expansion but had not enrolled (76). The majority of the Medicaid/CHIP-eligible uninsured are poor (below 100% FPL), persons of color, those living in working families, and those residing in Medicaid expansion states, given the higher-income eligibility for adults in expansion states (76). Furthermore, Medicaid/CHIP-eligible uninsured individuals in expansion states (6.8 million) are largely childless adults in working families, and those in nonexpansion states (2.2 million) are more likely to have incomes below 100% FPL (76). The majority of individuals eligible for tax credits are adults, of which nearly half are young adults less than age 35 (10).

To understand why eligible individuals remain uninsured, several studies have explored consumer experiences with the exchange marketplaces and Medicaid expansion (16, 23, 24, 26, 29, 30, 40, 41, 74, 89). Similar to the experiences in Massachusetts (20, 66), common barriers to enrollment have included perceived cost of coverage (16, 23, 29, 30, 40), limited awareness about coverage expansions and eligibility (29, 30, 40, 89), difficulty navigating the enrollment process (16, 23, 30), and language barriers (41, 89); application assistance from navigators has helped to mitigate some of these barriers (89). Despite enrollment challenges, adults with new Marketplace or Medicaid coverage have reported high satisfaction with their insurance, doctors offered in network, ease of finding doctors, and affordability and access to care, comparable with reports from other insured adults (24, 26, 74). These studies support future strategies that target awareness about Medicaid eligibility and tax credits, outreach to and usability among non-English speakers and older adults, simplification of the enrollment process, and education about affordable plan selection.

Approximately 9% of the remaining uninsured (almost 3 million Americans) falls into what is known as the “coverage gap.” This group represents poor, uninsured adults who reside in the 19 non-Medicaid expansion states whose income is above the state’s threshold for Medicaid eligibility but less than the 100% threshold for Marketplace subsidy eligibility. Also included are childless adults who were not previously eligible for Medicaid. Almost 90% of all adults in the coverage gap



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live in the South, half in either Texas or Florida, which aligns with this region’s high uninsurance rates, limited Medicaid eligibility, and low uptake of Medicaid expansion (37). Consistent with demographic characteristics and policies excluding nondisabled adults in states that did not expand Medicaid, African Americans and childless adults also account for a disproportionate share of individuals in the coverage gap (37). If all current nonexpansion states opted to expand Medicaid, 5.2 million currently uninsured adults would gain coverage: 2.9 million who are in the coverage gap, 0.5 million who are already eligible for Medicaid though alternate pathways, and an additional 1.8 million who are presently eligible for Marketplace subsidies with incomes from 100% FPL to 138% FPL yet did not enroll (37). Because a substantial portion of the remaining uninsured are either eligible for coverage or fall in the coverage gap, the law’s potential impact on the poor has not yet been fully realized.

In addition to those in the coverage gap, approximately half of the 11 million undocumented individuals residing in the United States will also remain uninsured (about 5.2 million) because they do not qualify for assistance under the ACA (10, 12, 96). In states such as California, where nearly one in four undocumented individuals lives, this population comprises a large share (about one-third in 2014 and projected to increase to almost half by 2019) of the remaining uninsured (30, 60). Given this gap in care, five states (California, New York, Illinois, Washington, Massachusetts) and the District of Columbia have extended coverage to low-income undocumented immigrant children, and proposed legislation in California (Senate Bill 10) would allow undocumented adults to purchase coverage through the state exchange. Though policies in select states have opened pathways to coverage, a substantial number of undocumented immigrants will continue to remain uninsured, and health care safety nets such as community health centers and Emergency Medicaid and Disproportionate Share Hospital programs will continue to play an integral role in providing care for this vulnerable population (1, 71, 73, 96).

In summary, early evidence following ACA implementation has demonstrated significant progress toward its goal of expanding coverage for millions of low-income individuals who would have otherwise remained uninsured. Not all individuals equally experience the potential benefits of the law, however, and disparities have developed on the basis of state decisions regarding whether to expand Medicaid.

