

Reducing Health Disparities among Children

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SUMMARY

The ultimate goal of providing public health insurance is to improve the health of low-income children. Yet, acknowledging the limitations of health insurance is important because children's health is shaped by a variety of factors, many of which cannot be influenced by increased access to health care. Health status is also affected by race, language, culture, geography, and socioeconomic class.

This article summarizes current research about what health insurance can and cannot do in three areas: providing access to health care, reducing stress and worry for parents, and improving children's health status. This review reveals several important themes, including:

- ▶ A strong link between health insurance and access to care.
- ▶ Evidence that health insurance reduces parental stress—both financial and emotional.

- ▶ Mixed and inconclusive evidence about the link between health insurance and improved health status.

The authors discuss some of the barriers to improving the health status of low-income children beyond increasing access to health care. They emphasize that ultimately, the underlying social inequities that lead to disparities in health status based on race, income, and education should be addressed.

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Over the past 15 years, federal and state initiatives have significantly expanded health insurance for low-income children, with the goal of increasing their access to care and, ultimately, improving their health status. Yet, low-income children still lag behind their more affluent peers in health and well-being. Socioeconomic level, which is typically expressed in terms of parental income, education, and occupation, is a strong and consistent predictor of health status. Children lower in the socioeconomic hierarchy suffer disproportionately from almost every disease and show higher rates of mortality compared with those in families that are better off.¹⁻³

During the 1980s and early 1990s, Congress greatly expanded the Medicaid program so that today, virtually all poor children are eligible for Medicaid coverage. (See the article by Mann, Rowland, and Garfield in this journal issue.) Complementing Medicaid, in 1997 Congress created the State Children’s Health Insurance Program (SCHIP) for children in families with incomes too high to qualify for Medicaid, but who still cannot afford private insurance. SCHIP serves fewer children, but is an important source of coverage for those who would otherwise lack it. In addition, a small number of private-sector insurance efforts over the past two decades have sought to extend subsidized coverage to otherwise uninsured children.⁴

The expansion of health insurance eligibility is an important and necessary step in the effort to improve the health status of low-income children—but it is only one of many needed steps. As a result, despite expanded insurance coverage, achieving measurable improvements in the health status of low-income children has proven elusive. To explain the complex social and policy environment that shapes children’s health, this article discusses key factors besides health insurance that influence children’s health. This article examines how health insurance can and cannot affect these factors—and, consequently, what insurance can do to improve children’s health status—and why health insurance expansions are necessary, but not sufficient, to reduce health disparities between high- and low-income children.

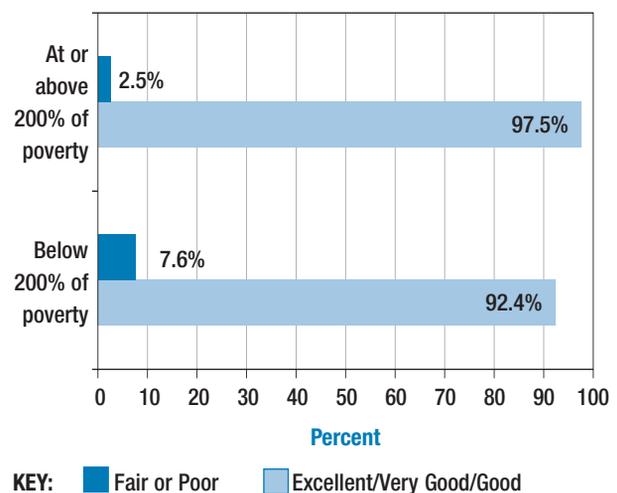
Major Influences on Children’s Health

Children’s health status, like that of adults, is influenced by many factors in addition to health care, including socioeconomic, biological and genetic, environmental, sociocultural, and behavioral factors.⁵ Together, these influences protect children or contribute to poor health or disease.

The primary role of health care (and by extension, health insurance as a means of gaining access to needed care) in influencing children’s health status is to prevent and mitigate health problems. Specifically, health care educates families about prevention measures, screens and detects problems as they emerge, and treats those conditions. As important as health care and health insurance are, however, neither influences children’s health status as strongly as does socioeconomic status.

