Health Insurance and Access to Health Care in the United States

CATHERINE HOFFMAN AND JULIA PARADISE

Kaiser Commission on Medicaid and the Uninsured, Menlo Park, California 94025

Health insurance, poverty, and health are all interconnected in the United States. This article synthesizes a large and compelling body of health services research, finding a strong association between health insurance coverage and access to primary and preventive care, the treatment of acute and traumatic conditions, and the medical management of chronic illness. Moreover, by improving access to care, health insurance coverage is also fundamentally important to better health care and health outcomes. Research connects being uninsured with adverse health outcomes, including declines in health and function, preventable health problems, severe disease at the time of diagnosis, and premature mortality.

Key words: health insurance; access to health care; poverty

Background and Introduction

In the United States, where per capita health care costs are the highest in the world and continue to escalate, health insurance has become nearly essential. Having reasonable access to health care rests on many factors: the availability of health services in a community and personal care-seeking behavior, for example. However, these and other factors are often trumped by whether a person can afford the costs of needed care. Health insurance enables access to care by protecting individuals and families against the high and often unexpected costs of medical care, as well as by connecting them to networks and systems of health care providers.

The American health insurance system is pluralistic, with both private and public sectors, but its foundation is employer-based coverage for working families and Medicare for the elderly and disabled. Most workingage adults obtain health coverage for themselves and their dependents as a benefit of employment. However, this benefit has been gradually eroding as health premiums, in tandem with higher health care costs, grow at a rate far outpacing rates of general inflation and wages. In 2005, 61% of the nonelderly had insurance through an employer, down from 66% in 2000. Low-wage workers are far less likely than higher-wage workers to have access to job-based coverage. In 2005, more

than half of workers in poor families and more than a third of those in near-poor families had no offer of job-based coverage in the family.² When it is available, health insurance is often unaffordable for low-income people, whose household budgets are strained to meet food, housing, and other basic needs.

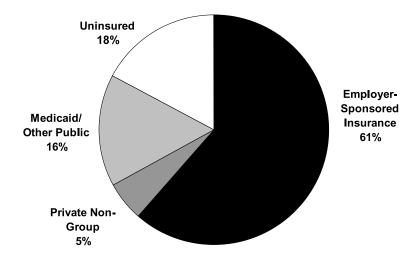
The nation's public programs are also critical sources of coverage. Medicare covers virtually all elderly Americans. Among the nonelderly, Medicaid and the State Children's Health Insurance Program (SCHIP) cover about 40% of the poor and about a quarter of the near-poor. Yet, the uninsured rolls and rate continue to grow. Between 2000 and 2006, the number of uninsured people rose by more than 1 million per year on average. By 2006, more than 46 million Americans—18% of the nonelderly population—had no health insurance coverage (Fig. 1).

Health insurance, poverty, and health are all interconnected. Among the poor, more than a third have no health coverage (36%) and those who are near-poor (incomes between one and two times the poverty level) are not much better off, with 30% uninsured. Taken together, those with low incomes (meaning less than two times the federal poverty level) make up two-thirds of the nation's uninsured. Two hundred percent of the poverty level was just over \$40,000 for a family of four in 2006. Racial and ethnic minorities, largely because they are more likely to have low incomes, disproportionately make up America's uninsured—just over half of the uninsured in 2006. ¹

Those with low incomes are more likely to be in just fair or poor health than are those with higher incomes.

Address correspondence to: Catherine Hoffman, Sc.D., M.N., 929 Signorelli Circle, St. Helena, CA 94574. Voice: 707-967-0890; fax: 707-967-0849.

choffman@kff.org



260 Million Nonelderly

FIGURE 1. Health insurance coverage of the nonelderly population, 2006. *Source:* Kaiser Commission on Medicaid and the Uninsured/Urban Institute analysis of Current Population Survey, March 2007.

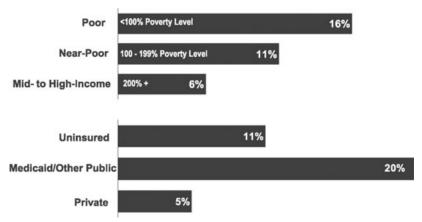


FIGURE 2. Percentage of U.S. nonelderly population reporting fair or poor health, by income and insurance status, 2006. *Source:* Kaiser Commission on Medicaid and the Uninsured/Urban Institute analysis of Current Population Survey, March 2007.

Similarly, the uninsured are more likely to report being in fair or poor health than are the privately insured. Those with Medicaid coverage are the most likely to be in fair or poor health because the program's eligibility requirements include being severely disabled and/or low-income (Fig. 2).

Health insurance is unaffordable for many in the low-income population, where household budgets are small and even the most basic needs compete. More than half of low-income adults report a housing hardship—crowded conditions, difficulty paying housing or utility bills, or housing expenses that require more than half of their income. Fifteen percent of low-income adults find it difficult to afford food. These hardships considerably decrease the chances of having health insurance.³

Not having health insurance or being underinsured can create significant medical debt. Health care spending alone now burdens millions of Americans, both the uninsured and insured. In 2003, nearly 50 million people (or 19% of the nonelderly population) lived in families in which more than 10% of the family's income was spent on health care – 19 million of these people were in families spending more than 20% of the family income on health. Often, this level of health spending is, in itself, a barrier to care. Those with medical debt are more likely to postpone and even forgo needed care altogether, including skipping recommended treatments and not filling prescriptions because of costs.^{5,6} The consequences of inadequate access to care can spiral downward, resulting in poorer health and even disability, further jeopardizing a family's income and financial security. And finally, having poor health makes it even more difficult to find a health insurance plan that will cover potentially higher costs but is still affordable.