**ACA IMPACTS ON ACCESS TO CARE**

An important goal of increased coverage eligibility and affordability is to increase access to adequate health care services for the poor. As a result, the ACA’s impact on access to high-quality health care has been evaluated across multiple dimensions, including access to a doctor, having a usual source care, timeliness of care, affordability, and access to medications and preventive, primary, and specialty care.

**Implications of Expansions Prior to ACA Implementation**

Given passage of minimal time since the ACA was implemented, examination of pre-ACA coverage expansions may provide insight into the anticipated effect of the law on access to care. Pre-ACA insurance expansions have largely demonstrated improved access to care for low-income populations. For example, the Massachusetts health reform was associated with significant reductions in unmet or delayed care and improvements in access to a personal doctor and usual source of care among adults overall (46, 54, 56, 58, 72, 88) and, in particular, for subgroups targeted by the ACA, such as low-income and childless adults (54, 56, 58). With regard to affordability, the Medicaid expansion in Oregon diminished financial hardship from medical costs, markedly reducing catastrophic OOP



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expenditures (5, 35, 98). In addition, other states that expanded public insurance prior to the ACA demonstrated improvements in access and affordability among low-income adults (62, 82) and children (33, 44) across comparable measures. More recently, the California LIHP waiver project found large reductions in the likelihood of any family OOP health care spending but did not detect significant differences in access to care, which may be explained by a well-established safety net in the state prior to program implementation (38). One ongoing concern about expanding coverage is that increased demand for services by newly insured individuals may limit access to care, but evidence from prior expansions does not appear to sufficiently support this hypothesis (67).

### Evidence Following ACA Implementation

Consistent with pre-ACA expansion findings, early post-ACA evidence has supported the law's positive impact on access to care, particularly among low-income adults (3, 7, 19, 79, 80, 83, 85, 90, 92). Among nonelderly adults overall, the ACA has been associated with improvements in having a usual source of care and greater ease in accessing medications and with reductions in delaying or forgoing necessary care (19, 79, 85). Benefits have also extended to low-income adults in particular, who have shown similar improvements in access to a doctor (84, 85, 92) and usual source of care (7, 79, 84, 85), largely attributed to Medicaid expansion. As expansion decisions and mechanisms continue to be debated politically in certain states, it merits highlighting evidence suggesting that different expansion approaches (i.e., the private option, whereby states use Medicaid funds to purchase private insurance through the Marketplaces) have produced comparable increases in access to care among low-income adults (83, 84).

Because cost is a well-documented barrier to access and disproportionately burdens low-income populations, assessments of affordability remain critically important. Adults who gained coverage through the ACA have provided favorable reports of affordability (24, 26, 74), likely due to cost-sharing protections of ACA provisions. In one study, using nationally representative data from the HRMS, unmet need due to cost and problems paying for medical bills significantly decreased among low-income (up to 138% FPL) and moderate-income (139-199% FPL) adults; notably, unmet need due to cost decreased by almost 11 percentage points among low-income adults by the second open enrollment period (79). Similarly, problems with cost-related unmet need or skipped medications, paying for medical bills, and annual OOP spending have been significantly reduced among low-income adults in Medicaid expansion states compared with nonexpansion states (7, 80, 83, 84).

Early evaluations of ACA impacts, however, have not uniformly documented improvements in access and affordability across all outcomes, and challenges persist (79, 83, 85, 97). In the year following Medicaid expansion, a study found no significant changes in having a usual source of care and in affordability measures such as cost-related delays in medical care, unmet medical care, and lack of a usual source of care among low-income nonelderly adults (97). Others have similarly found positive but nonsignificant improvements in ease of obtaining primary and specialty care appointments and ability to afford care among the poor in Medicaid expansion states compared with nonexpansion states (83, 84, 85). For individuals seeking care in the Marketplace, inadequate access to in-network specialty care and incurrence of high OOP costs also remain a concern (31). The potential impact of narrow networks and consequences of selecting plans with high deductibles or copayments require further investigation. Overall, nonelderly adults who experience access problems (e.g., difficulty finding doctors who accept new patients or their insurance type) have been more likely to be low-income, ethnic minorities, younger, female, and in poorer health (79) and to reside in states that did not expand Medicaid (9). Encouraging research, however, suggests that the ACA has reduced some income and ethnic disparities in access to care (19, 85).