Data from the National Survey of America’s Families confirm the relationship between parents’ income and education and children’s health.⁶ In 1999, children from low-income families (with incomes below 200%

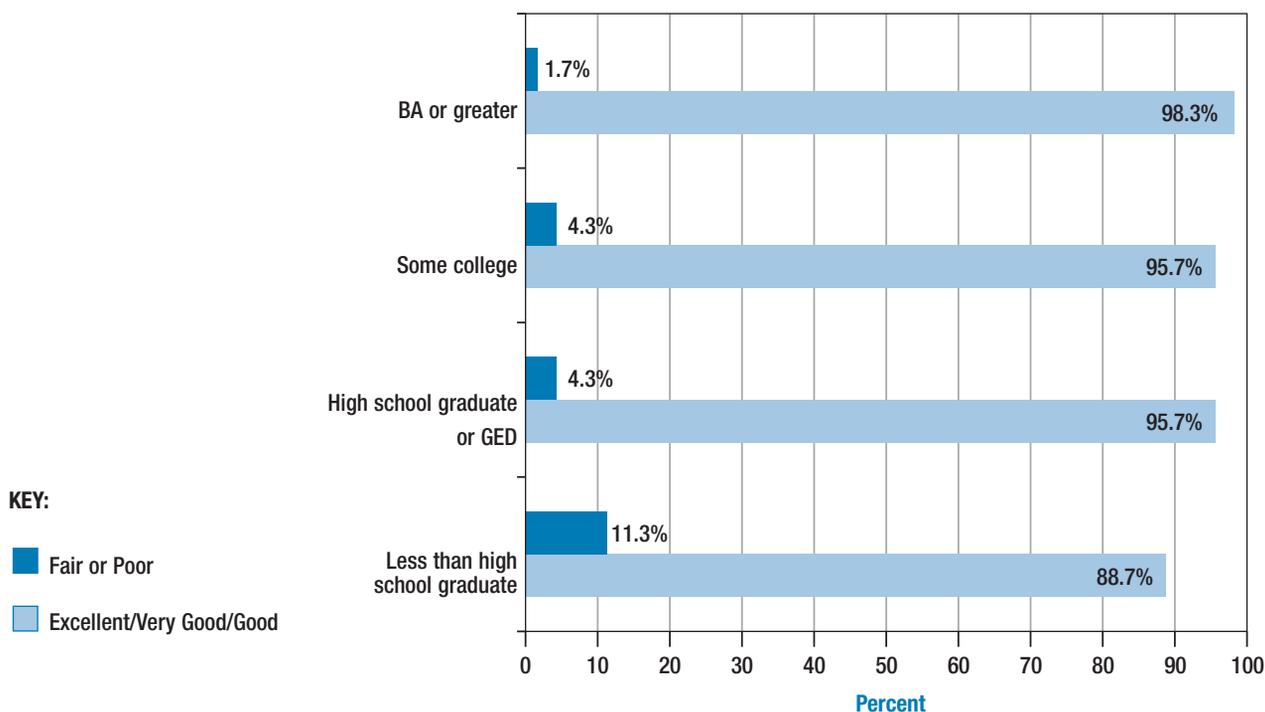
Figure 1
Self-Reported Health Status of Children by Income, 1999



Source: Urban Institute, National Survey of America’s Families.

Figure 2

Self-Reported Health Status of Children by Parental Education Level,^a 1999



^aFor adult most knowledgeable about child's health status.

Source: Urban Institute, National Survey of America's Families.

of the federal poverty level) and children whose parents had less than a high school education were far more likely to be in fair or poor health compared with other children. (See Figures 1 and 2.)