This review synthesizes a large body of compelling evidence that health insurance is a vital means to access to health care in the United States and, through that pathway, is fundamentally important to better health care and health outcomes. We highlight here the major research linking insurance coverage to access to care, spanning studies that examine access to prenatal care and basic primary care services, as well as access to the medical treatment of both acute and chronic health problems. We then review what is known about the health consequences associated with lack of health insurance coverage. In closing, we describe the role of Medicaid, this country's public insurance program for the poor and disabled, and discuss its effectiveness in improving their access to health care. Throughout this review, use of the term "significant" in association with research findings refers to statistical significance.

Access to Primary Care

Primary care is fundamentally important to good health and encompasses both preventive care and the treatment of routine illnesses and problems that do not require specialist care. Using household survey data primarily, health service researchers have developed several reliable measures of access to primary care, including whether a person has a usual source of care, any contact with a health professional, and preventive care visits, as well as whether perceived health care needs have been met.

Usual Source of Care

Having a usual source of care, a "medical home" (e.g., a doctor's office or community clinic) is a cornerstone of quality primary care, which in turn improves continuity of care, preventive care, prenatal care, and management of chronic diseases.^{7–10} It is one of the most widely used indicators of access to health care.

Those who have health insurance are far more likely than the uninsured to have a usual source of care. ^{10–13} In a 2005 study, nearly all privately and publicly insured children (98% and 97%, respectively) had a usual source of care, compared with 72% of uninsured children. ¹⁴ Adults were less likely than children to have a usual source of care and the disparity was larger: about 90% of privately and publicly insured adults had a usual source of care, compared with about half of uninsured adults. ¹⁵

More rigorous research validates these observational findings. ^{16–19} In particular, the implementation of SCHIP and its forerunner statewide programs presented natural experiments that could study the effect of new coverage on access to care. Researchers who monitored cohorts of newly enrolled children found that, compared with the year before enrollment, the proportion of children with a usual source of care increased 1 year after enrollment. Subgroup analyses showed that groups with the poorest access at baseline, including minority children, children uninsured for longer spells, and poorer children, experienced the greatest improvements. ^{20–22}

A longitudinal study by Kasper *et al.* used data from three rounds of a family survey conducted between 1995 and 1997 to investigate the effect of losing or gaining health coverage on the individual. Among those who were initially covered by Medicaid, the proportion *without* a usual source of care nearly quadrupled for the group who became uninsured, reaching 35% at follow-up, compared with 12% for those who retained Medicaid. For the uninsured who subsequently gained coverage, the proportion *without* a usual source of care fell from 33% to 20% at follow-up, a level well below the 41% for those who remained uninsured.²³

Any Physician Contact

Another commonly used measure of access to primary care is whether a person has had any contact with a physician or other health professional in the past year. Bloom *et al.* found that 26% of uninsured children in 2005 had *not* seen a health professional in the past year, a rate three times greater than the rate for children with either private coverage or Medicaid. The insurance-related disparity was as great among adults, but an even larger share of uninsured adults (42%) had not had a professional visit in the past year.

Preventive Care

Insurance differences in access to preventive care also exist. Ayanian et al. found that uninsured

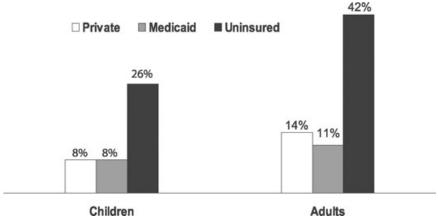


FIGURE 3. Children and adults with no contact with a health professional in past year by insurance status, 2005. *Source:* Bloom *et al.* 2006 and Pleis and Lethbridge-Cejku, 2006.

working-age adults were less likely than insured adults to have received basic preventive services, such as breast cancer screening (64% versus 89%) and hypertension screening (80% versus 94%). They also found that more than 40% of adults who were uninsured for a year or more had not had a routine checkup in the past 2 years, compared with 18% of insured adults. Even in specified higher-risk groups who had clear needs for more regular clinical management, the uninsured lagged far behind the insured on checkups.²⁴

Insurance-related disparities in access to care are often accentuated among low-income adults. An analysis of data from a national survey shows that among low-income women, the uninsured are also less likely than the insured to receive cancer screening. The mammography rate for the uninsured was about half that of the insured (32% versus 62%), and 43% of the uninsured received Pap tests, compared with 64% of the insured.²⁵

The research on the relationship between insurance and prenatal care use by low-income women is somewhat equivocal, but overall, the evidence indicates that women with insurance (either public or private) fare better than the uninsured and that some women newly covered through Medicaid expansions receive more timely and adequate prenatal care. ^{26–29}

Studies of access to primary dental care among children show problems in general, but uninsured and poor children fare distinctly worse than other children. ^{11,30,31} In 2003, 72% of children overall, but only 57% of children uninsured for dental services, had had at least one preventive dental visit in the past year; 58% of poor children had had a visit. ³²

Unmet Health Care Needs

As might be expected considering their lower income, reduced access to care, and worse health status, the uninsured report more unmet health needs than the insured. More than 90% of the uninsured cite cost as the main barrier to getting care (as do more than half the insured).³³ Results from the landmark RAND Health Insurance Experiment illuminate the links between low incomes, cost barriers, and unmet need. Designed to investigate the effect of cost sharing on health care use, the study randomly assigned families to insurance plans with different cost-sharing requirements, including one free-care plan. One of the many key findings was that cost sharing deters the poor from seeking health care, including highly effective care.³⁴ In effect, people without insurance face 100% cost sharing for health care. The RAND study shows that even far lower cost sharing poses financial barriers to care that are difficult for the poor to surmount.