In summary, consistent with studies of previous expansions, research examining the early impact of the ACA suggests improvements across a variety of dimensions of access and affordability. Continued observation of these measures, over a longer period of time, is essential to understanding the law’s impact on access to care for low-income populations.

### ACA IMPACTS ON UTILIZATION

For low-income individuals, barriers to access and affordability can prohibit routine engagement with health care providers and the health care system. By reducing these barriers, the ACA is expected to encourage the use of needed services that prevent or improve health conditions and subsequently reduce the use of other less efficient services.

#### Impacts of Pre-ACA Expansions

With such limited empirical data to address the impact of the ACA on utilization, evaluations of recent pre-ACA health insurance expansions can be helpful in predicting longer-term effects of the law. Results from the OHIE and Massachusetts reform, as well as other state Medicaid expansions, consistently show a significant increase in outpatient utilization (e.g., primary care visits, prescription drug use, and preventive care services such as routine check-ups and screening tests) (5, 13, 15, 28, 35, 38, 54, 58, 98). For inpatient utilization [i.e., emergency room (ER) visits and hospitalizations], the results have been less consistent (5, 15, 28, 35, 46, 57, 65, 91). For example, some OHIE studies using administrative data found a significant increase in ER visits and the probability of hospital admissions among new Medicaid enrollees following the expansion in Oregon (35, 34, 91), whereas another analysis of self-reported data did not reveal any changes (5). By contrast, evaluations of the Massachusetts health care reform found significant reductions in ER utilization and avoidable hospitalizations among nonelderly adults (46, 57, 65), which were more pronounced in the state’s poorer regions (46). Findings regarding inpatient utilization were similarly mixed among studies that evaluated a public insurance expansion for low-income childless adults in Wisconsin (15, 28). These inconsistencies for inpatient outcomes across evaluations of pre-ACA reforms may be driven by several factors including different methodological approaches, data sources, and follow-up time examined; state policies targeting poor populations prior to the expansion; regional variation patterns in care delivery; and unique features and implementation of individual state Medicaid programs.

#### ACA Early Returns

Because implementation of the ACA is still evolving, empirical evidence on the law’s impact on health care utilization remains limited (3, 19, 79, 80, 84, 85, 97). Following implementation of major provisions in 2014, significant increases in outpatient utilization and preventive care have been observed (3, 19, 79, 80, 84, 85, 97). After one year, there was a significant increase in the probability of having a physician visit and routine check-up among nonelderly adults overall (19, 79). Medicaid expansion, in particular, has been associated with a significant increase (6.6 percentage points) in physician visits among low-income adults, as well as increases in preventive care such as dental visits and cancer screenings, specifically among childless adults (80, 97). Consistent with these national findings, a comparison of two states (Arkansas and Kentucky) after the first two years of expansion to one nonexpansion state (Texas) found increases in outpatient office visits and use of preventive care services such as check-ups, regular care for chronic conditions, and glucose checks among those with diabetes (84). Thus, early findings suggest that, similar to

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pre-ACA reforms, the ACA has encouraged the use of outpatient services and preventive care among low-income individuals.

For inpatient utilization, however, findings have varied over time and by population (19, 83, 84, 97). In the year following implementation of the ACA, there were no changes in ER visits among nonelderly adults overall (19). Early research on Medicaid expansion, in particular, found no change in ER visits within the first year among low-income adults (83, 97), though one study revealed a significant increase (7 percentage points) in ER visits after excluding young adults who may have benefited from the dependent coverage provision (97). Studies assessing longer follow-up times, however, underscore how the effects of the law may evolve over time (83, 84). For example, evaluations of Medicaid expansion in three southern states initially found no changes in ER visits after the first year of expansion (83) but subsequently identified reductions in the likelihood of an ER visit and, importantly, reliance on the ER as usual care by the second year (84). Beyond ER use, Medicaid has been associated with small but significant increases in hospitalizations (97) and with a substantial reduction in the number of uninsured hospital stays and discharges (68, 77), thus highlighting the law's impact on reducing uncompensated inpatient care.