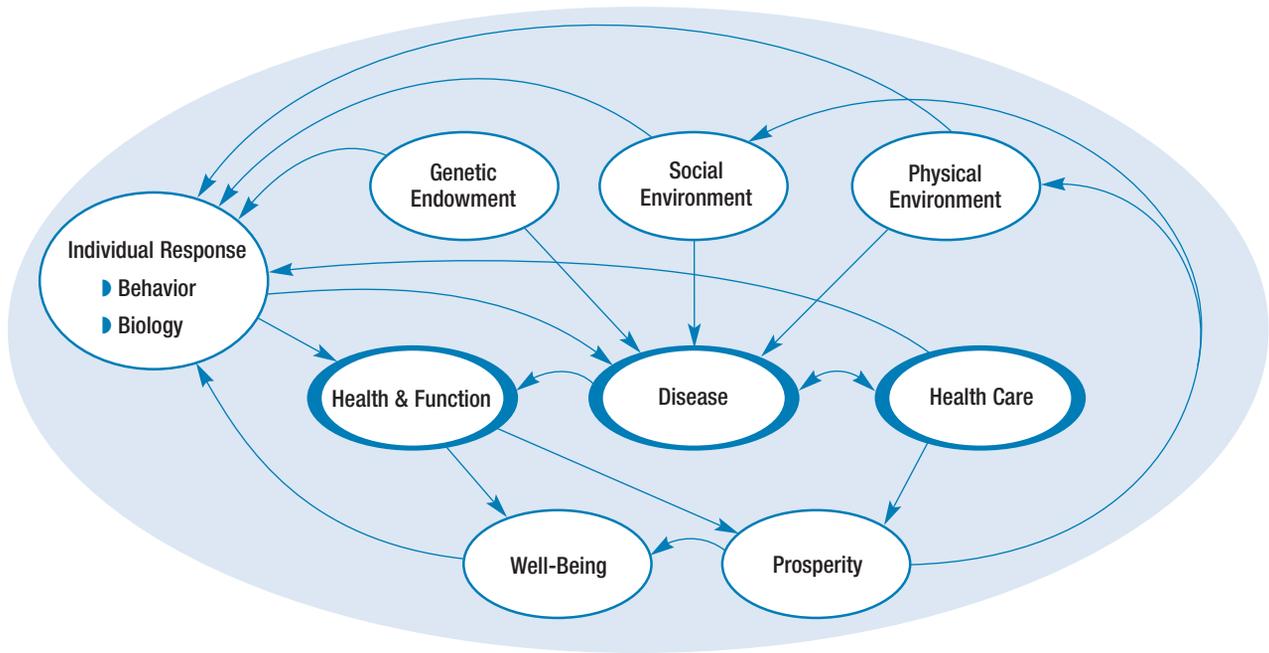
Low-income children have higher rates of mortality (even with the same condition),^{7,8} have higher rates of disability,^{9,10} and are more likely to have multiple conditions.¹¹ In addition, when low-income children have health problems, they tend to suffer more severely.¹² Children whose parents have lower education levels and lower-paid occupations also tend to have worse health than their more economically advantaged peers.¹³⁻¹⁵ Similarly, numerous studies have documented racial and ethnic disparities in health care and health.¹⁶ Even when controlling for income and insurance coverage, racial

and ethnic minority children fare worse than white children with respect to such indicators of access to care as presence of a usual source of care, number of physician contacts, and frequency of unmet health needs.¹⁷

Policies that promote improved access to health care for low-income and minority children address only one of a set of complex factors that influence children's health and well-being. Genetic, environmental, and behavioral factors also play an important role. Health system models that reflect these other factors began to emerge in the 1970s.¹⁸ One frequently cited analysis of these models, published in 1990, builds a comprehensive framework placing health care within the context of all these other factors (see Figure 3). As noted in this analysis, while the relative contributions of these

Figure 3

A Comprehensive Framework of Factors Affecting Health and Well-Being



Source: Evans, R.G., and Stoddard, G.L. Producing health, consuming health care. *Social Science Medicine* (1990) 31(12):1359, figure 5 (with permission from Elsevier Science).

numerous risk factors vary by health condition and by individual, they typically work in combination.

Reflecting the broad array of factors that influence health, in September 1990, the U.S. Department of Health and Human Services launched a comprehensive initiative to improve the health of Americans called Healthy People 2000.¹⁹ Among its 22 priority areas, the initiative included objectives to improve physical activity and fitness, nutrition, and environmental health, as well as the quality of health care services. The second generation of this initiative, Healthy People 2010, launched in January 2000, builds on these objectives and articulates two overarching goals: to increase quality and years of healthy life, and to eliminate health disparities.²⁰ These comprehensive initia-

tives recognize that improving health care, while important, is not enough to improve the health and well-being of a population.

The Role of Health Insurance

Health insurance is a vital link to health services in this country, but it has limitations which are important to acknowledge and understand. This section details current understanding about what health insurance can and cannot do in three areas: providing access to health care, reducing stress and worry for parents, and improving children’s health status.