Reported rates of health care needs unmet because of cost are low for children with stable coverage, but lack of health coverage and poverty increase children's risk of having unmet needs. Among both the insured and the uninsured, poor children are four times as likely, and near-poor children are three times as likely, to have unmet health care needs as children from higher-income families. Evidence that being uninsured and being poor both heighten the risk of having unmet needs has especially worrisome implications for children with health problems and chronic illnesses, whose needs for care are more complex and ongoing. Research focused on children with conditions and symptoms for which treatment is clinically indicated

(e.g., asthma, recurrent ear infections) shows that uninsured children are significantly less likely than insured children to receive physician care.³⁶

Like uninsured children, uninsured adults are significantly more likely to delay or forgo care and to have unmet needs than their insured counterparts. Ayanian *et al.*, in the study mentioned earlier, found that 7% of insured adults, but almost 40% of adults uninsured for a year or more, did not see a physician when needed in the past year because of cost; the rate was nearly 50% for uninsured adults with annual income below \$15,000.²⁴ More recently, in a 2005 survey, uninsured adults were found to be twice as likely as the insured to report that they or a member of their household skipped medical treatment, cut back on medication, or did not fill a prescription in the past year because of cost (51% versus 25%).³⁷

Another important study examined adults with a new serious symptomatic condition. Baker *et al.* found that the uninsured received care for only 24% of their symptoms, compared with 45% of symptoms for the insured. Although the types of symptoms and perceived need for care did not differ between the two groups, care thought to be necessary was *not* received for 30% of symptoms for the uninsured, and the (adjusted) likelihood of getting care that they thought necessary was about one-quarter (28%) that of the insured. Nearly all of the uninsured who did not get care that they thought was needed said that they could not pay for the care, and 63% said that not receiving care affected their health.³⁸

Many other studies, including analyses of low-income women and adults with disabilities, show similar insurance disparities in unmet need for health care. ^{39,40} Lack of insurance, low income, and having no usual source of care all increase the likelihood of missing or delaying needed care because of cost, and evidence suggests that their effects are cumulative. ⁴¹

Access to Acute and Trauma Care

Even in the treatment of acute illness or injury (where care tends not to be discretionary and there is little unnecessary use), health insurance appears to affect medical decision making and patient care-seeking behavior. Important evidence of this effect comes from an early study examining hospital care of sick newborns. Presumably, elective and unnecessary procedures are minimal in this case because of sick newborns' fragility and the need for maternal bonding; at the same time, early medical interventions could profoundly improve these sick newborns' outcomes.

Braveman *et al.* found that uninsured newborns, even though they had more severe medical problems, received fewer hospital services than privately insured newborns (as measured by adjusted length of stay and hospital charges).⁴²

Uninsured injured adults also fare poorly. Research by Hass and Goldman examined acute trauma patients aged 15–64 years who were hospitalized with an injury. The authors controlled for comorbidities and the type and severity of injury. Although they found no insurance-based differences in whether the patient received care in an intensive care unit, they did find that the uninsured were less likely to have physical therapy or undergo surgery while hospitalized for an injury.⁴³

In the most recent study of this type, Hadley examined insurance-related differences in care among the nonelderly after a "health shock"—an unintentional injury or the onset of a new chronic illness. This research improves on the design of earlier studies by using national data rather than data from one state, determining insurance status before the health shock, and examining care after the health shock. Hadley found, after adjustment for known confounders, that uninsured persons were significantly less likely than the insured to see a clinician after an unintentional injury (79% versus 89%). When they did see a clinician, the uninsured and the insured were equally likely to have follow-up care recommended, but the uninsured were significantly less likely than the insured to receive all the recommended follow-up care (18% versus 30%) and significantly more likely not to have received any of the recommended follow-up care (19% versus 9%).44

Managing Chronic Conditions

People with chronic conditions are more likely than others to have health insurance—partly because they know that their health needs will be greater, making insurance more essential to them, and also because those who are both severely disabled by a chronic condition and poor qualify for Medicaid. However, about 10% of the nonelderly living with a chronic condition have no health coverage: nearly 9 million people when last measured in 1996. 44,46 Among adults with chronic conditions, the uninsured are more likely to be in poor health and/or to have physical limitations than are the insured. Even so, they have less in access to care.

