CARE WITHOUT COVERAGE:
TOO LITTLE, TOO LATE

In the United States, too many working-age people lack insurance coverage and when they do get necessary medical care, it is too little and too late. One national study found that, over a 17-year follow-up period, adults who lacked health insurance at the outset had a 25 percent greater chance of dying than did those who had private health insurance. Health insurance is a key that provides access to high quality health care and consequently to better health. It is not the only key that opens these doors nor is access to them guaranteed if one has coverage. But health insurance is the mechanism that most Americans rely upon to obtain the care that they want and need. The health benefits of insurance are strongest when coverage is continuous rather than sporadic.

This report, the second in a series issued by the Institute of Medicine (IOM) Committee on the Consequences of Uninsurance, summarizes the research evidence contrasting the health of insured and uninsured adults. The main findings are that working-age Americans without health insurance are more likely to:

- Receive too little medical care and receive it too late;
- Be sicker and die sooner;
- Receive poorer care when they are in the hospital even for acute situations like a motor vehicle crash.

The health and length of life of working-age Americans would improve if they obtained coverage. Like those who are now insured, the newly insured would use preventive services more often and would be less likely to delay seeking care, thus making early detection and treatment of problems more feasible. The best health outcomes are possible only if the uninsured obtain coverage before the onset of any illness or injury.
People without health insurance often go without appropriate care. For example, the uninsured more often
- Go without cancer screening tests, delaying diagnosis and leading to premature death;
- Do not receive care recommended for chronic diseases, like timely eye and foot exams to prevent blindness and amputations in persons with diabetes;
- Lack regular access to medications to manage conditions such as hypertension or HIV infection;
- Receive fewer diagnostic and treatment services after a traumatic injury or a heart attack, resulting in an increased risk of death even when in the hospital.

Assessing the Impact of Health Insurance on Health-Related Outcomes

The Committee reviewed 130 research studies that consider (1) health insurance status as an independent variable, and (2) its effect on health-related outcomes for adults ages 18 through 64. Studies focusing on older adults were excluded because virtually all have coverage through Medicare. The next Committee report will review the effects of coverage for children and pregnant women. For this report, “insured adults,” means those with general medical and hospitalization insurance while “uninsured adults” are without any health insurance.

Most of the evidence about the value of coverage comes from observational rather than experimental studies. Therefore, research studies adjust for variations among study subjects in types of health insurance coverage and characteristics of study participants. Three personal characteristics—health status, race and ethnic identity, and socioeconomic status—are closely related to both having health insurance and the source of coverage. The most informative studies separate the effects of these personal characteristics from those attributable to having coverage.
Effects of Health Insurance on Health

The quality and length of life are distinctly different for insured and uninsured populations. Even the most acutely ill or seriously injured adults, when uninsured, cannot always obtain needed care. Having health insurance will not just increase access in times of crisis but will also facilitate use of essential health screening services and chronic disease care.

Health insurance does not eliminate all racial and ethnic disparities in health. This is confirmed by this study as well as by the recent IOM report, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*. However, having insurance does facilitate access to preventive services, a regular source of care, and better quality care for minority populations.

Primary Prevention and Screening Services

Uninsured adults are less likely than insured adults to receive recommended health screening services (e.g., mammograms, clinical breast exams, Pap tests, colorectal screenings). And when they do receive these preventive services, it is not as often as recommended by the U.S. Preventive Services Task Force. The disparities in whether someone uses these vital services holds even after accounting for the possible influence of age, race, education or having a regular source of care.

Some health insurance plans cover preventive health care and others do not. If your plan covers preventive services, you are more likely to get them, particularly if the service is costly, like a mammogram. If your plan does not cover preventive services, you are still more likely to receive preventive services than anyone who is uninsured. Why? Most people with insurance have a regular medical provider who looks out for their health.

Cancer Care and Outcomes

Uninsured cancer patients generally have poorer outcomes and die sooner than persons with insurance. Without timely preventive screenings, diagnosis is delayed. As a result, when cancer is found, it is relatively advanced and more often fatal than it is in persons with health insurance coverage. For example, uninsured women with breast cancer have a 30 to 50 percent higher risk of dying than women with private health insurance. Furthermore, once diagnosed, treatment disparities persist. For example, uninsured women are less likely to receive breast-conserving surgery.