Providing Access to Care

Children’s health insurance status helps to predict whether they receive needed health care, and provides

a critical means for identifying and addressing their health problems early in life. Studies consistently demonstrate that children who are covered by health insurance are more likely than their uninsured counterparts to have better access to care, whether measured by number of physician visits, office-based visits, or hospital-based visits, whether a child “enters” the health care system by using health services, or whether a child has a regular source of health care.²¹⁻²³

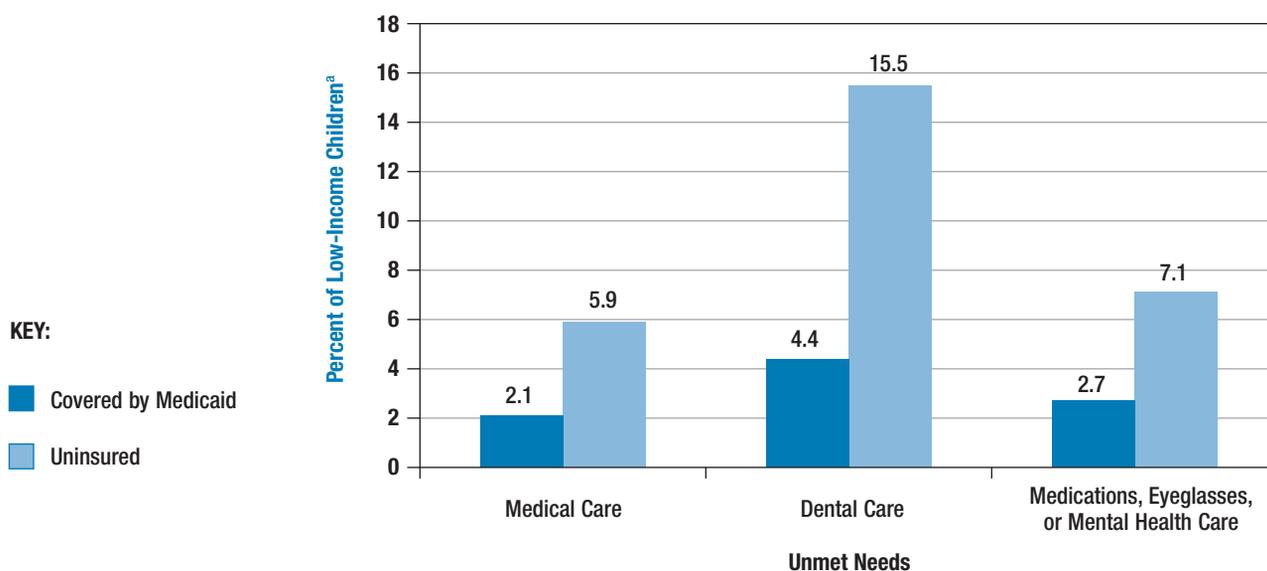
For example, numerous studies demonstrate, specifically among low-income children, that Medicaid coverage is associated with greater access to care relative to being uninsured,²⁴⁻²⁷ and early evidence suggests that SCHIP and its antecedents may produce similar results.^{28,29} One study found that, compared to poor children without health insurance, poor children with Medicaid coverage experienced far better access to health care across a vari-

ety of dimensions, including presence of a usual source of care (95.6% versus 73.8%) and use of medical services such as one or more physician contacts in the past year (83.9% versus 60.7%).³⁰ Another recent study found that uninsured children were 8.8 percentage points more likely than those with Medicaid coverage to have no usual source of health care or to rely on the emergency room for routine care.³¹ Also, children with Medicaid coverage generally use more preventive services than their uninsured peers do, and are less likely to have unmet needs for care (see Figure 4). Not all studies have found strong effects in this area,³²⁻³⁵ but one study found that a full year of Medicaid was associated with increases in a child’s chances of having any well-child visit by 17%.³⁶⁻³⁸

By improving access to health care, insurance provides a critical means for identifying and addressing health

Figure 4

Unmet Needs for Care among Low-Income Children Covered by Medicaid versus Uninsured



^aLow-income children are those in families with incomes below the federal poverty level.