A 1999 study by Reed and Tu found that more than half of uninsured adults with chronic conditions delay or postpone care—twice the rate reported by privately insured adults with chronic conditions (54% versus 27%); a quarter of uninsured adults do not

get needed care—more than three times the proportion for the privately insured.⁴⁷ The pattern is similar among people with disabilities. Hanson *et al.* found that two-thirds of nonelderly adults who were both disabled and uninsured had postponed care and gone without health necessities (e.g., eyeglasses and equipment), and almost as large a share reported skipping doses or not filling prescriptions; the corresponding figures for the privately insured and those with Medicaid were significantly (about 20–30 percentage points) lower.⁴⁰

Hadley, in the study mentioned earlier, found insurance-related disparities in care also among those with a newly diagnosed chronic condition. Although equally likely to receive recommendations for follow-up care, the uninsured were less likely than the insured to receive it; they also had fewer office visits and prescription medicines and more visits to the emergency department. Finally, they were more likely to report no longer being treated at the first follow-up interview about 3 months later, and they experienced significantly worse short-term health outcomes than those with insurance. 44

Heart Disease

Wenneker et al. were the first to document insurancerelated differences in access to procedures for a specific chronic condition—coronary artery disease. They found that, in Massachusetts, among patients admitted to the hospital for circulatory disorders or chest pain, both uninsured and Medicaid patients underwent fewer cardiac procedures than those with private coverage. After adjustment for demographic, clinical, and hospital factors, privately insured patients had 80% higher odds than the uninsured of receiving cardiac catheterizations, and their odds were 40% higher for cardiac bypass surgery and 28% higher for angioplasty.48 In 2000, Canto et al. published a much larger study using a national registry of patients admitted to the hospital for acute myocardial infarction (heart attack). Their research not only validated that uninsured patients were less likely than the privately insured to undergo diagnostic and therapeutic cardiac procedures but also showed that they were significantly more likely to die in the hospital after a heart attack.49

Human Immunodeficiency Virus Disease

An important study, the HIV Costs and Services Utilization Study, allowed researchers to specifically examine the relationship between health insurance and the receipt of antiretroviral therapy, an intervention that changes the clinical course of HIV disease from an acute and fatal condition to a chronic condition. Andersen et al. were the first to find that being uninsured was associated with much lower chances of having received antiretroviral therapy. However, after adjustment for a wide range of health factors and, importantly, differences in access to care, there were no significant differences between the privately insured and the uninsured.⁵⁰ That is, once differences in access to care were taken into account, having health insurance no longer affected whether a person received antiretroviral therapy—which supports the theory that health insurance and access to care are tightly connected. Using the same longitudinal database, another team of researchers tracked patients' mortality for a year. They found that having health insurance protected against premature death in this population, even after controlling for differences in health status.⁵¹

Other Chronic Conditions

Several studies provide more evidence that uninsured patients - both adults and children - who have specific chronic physical conditions, including diabetes and cancer, receive less care than the insured with the same conditions. 35,52-54 Rabinowitz et al., also found such disparities among persons with mental health conditions. Examining the records of patients with psychosis admitted for the first time to the hospital, and looking back at care before the hospitalization, they found that private coverage increased the likelihood of having received earlier mental health treatment, being admitted voluntarily, and being hospitalized within 3 months of the onset of the psychosis. The results indicate that, just as with chronic physical conditions, health insurance affects care-seeking by persons with chronic mental conditions.⁵⁵

Health Outcomes

A growing number of studies indicate that people without health insurance not only lack access to care but also experience worse health outcomes. One such study, of low-income children with asthma who were newly enrolled in SCHIP, found that the average number of asthma attacks, the rate of hospitalization for asthma, and the rate of visits to the emergency department for asthma all fell sharply in the year after their enrollment in SCHIP, compared with the year before enrollment.⁵⁶

Roetzheim *et al.* examined the relationship between insurance status and the diagnosis of four types of cancer in adults. When cancer is first diagnosed in its later stages, it often reflects poor access to primary care and



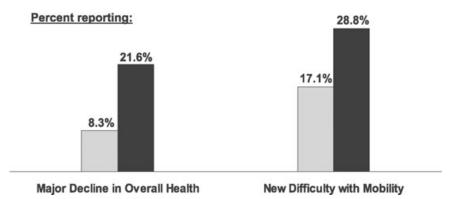


FIGURE 4. Decline in health among adults aged 51–61 years: insured versus uninsured. *Source:* Baker *et al.*, 2001.

routine health screening. The researchers found that the uninsured and those with Medicaid had greater odds of a late-stage diagnosis, that is, more severe cancer, at the time of diagnosis, than the privately insured.⁵⁷

Baker *et al.*, in a study of adults in late middle-age, found that adults who were continuously uninsured were much more likely than continuously insured adults to have a major decline in their overall health over a 4-year period (22% versus 8%) and to develop a new difficulty with mobility (29% versus 17%). (FIG. 4). Even after adjustment for baseline differences between the two groups, the excess risks of these adverse outcomes for the uninsured were 63% and 23%, respectively.⁵⁸

Preventable hospitalizations (also referred to as "ambulatory care-sensitive conditions" or "avoidable hospitalizations") are hospitalizations for specific conditions that generally can be managed effectively in an ambulatory care setting. They are not only an important measure of poor access to care but also an indicator of avoidable suffering, costs, and lost productivity. Studies find that the uninsured have higher rates of preventable hospitalizations than do the insured. In a 10-state study, uninsured patients had a preventable hospitalization rate 35% higher than the rate for privately insured patients (12.6% versus 9.4%). Uninsured adults living in low-income areas had even higher preventable hospitalization rates than those of other uninsured adults. Even after the study controlled for socioeconomic factors, comorbidities, and local health care capability, the odds of having a preventable hospitalization were 28%-71% higher for uninsured adults than for insured adults.⁵⁹ Other research using a community-level analysis of preventable hospitalizations validates these differences.⁶⁰

Premature Mortality

Being uninsured is associated not only with inadequate access to care and poorer health but also with the most serious health consequence, premature death. Several studies have specifically examined the relationship between health coverage and mortality, with the consistent finding that having health insurance, independent of other factors, lowers the risk of death.