Chronic Disease Care and Outcomes

Uninsured adults are less likely to have regular checkups and a usual source of care to help manage their disease than is a person with coverage. For the five chronic conditions that the Committee examined (diabetes, cardiovascular disease, end-stage renal disease, HIV infection and mental illness), uninsured patients have worse clinical outcomes than insured patients.
Diabetes: Uninsured adults with diabetes are less likely than those insured to receive the professionally recommended standard of care for monitoring blood glucose levels and other complications. Uncontrolled blood glucose levels puts persons with diabetes at increased risk of hospitalization and additional complications (e.g., heart and kidney disease) and disability (e.g., amputations and blindness). It is hard to imagine, but 25 percent of persons with diabetes go without a checkup for two years if they have been without health insurance for a year or more.

Cardiovascular Disease: Despite the fact that having a usual source of care improves medical management, 19 percent of uninsured adults diagnosed with heart disease and 13 percent with hypertension lack this ongoing relationship. Their blood pressure and cholesterol levels are monitored less frequently, and they are less likely to begin or stay on drug therapy than insured adults. These deficits in care place the uninsured at further risk of deteriorating health. For example, studies in emergency departments show that patients admitted with severe uncontrolled hypertension are disproportionately uninsured.

End-Stage Renal Disease (ESRD): The clinical goals for treatment of kidney disease are to slow the progression of renal failure, and prevent or manage complications and co-existing diseases (e.g., heart disease). Uninsured patients have more severe renal failure when they begin dialysis, and their health is often already compromised because they did not receive treatment for anemia before initiating dialysis. Virtually all ESRD patients qualify for Medicare once dialysis or transplantation becomes necessary. What is the effect of obtaining this insurance?
Differences in the care received by women and men and by members of different racial and ethnic groups (for example, hospital-based treatments for heart disease) among patients with kidney disease are essentially eliminated.

**Human Immunodeficiency Virus (HIV) Infection:** One positive effect of health insurance for HIV-infected adults is obtaining a regular source of care. Without health insurance, many wait more than three months after diagnosis to have their first office visit. The uninsured wait an average of four months longer than privately insured patients to receive newer drug therapies. Once started on medications, the uninsured are less able to maintain the necessary but costly and complicated drug regimen. Having health insurance appears to reduce mortality in HIV-infected adults by 71-85 percent over a 6-month period. The greatest reductions in mortality were found more recently when effective drug therapies came into widespread use.

**Mental Illness:** Mental illness represents a major but often underestimated source of disability. It contributes as much to disability as does cancer or heart disease. As is the case with other diseases, the uninsured are less likely than those with coverage to receive the desirable level of mental health care.

Without specific coverage for mental health visits, patients diagnosed with depression, panic disorder, or generalized anxiety disorder are less likely to receive mental health services. Having general health insurance, even without mental health benefits, increases the likelihood of receiving some care and that the care meets professional practice guidelines.

Severe mental illnesses (schizophrenia, other psychoses and bipolar depression) require the attention of specialty mental health professionals and perhaps more extensive services (e.g., inpatient services, partial or day hospitalization). Persons with a severe mental illness face difficulties in obtaining and then keeping insurance after diagnosis. They also experience delays in obtaining specialty mental health services and receive less appropriate care until they qualify for public insurance coverage (Medicare or Medicaid). Notably, those with public insurance are more likely to receive specialty services than are severely ill persons with private insurance, which may have more restrictive benefits.

**Hospital-based Care**

The poorer health status of uninsured adults at the time of hospitalization is compounded by experiences as inpatients. They receive fewer needed services, worse quality care, and have a greater risk of dying in the hospital or shortly after discharge. For example, uninsured patients are less likely to receive an endoscopy and, when they finally do receive it, the pathology is more likely to be abnormal. Because the uninsured are more likely to delay seeking care, their risks of poor outcomes are greater (e.g., rupture in acute appendicitis).