Source: Newacheck, P.W., Pearl, M., and Hughes, D.C. The role of Medicaid in ensuring children’s access to care. *Journal of the American Medical Association* (1998) 280(20):1789-93.



problems in children.³⁹ Children grow and develop rapidly, placing them at special risk of illness and injury. If health problems are not identified and treated, they can affect children's cognitive, physical, behavioral, and emotional development. To prevent or minimize the impact of poor health on overall growth and development, early and frequent monitoring is necessary. Children with undetected and inadequately treated childhood health problems may face the consequences in childhood and later in life. For this reason alone, extending health insurance coverage to improve children's access to health care should be an important public policy goal.

Reducing Parents' Worries

When parents can obtain health insurance for their children, it not only can provide access to care, it also can reduce parents' worries—both financial and nonfinancial—about being uninsured. For example, one study

found a significant reduction in parents' restriction of their children's activities due to health-related conditions or concerns after children were insured.⁴⁰ In another study of newly enrolled children, 73.5% of the parents reported having been worried, scared, and stressed when their child was uninsured.⁴¹ Over one-third of the parents (36.2%) said that lack of insurance created financial difficulties for the family. Another recent study examined the experiences of children enrolled in SCHIP programs in seven states, and found that the majority of parents (83%) rate the programs as "excellent" or "very good."⁴² More than half indicated that they liked the affordability of the program best of all. Therefore, extending insurance to uninsured children has the advantage of relieving parents of the stress and worry that can result from trying to get needed services at an affordable rate. The security provided by health insurance is especially important to parents of the

15% to 18% of children with special health care needs. (See the article by Szilagyi in this journal issue.)

Improving Health Status

The extent to which the Medicaid and SCHIP expansions have improved the health status of low-income children has not been well documented by empirical research. In fact, the available evidence offers somewhat conflicting and inconclusive results. One method for studying the impact of these programs on health is to compare population statistics before and after the Medicaid and SCHIP expansions. These comparisons could potentially reveal evidence of improved health status; however, little such evidence has been found.

For example, one study examined the health status of poor children ages 1 to 12, comparing changes for white, black, and Hispanic children between 1989 and 1995, when an additional 7 million poor and near-poor children were made eligible for Medicaid. Although the number of children with health insurance coverage increased, their health status—measured by parental report of the child’s health status and activity in the previous two weeks—did not change.⁴³ Another study that examined individual-level data from the National Health Interview Survey and state-level aggregate vital statistics of child mortality found that Medicaid eligibility reduced child mortality, but had either no effect or a negative effect on mothers’ assessments of their children’s health status.⁴⁴

Still another study examined changes in hospitalizations among children ages two to six living in poor residential areas relative to children living in nonpoor areas before and after major Medicaid expansions between 1988 and 1992.⁴⁵ The study focused on hospitalizations for ambulatory sensitive conditions (which are health conditions shown to be responsive to access to primary care) that can be prevented or mitigated through primary health care, such as asthma or dehydration. Findings suggested that Medicaid expansions had a positive impact on young, poor children; however, overall, the results of this study were also mixed.

Additional studies have examined the effects on children’s health of enrolling in non-Medicaid state health insurance programs. For example, one study found that 25% of parents reported improvements in their child’s

health as a result of enrolling in a state program targeting uninsured, low-income children not eligible for Medicaid.⁴⁶ Another study compared the health status of children 12 months after enrolling in New York’s CHPlus (a program for low-income children who were ineligible for Medicaid) to the health status of a comparable group of children newly enrolled in the program. Results indicated that enrollment did lead to health improvements. For example, parents of 55% of children with asthma reported health improvements as a result of office visits and medications received in the year following enrollment in the program.⁴⁷

Beyond studying the differences resulting from health insurance expansions, another approach is to examine whether the cost of insurance contributes to differential health status among children. For example, the Rand Health Insurance Experiment used a randomized, controlled trial to examine the effects of cost sharing on use of health services, quality of care, and health. Insured families faced varying degrees of cost sharing, while uninsured families faced full cost sharing. This study found no significant difference in parents’ perceptions of their child’s health or in physiologic measures of health between children enrolled in free health insurance plans and those whose parents had varying degrees of responsibility for paying for their child’s care.⁴⁸ While this study did not look precisely at the relationship between children’s health status and insurance coverage, the findings suggest that insurance and co-payments did not play a significant role in influencing health status among the population studied.⁴⁹

In sum, evidence indicates that children’s health insurance can provide better access to care and can reduce parents’ worries about being uninsured, but whether it can produce health benefits is inconclusive. Although some studies suggest that there might be select benefits for certain groups and individuals, overall, results are mixed and somewhat weak. A number of factors help explain this lack of a strong association between insurance and health status, as explored further below.