Using data from a 1988 national maternal survey linked with vital statistics records, Moss and Carver determined that among low-income families, the chance of infant mortality in the first month of life was nearly 40% greater for uninsured mothers than for uninsured mothers after the study controlled for many other social and health factors associated with infant death. Looking at infant deaths after the first month of life, the researchers also found mortality differences between uninsured and insured infants. However, after adjustment for differences in access to sick- and well-baby care, the infants' risks of dying were the same—a finding that points to the crucial role of access to care, which is markedly improved by having health insurance. ⁶¹

Health insurance has also been shown to lengthen life for people with potentially fatal conditions. A small retrospective study of patients with cystic fibrosis (CF) who were admitted to a large regional children's hospital looked at the relationship between survival time (which has increased dramatically over time) and

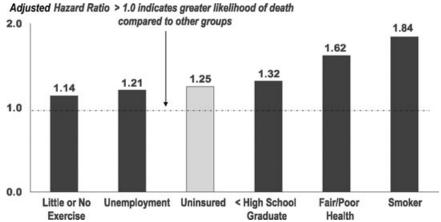


FIGURE 5. Independent risk of mortality associated with social and behavioral factors. *Source:* Franks *et al.*, 1993.

socioeconomic status, insurance coverage, and known health risks for early CF death. The average follow-up was 10 years, and half of the CF patients died during the study period; however, median survival time was 6 years for uninsured patients compared with 20 years for those with private insurance or Medicaid. The adjusted relative risk of dying for the uninsured was twice that for the privately insured and even exceeded the relative risks associated with known adverse health factors ⁶²

Several statewide studies have found that cancer survival is also worse among the uninsured. Uninsured women first present with breast cancer at later stages of the disease, and they are more likely to die from it (except for women diagnosed with the worst stage of disease). In New Jersey, the adjusted mortality risk from breast cancer was nearly 50% greater for uninsured women than for privately insured women during a 4.5- to 7.5-year study period after diagnosis. ⁶³ In a Florida study of colorectal cancer patients that also adjusted for key social and health factors, the uninsured were less likely to undergo surgery for their cancer and, similar to the findings on women with breast cancer, had a 40% greater relative risk of dying than that of patients with private fee-for-service coverage. ⁶⁴

National-level evidence comes from two longitudinal studies published in the early 1990s. 65,66 The seminal study by Franks *et al.* examined a large cohort of adults who participated in the first National Health and Nutrition Examination Survey (NHANES) between 1971 and 1975, monitoring them through 1987. Controlling for sociodemographics, health status, and health behaviors, they found a 25% greater risk of death for adults who initially had been uninsured. Although this is a sizable difference, it is probably an un-

derestimate because some of the initially uninsured and insured might have gained or lost coverage over such a long period, which would blunt differences (FIG. 5).

To produce a national estimate of the effect of being uninsured on premature mortality among adults aged 25–64 years, the Institute of Medicine's Committee on the Consequences of Uninsurance assumed a 25% greater mortality rate for the uninsured and applied this factor to estimates of the uninsured by age groups. They estimated that in 2000, excess deaths among uninsured adults aged 25–64 years numbered around 18,000.¹⁰

Medicaid's Effect on Access to Care for the Low-Income Population

Were it not for Medicaid and SCHIP, millions more in the low-income population would have no health insurance. Medicaid covers more than 55 million low-income Americans, including pregnant women, children and families, individuals with severe disabilities and chronic illnesses, and elderly persons. SCHIP covers another 6 million children and about 600,000 adults who have too much income to qualify for Medicaid but cannot afford private health insurance. Medicaid and SCHIP expansions have increased the number of low-income children with health coverage and reduced racial disparities in coverage; between 1997 and 2005, the uninsured rate among low-income children fell from 23% to 14%. 68,69

Research results from studies of the effect of Medicaid on access to care for the low-income population are mixed. Most of these studies are confounded by three defining features of the program. First,

discontinuities in Medicaid coverage weaken the effect of the coverage. As income fluctuates around income eligibility thresholds, low-income beneficiaries lose and gain coverage sporadically. Even brief spells without health insurance, even for part of a year, reduce access to care and disrupt health care. To-73 Second, the greater severity of health problems and disability among Medicaid beneficiaries is difficult to measure well enough to avoid bias in comparisons with other insurance groups. Last, inadequate physician participation in Medicaid weakens the positive correlation between insurance and access to care.

Despite the bias that these issues introduce, many studies conclude that public coverage makes a difference in access to care for the poor and nearpoor. Evidence shows consistently that low-income children with Medicaid or SCHIP have significantly better health and dental care access than that of their uninsured counterparts, and are significantly less likely to have unmet needs for medical and dental care, prescription drugs, eyeglasses, and mental health care. 30,74,75 Low-income women with Medicaid also fare better than low-income women who lack insurance, as shown by their higher rates of access to primary care and use of prenatal care. 39,76,77 There is evidence, too, that low-income, pregnant women with Medicaid obtain more timely and adequate prenatal care than the uninsured. 26,27,78