Future evaluations of the ACA should continue to examine mechanisms of utilization among low-income individuals. First, it will be important to understand how the ACA affects the complex relationship between utilization in the outpatient and inpatient settings, namely whether increased use of outpatient services potentially induces inpatient care as observed in the OHIE or, alternatively, substitutes for inpatient care and reduces preventable ER visits (e.g., for ambulatory care sensitive conditions) as observed in Massachusetts. Second, the health care system's ability to respond to pent-up demand among the newly insured remains a concern. Individuals who were previously uninsured may have forgone or postponed necessary care because of financial constraints, and expanded insurance coverage under the ACA may increase utilization that could overwhelm both the health care system and state budgets. An evaluation of California's LIHP waiver project, which preceded the 2014 Medicaid expansion, showed that the initial increased demand for inpatient care among previously uninsured adults declined rapidly after one year (53), whereas demand persisted even two years after the OHIE (34). Thus, based on pre-ACA expansions, long-term patterns of use among low-income, newly insured individuals remain uncertain.

### ACA IMPACTS ON HEALTH

An expected consequence of improved coverage, access, and interface with the health care system is improved health. Health has often been assessed across dimensions of self-reported general and mental health, diagnosed chronic conditions, clinical indicators, and mortality.

#### Health Impacts of Pre-ACA Reforms

Understanding the health impacts of coverage expansions preceding the ACA (5, 35, 51, 82, 88) may help to contextualize the small but growing literature on the ACA's health impacts. Many have taken advantage of natural experiments to overcome the endogeneity challenge presented when examining the causal relationship between gaining health insurance and experiencing better health (51). Improvements in self-reported health were observed among nonelderly adults following the Massachusetts reform (88), as well as among low-income adults who gained Medicaid coverage following expansions in Oregon, New York, Maine, and Arizona (5, 35, 82). Although significant changes in mortality were not detected in the OHIE after one year (35), the other coverage expansions, which were evaluated over a longer period of time, provide compelling evidence that mortality declined among low-income adults (82, 88). In addition to self-reported health and



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mortality, clinical outcomes were evaluated in the two years following the OHIE. Whereas no significant changes were observed for clinical outcomes determined to be sensitive to changes within this time period, such as blood pressure, cholesterol level, or hemoglobin level, a higher probability of diagnosed diabetes and a substantial decrease in probability of depression were found among those who received Medicaid coverage (5). Despite potential limitations of these studies (e.g., insufficient follow-up time, potentially limited statistical power), the health impacts of these earlier coverage expansions appear positive across multiple outcomes, though not conclusive.

### Health Impacts After ACA Implementation

Only a limited number of studies have evaluated the ACA’s impact on health outcomes since implementation of the law’s major provisions in 2014 (3, 43, 80, 84, 85, 97). After one year, an improvement in self-reported health was found among all nonelderly adults overall (85). Medicaid expansion, in particular, was not associated with significant changes in self-reported health among low-income adults after one year (83, 85, 97), but improvements were observed after two years (80, 84), most substantially among low-income childless adults, an important subgroup who benefited from expanded Medicaid eligibility (80). Early evaluations of Medicaid expansion have also revealed no associations with changes in rates of self-reported or positive screening results for depression, diagnosed hypertension, or health behaviors such as obesity, but have observed significant increases in rates of diagnosed diabetes and high cholesterol (43, 80, 83, 84, 97).