Explaining the Weak Link between Health Insurance and Health Status

Despite long-term, major investments in public health insurance, the health status of low-income children continues to lag behind that of more affluent children.

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Difficulties measuring health status no doubt contribute to the lack of evidence of improved health. At the same time, it is unclear how much improvement may be occurring that simply is not being accurately measured. Beyond the availability of insurance, there are several barriers to improvements in the health status of low-income children, including underenrollment in public programs; inability to mitigate the health effects of low socioeconomic status; noninsurance barriers to health care; and difficulties children face in obtaining appropriate health care, even when some health care is available. To achieve improvements in children's health, these barriers also must be recognized and addressed.

Difficulties Measuring Changes in Children's Health Status

Because children do not have as many health problems as adults do, detecting differences in children's health status is difficult. Compounding the problem is a lack of good methods for measuring children's health status. Health status is typically measured through parental reports (surveys), physical examinations of the child, or reviews of databases such as vital statistics. Each of these options has advantages and disadvantages.

For instance, while relatively easy to collect, self-reports, particularly parental reports of their child's health, are highly subjective and may be too broad to capture improvements or deterioration in status.⁵⁰ Clinical examinations are prohibitively expensive on the scale necessary to generate population or even subpopulation estimates. Analyses of inventories and databases such as vital statistics, while more objective than parental reports and less expensive than clinical examination, are complicated by a lack of agreement about what defines "health" and "normal functioning" of children, and of key information on insurance status and income.

Recent efforts to assess the impact of Medicaid expansions on children's health status illustrate these measurement problems. One study used child mortality, an objective measure, to assess the impact.⁵¹ But the rari-

ty of childhood mortality makes it a poor variable for tracking children's health. Moreover, the majority of deaths among children ages 1 to 14 are due to causes that medical care cannot prevent, such as unintentional injuries, congenital anomalies, birth defects, and homicide.⁵² Therefore, the usefulness of this indicator of children's health is questionable.

In the study of changes in hospitalizations mentioned earlier, objective measures of ambulatory-sensitive conditions were used to assess the impact of Medicaid expansions on children's health status, a more precise measure than childhood deaths.⁵³ However, measurement error may have been introduced because of the collection method. Specifically, the authors imputed eligibility status for Medicaid because their data source did not include information about the child's family income, a technique that may have led to misclassifications.

The difficulty of assessing children's health status contributes to the lack of evidence linking expansions of public health insurance to improved outcomes for children. Better measurement systems are needed to clearly demonstrate success. At the same time, better strategies are also needed to address several key barriers to improving the health status of low-income children beyond the lack of insurance.

Underenrollment of Eligible Children

A key contributing factor to the slow progress in improving children's health status is underenrollment in public programs. Despite the availability of Medicaid and SCHIP, not all eligible children are enrolled. In fact, a high proportion of eligible children are not enrolled. For example, more than three-quarters of uninsured children are eligible for public coverage.⁵⁴ The article by Cohen Ross and Hill in this journal issue explains various reasons parents do not enroll their children in public health insurance programs, such as burdensome application processes and confusion about eligibility.⁵⁵⁻⁵⁷ Whatever the reasons, neither improvements in access to health care nor health status can be expected to result from insurance expansions if children are not enrolling in available programs.

Inability to Mitigate Socioeconomic Status

Another reason health insurance expansions may not have strong effects on the health status of low-income children is that low-income families experience many increased risk factors for poor health beyond the lack of insurance. Poverty is strongly associated with multiple risk factors for poor health, including reduced access to health care, poor nutrition, inadequate housing, and greater exposure to environmental threats.⁵⁸⁻⁶¹ (See Figure 3.) Among adults, low socioeconomic status is also strongly linked to risky individual behaviors such as smoking, eating a high-fat diet, lack of exercise, and substance abuse—behaviors that clearly affect health status.⁶²⁻⁶⁴ Children are less likely than adults to engage in risky behaviors themselves, regardless of socioeconomic status. Nonetheless, living in homes with parents who engage in these behaviors can influence a child's health, either directly (as with smoking), or indirectly, through correlations with other household characteristics associated with greater risk to children's health, such as lack of parental education or large family size.⁶⁵