Reinforcing this evidence are findings that access to care, continuity of care, and utilization have improved for low-income populations after expansion of public coverage programs. ^{20,21,74–82} Equally, marked declines in access to care and health status after the loss of Medicaid coverage point to the program's effect. Lurie *et al.* monitored a cohort of medically indigent California adults whose Medicaid coverage was terminated to control state costs, leaving them uninsured. Six months after termination of their benefits, the health and access of the study patients had worsened significantly, whereas a comparison group of adults in Medicaid experienced no similar deterioration in either their health status or access to care. ⁸³

There is substantial evidence that Medicaid enrollees fare as well as or better than the low-income privately insured on important measures of primary care access. ^{12,16,76,79} Public coverage also provides more financial protection than private insurance for low-income people because it has lower cost-sharing requirements and it covers services that private insurance often limits or excludes. ^{84,85}

At the same time, access problems in Medicaid stemming from low provider participation in the program, particularly among specialists, are a perennial issue—

with low Medicaid payment rates being one of the driving causes. 86–89 In some states, access is also hindered by sharply limited benefits for adults in Medicaid. Healthcare access problems in Medicaid are a major concern in light of the limited means and extensive health needs of the program's beneficiaries.

Conclusion

Whereas the number of uninsured Americans has been growing, their profile has changed little over time. The uninsured are largely the poor and near-poor, explaining a substantial part of why racial and ethnic minorities, new immigrants, the poorly educated, and those in poor health are more likely to be uninsured. Few people choose to go without health insurance; the primary reason for being uninsured is that coverage is not affordable.

The health services research reviewed here shows a strong association between health insurance coverage and access to primary and preventive care, the treatment of acute and traumatic conditions, and the medical management of chronic illness. Moreover, the research connects being uninsured with adverse health outcomes, including declines in health and function, preventable health problems, severe disease at the time of diagnosis, and premature mortality. Although the research literature consists mostly of observational studies, studies using a stronger research design, (e.g., longitudinal analysis) come to the same conclusions.

In 2004, the Institute of Medicine completed its 3-year examination of the problem of America's uninsured. The second of their six reports focused on the relationship between health coverage and access to care. Drawing from many of the same studies reviewed in this article, they firmly concluded that, although health insurance *alone* would neither eliminate disparities in access to health care nor equalize health across subgroups of Americans, having health insurance is clearly connected to better health-related quality of life and longer lives:

Most importantly, if adults who now lack health insurance were to be insured on a stable and ongoing basis, their health status would likely be better than it would be without health insurance, and their risk of dying prematurely would be reduced.¹⁰

It is also clear that the personal benefits afforded by having health coverage—greater financial security, prevention of illness, pain, and suffering, better physical and mental function, and a longer life expectancy are most likely to be achieved when health insurance coverage is continuous over a lifetime so that health care remains affordable.

References

- 1. Kaiser Commission on Medicaid and the Uninsured. The Uninsured: A Primer, 2007.
- CLEMANS COPE, L. et al. 2006. Changes in Employees'
 Health Insurance Coverage: 2001–2005, Kaiser Commission on Medicaid and the Uninsured.
- LONG S. 2003. Hardship among the Uninsured: Choosing among Food, Housing, and Health Insurance, New Federalism, Series B, Urban Institute.
- BANTHIN, J. & D. BERNARD. 2006. Changes in financial burdens for health care: national estimates for the population younger than 65 years, 1996 to 2003. JAMA 296: 2712–2719.
- HOFFMAN, C. et al. 2005. Medical Debt and Access to Health Care, Kaiser Commission on Medicaid and the Uninsured.
- SCHOEN, C. et al. 2005. Insured But Not Protected: How Many Adults are Under-Insured? Health Aff. Web Exclusive, W5: 289–302.
- STARFIELD, B. & L. SHI. 2004. The medical home, access to care, and insurance: a review of the evidence. Pediatrics 113(5 Suppl): 1493–1498. Review.
- BINDMAN, A. et al. 1996. Primary care and receipt of preventive services. J. Gen. Intern. Med. 11: 269–276.
- ETTNER, S. 1996. The timing of prevention services for women and children: the effect of having a usual source of care. Am. J. Public Health 86: 1748–1754.
- INSTITUTE OF MEDICINE. Care Without Coverage: Too Little, Too Late. 2002. National Academies Press. Washington, DC.
- STEVENS, G. et al. 2006. Enrolling vulnerable, uninsured but eligible children in public health insurance: association with health status and primary care access. Pediatrics 117: e751–e759.
- DUBAY, L. & G. KENNEY. 2001. Health care access and use among low-income children: who fares best? Health Aff. 20: 112–121.
- NEWACHECK, P. et al. 2000. Access to health care for children with special health care needs. Pediatrics 105: 989–97
- BLOOM, B. et al. 2006. Summary Health Statistics for U.S. Children: National Health Interview Survey, 2005, NCHS/CDC/USDHHS, Vital Health Statistics, Series 10.
- PLEIS, J. & M. LETHBRIDGE-CEJKU. 2006. Summary Health Statistics for U.S. Adults: National Health Interview Survey, 2005, NCHS/CDC/USDHHS, Vital Health Statistics, Series 10.
- SELDEN, T. & J. HUDSON. 2006. Access to care and utilization among children: estimating the effects of public and private coverage. Med. Care 44(5 Suppl): 119–26.
- NEWACHECK, P. et al. 1998. Health insurance and access to primary care for children. JAMA 338: 513–519.
- HOLAHAN, J. & B. SPILLMAN. 2002. Health Care Access for Uninsured Adults: A Strong Safety Net is Not the Same as Insurance, New Federalism, Series B.
- OLSON, L. et al. 2005. Children in the United States with discontinuous health insurance coverage. N. Engl. J. Med. 353: 382–391.