Overall, these findings further lend evidence to the potential benefits of Medicaid expansion, regardless of expansion approach, and to the notion that health impacts may take more time to materialize. Researchers have hypothesized that lack of immediate improvements in perceived health status could be explained by increased awareness of newly diagnosed conditions, though these perceptions may improve over time as conditions are treated (47, 94, 97). In addition, it will be important to monitor possible reductions in health disparities under the ACA. In a previous study of uninsured adults in the years leading up to Medicare eligibility, health trends were significantly worse and worsening faster for uninsured individuals compared with insured individuals. After gaining Medicare coverage, however, the health status of the previously uninsured improved to levels comparable to the insured (64). These findings suggest that, by extending coverage to the previously uninsured, the ACA may play a significant role in reducing health disparities experienced by the previously uninsured.

### CONCLUSIONS

In conclusion, the ACA is the most significant expansion of health insurance coverage in the United States since the implementation of the Medicare and Medicaid programs in 1966. As of early 2016, about 20 million more individuals have health insurance compared with 3 years ago, just prior to the implementation of the law’s major provisions. Low-income residents have been the primary beneficiaries of the ACA’s insurance subsidies and Medicaid expansions, but challenges remain. Low-income individuals who are eligible for benefits continue to be uninsured because of ongoing affordability concerns, either because they live in a state that refuses to expand its Medicaid program despite the availability of substantial federal funding or because they are undocumented and prohibited from ACA benefits. Nevertheless, the early evidence strongly indicates that the ACA is working; it has substantially reduced the number of uninsured and has improved access to care for 20 million newly insured people. In the longer term, further research may show improvements in self-reported health status and better mental and physical health outcomes not only from better access to care, but also from significant reductions in financial stress for low-income individuals and families.



There are limitations to the recent evaluations of the ACA. First, most assessed limited follow-up time, with some relying on only 6 to 12 months of post-ACA data. It will likely take longer for the effects of the law to become evident. Second, although some of these studies methodologically took advantage of some states choosing to expand Medicaid while others did not (i.e., used nonexpansion states as a control group), it merits noting that states were not randomly assigned to the expansion. Thus, the observational studies are susceptible to unmeasured confounders, particularly those that may differentially change over time in expansion versus nonexpansion states. Finally, implementation of Medicaid expansion and the ACA more broadly is not homogenous across states, which could impact eligibility for coverage as well as access, utilization, and health outcomes. Although steps were taken to mitigate these limitations, future evaluations will need to continue to monitor the impact of the ACA across these domains to fully understand its impact on low-income populations.

### SUMMARY POINTS

1. An estimated 20 million individuals have gained coverage under the ACA. Since open enrollment began in 2013, more than 15 million individuals enrolled in Medicaid and CHIP. In addition, ~12.7 million were enrolled in Marketplace plans after the third open enrollment period, which suggests that ~7.7 million ACA enrollees were previously insured.
2. Insurance coverage among Americans has significantly increased since ACA implementation, especially those in Medicaid expansion states and among subpopulations targeted by the law, namely the poor, childless adults, ethnic minorities, and young adults.
3. Approximately 32 million nonelderly adults remain uninsured, half of whom are eligible for Medicaid/CHIP or Marketplace tax credits. As undocumented residents do not qualify for assistance under the ACA, the remaining uninsured also includes about 5.2 million of the approximate 11 million undocumented individuals residing in the U.S.
4. The ACA has generally been associated with significant improvements in access and affordability and increases in outpatient utilization among low-income populations, but changes in inpatient utilization and health outcomes have been less conclusive.
5. Despite the availability of subsidies and cost-sharing reductions, the reliance of the ACA on health insurance exchanges might increase access to health insurance, but simultaneously pose unintended barriers to access through creation of narrow networks and existence of high-deductible Bronze plans.
6. A major limitation of post-ACA evaluations is minimal follow-up time, as it will likely take longer for the effects of the law to materialize. Therefore, continued monitoring of implementation and effectiveness is essential.

### DISCLOSURE STATEMENT

The authors are not aware of any affiliations, memberships, funding, or financial holdings that might be perceived as affecting the objectivity of this review.

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