Noninsurance Barriers to Health Care

Parents and guardians of children face a number of barriers to health care that no- or low-cost health insurance cannot remedy. These “noninsurance” barriers include both personal and family factors, and structural factors related to the organization of the health care delivery system.⁶⁶ While Medicaid may improve access to care for poor children who are otherwise uninsured, it does not ensure their access to the same locations and providers of care, nor the same continuity of care that more affluent children receive. For example, poor children with Medicaid are less likely than nonpoor children (regardless of insurance status) to receive routine care in physicians' offices, and are more likely to lack continuity of providers between routine and sick care.⁶⁷

Personal and Family Barriers to Care

Personal or family factors can pose significant barriers to health care. Parents' knowledge about the importance of health services, their cultural attitudes and beliefs, and competing demands for their time and resources can all influence decisions about whether and when to seek care. While such barriers can be especially acute for immigrants and refugees, personal or family factors that influence health care utilization are found among all populations.^{68,69}

For example, parents' knowledge, attitudes, and beliefs about health and well-being can influence their views about what is acceptable in terms of health status and whether or not to seek health care for their children.⁷⁰ If parents are unaware of the need for routine check-ups, believe that health services such as immunizations are detrimental, or lack the experience to discern that their child requires medical attention, the presence or absence of insurance becomes relatively unimportant.

Even if provided with low- or no-cost insurance, low-income parents may face difficult tradeoffs in seeking care versus meeting other family needs. For example, many parents would perceive the need to adequately feed, clothe, and house their families as more immediately important than health care.⁷¹ Some scholars argue that the relationship between socioeconomic status and disparities in health status can be explained in terms of demands and resources.⁷² Families with lower socioeconomic status face more pressures and problems, such as environmental and occupational exposure to toxins, job-related strains, and stress caused by poverty, but have fewer resources—including money, access to medical care, social supports, and personal coping mechanisms—to meet them.

Immigrants and refugees face particular noninsurance barriers to care (see the article by Lessard and Ku in this journal issue), especially linguistic incompatibility with health care providers and staff and lack of bilingual or multilingual staff, translated materials, and interpreter services.^{73,74} Immigrants also cite cultural differences between them and Western health practitioners as a barrier to utilization.⁷⁵ A 1992 study of Southeast Asian refugees illustrates the significance of these barriers.⁷⁶ Despite a high prevalence of health problems, a number of factors prevented the refugees from seeking care, including beliefs that suffering is an unavoidable part of life, a distrust of Western medicine, and unfamiliarity with Western methods.

For some immigrants, concerns about potential negative ramifications for their immigration status from participating in public programs like Medicaid and SCHIP prevent them from enrolling their children in available programs, and thus from obtaining needed health care. Although the Immigration and Naturalization Service clarified in 1999 that the use of these health services by



an immigrant or family member is not a “public charge” and will not affect immigration status, this information has not reached all eligible families.^{77–79}

Structural Barriers to Care

The organization of health services also can affect parents’ ability to obtain care, even when the child has health insurance. For example, the physical availability of providers is an important structural barrier, affecting travel time to the service location, the times appointments are available, and the time parents must wait to see the doctor.⁸⁰ The organization of services at the service-delivery level (for example, procedures for making appointments and the availability of after-hours services), and at the health-plan level (for example, rules regarding self-referral to specialists, co-payment levels, and the scope of benefits), also influences use of care.⁸¹

In addition, the type of insurance that a child has (public versus private) can create or eliminate barriers to care. While

Medicaid coverage improves children’s access to and utilization of care, it does not always provide children with the same access as privately insured children have. Studies show that Medicaid reimbursement levels, which historically have lagged far behind private payment levels, affect the availability of physicians to Medicaid patients,⁸² whether a child has a physician’s office or a clinic as a usual source of care, and the volume of preventive services received.⁸³ At the same time, private coverage for low-income children is not necessarily better. In fact, children with private insurance may face greater barriers to health care than low-income children covered by Medicaid, given deductibles, co-payments, and less favorable benefit structures.⁸⁴