- LAVE, J. et al. 1998. Impact of a children's health insurance program on newly enrolled children. JAMA 279: 1820– 1825.
- SZILAGYI, P. et al. 2004. Improved access and quality of care after enrollment in the New York State Children's Health Insurance Program. Pediatrics 113: e395– 404.
- U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES.
 Congressionally Mandated Evaluation of the State Children's Health Insurance Program, Final Report to Congress. 2005.
- KASPER, J. et al. 2000. Gaining and losing health insurance: strengthening the evidence for effects on access to care and health outcomes. Med. Care Res. Rev. 57: 298– 318
- AYANIAN, J. et al. 2000. Unmet health needs of uninsured adults in the United States. JAMA 284: 2061– 2069.
- ADAMS, E. et al. 2007. Impact of the National Breast and Cervical Cancer Early Detection Program on mammography and pap test utilization among white, hispanic, and African American women: 1996–2000. Cancer 109(2 Suppl): 348–358.
- MARQUIS, M. & S. LONG. 2002. The role of public insurance and the public delivery system in improving birth outcomes for low-income pregnant women. Med. Care 40: 1048–1059.
- EGERTER, S. et al. 2002. Timing of insurance coverage and use of prenatal care among low-income women. Am. J. Public Health 92: 423–427.
- LONG, S. & M. MARQUIS. 1998. The effects of florida's medicaid eligibility expansion for pregnant women. Am. J. Public Health 88: 371–376.
- HOWELL, E. 2001. The Impact of the Medicaid expansions for pregnant women: a synthesis of the evidence. Med. Care Res. Rev. 58: 3–30.
- Kenney, G. et al. 2000. Gaps in Prevention and Treatment: Dental Care for Low-Income Children, New Federalism, Series B, Urban Institute.
- EDELSTEIN B. 2002. Disparities in oral health and access to care: findings of national surveys. Ambul. Pediatr. 2(2 Suppl): 141–147. Review.
- LEWIS, C. et al. 2007. Preventive dental care for children in the United States: a national perspective. Pediatrics 119: e544–553.
- STRUNK, B. & P. CUNNINGHAM. 2002. Treading Water: Americans' Access to Needed Medical Care, 1997–2001, Tracking Report No. 1, Center for Studying Health System Change.
- LOHR, K. et al. 1986. Effect of cost-sharing on use of medically effective and less effective care. Med. Care 24(9) Supplement.
- NEWACHECK, P. et al. 2000. The unmet health needs of america's children. Pediatrics 105: 989–997.
- STODDARD, J. et al. 1994. Health insurance status and ambulatory care for children. N. Engl. J. Med. 330: 1421–1425
- USA Today/Kaiser Family Foundation/Harvard http://www.kff.org/newsmedia/upload/7371.pdf. Health Care Costs Survey. 2005. School of Public Health.

- BAKER, D. et al. 2000. Health insurance and access to care for symptomatic conditions. Arch. Intern. Med. 160: 1269–1274.
- Almeida, R. et al. 2001. Access to care and use of health services by low-income women. Health Care Financ. Rev. 22: 27–47.
- HANSON, K. et al. 2003. Uncovering the health challenges facing people with disabilities: the role of health insurance. Health Aff. Web Exclusive W3: 552– 565
- SHI, L. & G. STEVENS. 2005. Vulnerability and unmet health care needs: the influence of multiple risk factors. J. Gen. Intern. Med. 20: 148–54.
- BRAVEMAN, P. et al. 1991. Differences in hospital resource allocation among sick newborns according to insurance coverage. JAMA 266: 3300–3308.
- HASS, J. & L. GOLDMAN. 1994. Acutely injured patients with trauma in Massachusetts: differences in care and mortality, by insurance status. Am. J. Public Health 84: 1605–1608.
- HADLEY, J. 2007. Insurance coverage, medical care use, and short-term health changes following an unintentional injury or the onset of a chronic condition. JAMA 297: 1073–1084.
- HWANG, W. et al. 2001. Out-of-pocket medical spending for care of chronic conditions. Health Aff. 20: 267–278.
- Calculated based on tabled data in Exhibit 1 in Hwang W et al., 2001.
- REED, M. & H. Tu. 2002. Triple Jeopardy: Low Income, Chronically Ill and Uninsured in America, Issue Brief 49, Center for Studying Health System Change.
- WENNEKER, M. et al. 1990. The association of payer with utilization of cardiac procedures in Massachusetts. JAMA 264: 1255–1260.
- CANTO, J. et al. 2000. Payer status and the utilization of hospital resources in acute myocardial infarction. Arch. Intern. Med. 160: 817–823.
- ANDERSEN, R. et al. 2000. Access of vulnerable groups to antiretroviral therapy among persons in care for hiv disease in the United States. Health Serv. Res. 35: 389– 416.
- BHATTACHARYA, K. et al. 2003. The link between public and private insurance and HIV-related mortality. J. Health Econ. 22: 1105–1122.
- BECKLES, G. et al. 1998. Population-based assessment of the level of care among adults with diabetes in the U.S. Diabetes Care 21: 1432–1438.
- THORPE, K. & D. HOWARD. 2003. Health insurance and spending among cancer patients. Health Aff. W3: 189– 198
- MAYER, M. et al. 2004. Unmet need for routine and specialty care: data from the national survey of children with special health care needs. Pediatrics 113: 109– 115.
- RABINOWITZ, J. et al. 1998. Relationship between type of insurance and care during the early course of psychosis. Am. J. Psychiatry 155: 1392–1397.
- SZILAGYI, P. et al. 2006. Improved asthma care after enrollment in the state children's Health Insurance Program in New York. Pediatrics 117: 486–496.