**Traumatic injuries:** Surprisingly, provider response to traumatic injury can be influenced by insurance status. Uninsured trauma victims are less likely to be admitted to a hospital, receive fewer services when admitted, and are more likely to die than are insured trauma victims. One statewide study showed that while un-

One statewide study of auto crash victims determined that the uninsured had a 37 percent higher death rate than the privately insured.
Uninsured adults with a heart attack have a greater chance of dying in the hospital or shortly after release than those who have private insurance.

Acute Cardiovascular Disease: Uninsured patients with acute cardiovascular disease are:
- less likely to receive angiography or revascularization procedures,
- less likely to be admitted to a hospital that performs these diagnostic and treatment procedures, and
- more likely to die in the short term.

Health insurance not only improves access, but it also lessens disparities in cardiovascular procedures between men and women and among racial and ethnic groups.

General Health Outcomes

What happens to adults’ health when they remain uninsured? It depends on a person’s age, underlying health, and the length of time uninsured. Adults in late middle age (especially between 55 and 65 years of age) and adults with low incomes are particularly susceptible to deteriorating health if they never had or lose health insurance coverage.

Relatively short (1-4 year) longitudinal studies document decreases in general health for adults who are uninsured or lose coverage. Changes may include worsening control of blood pressure, decreased ability to walk or climb stairs, reduced overall self-perceived wellness and ability to perform daily activities.

Longer population-based studies (over 5 to 17 years) show that adults under age 65 who were uninsured at the beginning of the study face a 25 percent higher risk of dying than those with private coverage. This pattern is found when comparing deaths of uninsured and insured patients from heart attack, cancer, traumatic injury, and HIV infection.

The Difference Coverage Could Make to the Health of Uninsured Adults

Health insurance enhances access to appropriate care for a range of preventive, chronic and acute care services. Based on the substantial consistency of the more than one hundred research studies reviewed and evaluated, the Committee reached the following conclusions:

CONCLUSIONS

- Health insurance is associated with better health outcomes for adults and with their receipt of appropriate care across a range of preventive, chronic and acute care services. Adults without health insurance coverage experience greater declines in health status and die sooner than do adults with continuous coverage.
- Adults with chronic conditions and those in late middle age stand to benefit the most from health insurance coverage in terms of improved health outcomes because of their generally greater need for health care.

CONTINUED
CONCLUSIONS (continued)

• Racial and ethnic minorities and lower-income adults would particularly benefit from increased health insurance coverage because they more often lack stable health insurance coverage and have worse health status. Increased coverage would likely reduce some of the racial and ethnic disparities in use of appropriate health care services and may also reduce disparities in morbidity and mortality.
• Health insurance that ensures adequate provider participation and that includes preventive and screening services, outpatient prescription drugs and specialty mental health care is more likely to facilitate the receipt of appropriate care.
• Broad-based health insurance strategies across the entire uninsured population would be more likely to produce these benefits than would “rescue” programs aimed only at those who are already seriously ill.

What difference would health insurance make if the uninsured were provided with coverage? First, they would be likely to use more services like timely preventive care and chronic disease care that match professional guidelines. They would also be more likely to have a regular source of care. Most importantly, if adults were insured on a continuous basis, their health would be expected to be better and their risk of dying prematurely reduced.

The survival benefits derived from insurance coverage, however, can be achieved in full only when health insurance is acquired well before the development of advanced disease. For example, insuring women once cancer is diagnosed will not solve the problem of later diagnosis and higher mortality among uninsured women with breast cancer.

Finally, the evidence presented only accounts for some of the advantages that health insurance provides. Financial security and stability, peace of mind, alleviation of pain and suffering, improved physical function, disabilities avoided or delayed, and gains in life expectancy constitute an array of health insurance benefits that accrue to members of our society with health insurance. For many of the 30 million uninsured adults and another 9 million children in America, these benefits remain elusive.

For More Information…

Visit the Committee’s website at www.iom.edu/uninsured.

Copies of Care Without Coverage: Too Little, Too Late are available for sale from the National Academy Press; call (800) 624-6242 or (202) 334-3313 (in the Washington metropolitan area), or visit the NAP home page at www.nap.edu.

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