Difficulties Obtaining Appropriate Care

Even when children obtain access to health care, that care is not always appropriate, regardless of insurance coverage. Health insurance has been shown to improve access to health care, and to a regular source of care, but not necessarily to a regular source of primary

care.⁸⁵ Yet, access to care appears to be most beneficial when it includes primary health care.⁸⁶

Primary care is the entry point into the health care system and facilitates continuing care for most health problems.⁸⁷ One of the major benefits of primary care includes establishing a long-term relationship with a particular provider, which leads to better compliance with appointments, better achievement of preventive care goals, and fewer hospitalizations and costs. Another advantage of primary care is patients' ability to obtain health care easily when they need it.

Considerable evidence supports the importance of a regular source of health care, particularly primary care. Having a regular source of care is associated with timely immunizations, preventive care,⁸⁸ and other needed health care,⁸⁹ as well as satisfaction with that care.⁹⁰

Despite its importance, the primary care infrastructure in the United States—that is, the system- and practice-related features required to deliver primary care—is relatively undeveloped compared with most other industrialized countries.^{91,92} Research examining health outcomes and health care costs among 13 industrialized countries scored the countries in terms of the various health system characteristics that reflect strength of primary care orientation.^{93,94} The study found that countries with the weakest primary care infrastructures have poorer performance on health status indicators. Overall, the United States ranked 12th among the 13 countries (second from the bottom) on average for 16 health indicators. Furthermore, children in the United States, according to this study, fared particularly poorly. That is, the health disadvantages of this country's underdeveloped primary care system particularly affect children, especially younger children. Failure to substantially improve the health status of U.S. children despite health insurance expansions, therefore, is potentially related to the inadequacy of the primary care system and the inability of insured children to obtain appropriate health care.

In sum, a variety of factors—including measurement issues, underenrollment in programs, poverty's association with multiple other risk factors, family attitudes and beliefs, and health system characteristics—help to explain why the availability of health insurance for low-

income children has not had a more significant impact on reducing socioeconomic disparities in children's health status. Overall, access to health care appears to account for relatively little of the association between health and socioeconomic status. The relationship between poverty and poor health is as strong in countries like England, which has universal access to health care, as it is in the United States.⁹⁵ Thus, while extending health insurance and removing barriers to care for low-income children is a worthy and essential goal, the extent to which health care alone can reduce socioeconomic disparities in children's health appears to be inherently limited.

Conclusion

Great strides have been made over the past few decades to extend health insurance to low-income children. Policymakers, clinicians, and advocates have sought to extend coverage in order to increase low-income children's access to health care and, ultimately, to improve their health status. Clearly, insurance can provide children the means to obtain needed health care and reassure parents that insurance is available to help them cover health care costs. At the same time, however, health insurance alone cannot reduce the health disparities between high- and low-income children. Differential access to medical care is just one of many factors that account for the disparities in health status between more affluent and low-income children.

Therefore, beyond expanding health insurance coverage for children, further steps will be needed. For example, further work is needed to develop credible and reliable methods of measuring children's health status for use in studies of the relationship between access to care and health status. In addition, nonfinancial barriers to health care that are amenable to policy must be addressed for Medicaid and SCHIP coverage to translate into improved access and greater utilization. These barriers include linguistic incompatibility between patient and doctor, inconvenient location and hours of service, and miscommunication about health care use and immigration status. Also, greater emphasis must be placed on ensuring children's access to primary care through better financing of primary care, greater focus on primary care in medical training, and

other reforms that would strengthen the primary care infrastructure in this country.

Ultimately, however, addressing the socioeconomic gap in children's health will require addressing the underlying inequalities that divide Americans. Otherwise, differences in financial resources will continue to produce differences in nutrition, housing, and coping resources, as well as differences in educational and work opportunities—all factors that have significant effects on children's health. While the goal of greater equality is seemingly utopian, studies show that in

developed countries, average life expectancy is correlated with income distribution. The more egalitarian the distribution, the higher the life expectancy.⁹⁶ The United States is among the least egalitarian developed countries in income distribution. Achieving true progress will require health professionals and policymakers to join with colleagues in education, work, nutrition, and other related fields to reduce the economic and opportunity inequalities that give rise to the disparities in children's health status, and to develop a more comprehensive policy addressing the full range of factors that affect children's health.

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