- ROETZHEIM, R. *et al.* 1999. Effects of health insurance and race on early detection of cancer. J. Natl. Cancer Inst. 91: 1409–1415.
- BAKER, D. et al. 2001. Lack of health insurance and decline in overall health in late middle age. N. Engl. J. Med. 345: 1106–1112.
- HOFFMAN, C. & D. GASKIN. Health Insurance Coverage and Preventable Hospitalizations in Ten States, unpublished.
- BINDMAN, A. et al. 1998. Preventable hospitalizations and access to health care. JAMA 274: 305–311.
- Moss, N. & K. Carver. 1998. The effect of WIC and Medicaid on infant mortality in the United States. Am. J. Public Health 88: 1354–1361.
- CURTIS, J. et al. 1997. Absence of health insurance is associated with decreased life expectancy in patients with cystic fibrosis. Am. J. Respir. Crit. Care Med. 155: 1921–1924.
- Ayanian, J. et al. 1993. The relation between health insurance coverage and clinical outcomes among women with breast cancer. N. Engl. J. Med. 329: 326–331.
- ROETZHEIM, R. *et al.* 2000. Effects of health insurance and race on colorectal cancer treatments and outcomes. Am. J. Public Health **90:** 1746–1754.
- FRANKS, P. et al. 1993. Health insurance and mortality. evidence from a national cohort. JAMA 270: 737–741.
- SORLIE, P. et al. 1994. Mortality in the uninsured compared with that in persons with public and private health insurance. Arch. Intern. Med. 154: 2409–2416.
- 67. KAISER COMMISSION ON MEDICAID AND THE UNINSURED. Medicaid: A Primer: 2007.
- RACINE, A. et al. 2001. Differential impact of recent medicaid expansions by race and ethnicity. Pediatrics 108: 1135–1142.
- Ku, L. 2005. Medicaid: Improving Health, Saving Lives, Center on Budget and Policy Priorities. http://www.cbpp.org/7-19-05health.pdf
- HOFFMAN, C. et al. 2001. Gaps in health coverage among working-age Americans and the consequences. J. Health Care Poor Underserved 12: 272–289.
- BURSTIN, H. et al. 1998–99. The effect of change of health insurance on access to Care. Inquiry 35: 389–397.
- SCHOEN, C. & C. DESROCHES. 2000. Uninsured and unstably insured: the importance of continuous insurance coverage. Health Serv. Res. 35: 187–206.
- 73. Olson et al. 2005.
- NEWACHECK et al. 1998. The role of Medicaid in ensuring children's access to care. JAMA 280: 1789–1793.
- WANG, H. et al. 2007. Effects of the State Children's Health Insurance Program on access to dental care and use of dental services. Health Serv. Res. 42: 1544–1563.
- LONG, S. et al. 2005. How well does Medicaid work in improving access to care? Health Serv. Res. 40: 39–58.
- SALGANICOFF, A. et al. 2005. Women and Health Care: A National Profile. Kaiser Family Foundation.
- ROWLAND, D. et al. 1999. The key to the door: Medicaid's role in improving health care for women and children. Annu. Rev. Public Health 20: 403–426.
- DUDERSTADT *et al.* 2006. The impact of public insurance expansions on children's access and use of care. Pediatrics 118: 1676–1682.

- Hughes, D. et al. 2005. Disparities in children's use of oral health services. Public Health Rep. 120: 455– 462.
- DUBAY, L. et al. 2001. Changes in prenatal care timing and low birth weight by race and socioeconomic status: implications for the Medicaid expansions for pregnant women. Health Serv. Res. 36: 373–398.
- SZILAGYI et al. 2007. Improved health care among children with special health care needs after enrollment into the State Children's Health Insurance Program. Ambul. Pediatr. 7: 10–17.
- Lurie, N. et al. 1984. Termination from Medi-Cal—does it affect health? N. Engl. J. Med. 311: 480–484.
- 84. Shen, Y. & J. McFeeters. 2006. Out-of-pocket health spending between low- and higher-income populations: who is at risk of having high expenses and high burdens? Med. Care 44: 200–209.

- GALBRAITH, A. et al. 2005. Out-of-pocket financial burden for low-income families with children: socioeconomic disparities and effects of insurance. Health Serv. Res. 40: 1722–1736.
- SKAGGS, D. et al. 2006. Access to orthoapedic care for children with medicaid versus private insurance: results of a national survey. J. Pediatr. Orthop. 26: 400–404.
- WANG, E. et al. 2004. Inequality of access to surgical specialty health care: why children with government-funded insurance have less access than those with private insurance in Southern California. Pediatrics 114: e584–590.
- COUGHLIN, T. et al. 2002. Health care access, use, and satisfaction among disabled medicaid beneficiaries. Health Care Financ. Rev. 24: 115–136.
- ZUCKERMAN, S. et al. 2004. Changes in Medicaid physician fees, 1998–2003: implications for physician participation. Health Aff. Suppl Web Exclusive W4: 374–384.