



The Safety Net Assessment Project: Factors Influencing Access to Health Care for Low-Income People

Identifying the factors that can improve access for uninsured patients and other vulnerable populations

SUMMARY

Researchers with the Safety Net Assessment Project (SNAP), a collaborative research project, examined how individual- and community-level factors influence access to health care for low-income residents, defined as those who reported a household income less than or equal to 250 percent of the federal poverty level, and why their access varies in different metropolitan regions of the United States.

The researchers were affiliated with [New York University, Robert F. Wagner Graduate School of Public Service](#), the [UCLA Center for Health Policy Research](#) and [Rutgers Center for State Health Policy](#), under a subcontract from UCLA.

Key Findings

In a spring 2004 article, "Effects of Community Factors on Access to Ambulatory Care for Lower-Income Adults in Large Urban Communities," in the journal *Inquiry*, available [online](#), the researchers reported the following key findings:

- Several individual-level factors contributed to differences in access among residents of 54 metropolitan areas, including:
 - Insured and uninsured people were half as likely to have a usual source of care if they had immigrated in the last five years compared with those living in the United States longer.
 - Lower-income insured and uninsured residents who did not graduate from high school had a lower probability of visiting a physician than did those with a secondary education.
 - Uninsured residents with a usual source of care were two-and-a-half times more likely to visit a physician in the previous year, whereas insured residents with a usual source of care were three times more likely to do so.

- Several community-level factors influenced access for low-income residents, but, in many cases, they did so differently for insured and uninsured adults. For example:
 - Low-income residents fared slightly better when their state's Medicaid program paid providers more. Larger payments per beneficiary increased the likelihood that uninsured residents would have a usual source of care. For insured adults, the larger payments promoted use of physician services, but not whether they had a usual source of care.
 - Low-income insured adults in areas with a higher proportion of residents covered by HMOs were more likely to have a usual source of care, a finding consistent with the emphasis in managed care on coordination and "gate keeping" by a primary care provider.
 - Among low-income adults, living in a metropolitan area with a large population dependent on the health care safety net reduced the likelihood of having a usual source of care.

Key Conclusions

In the Inquiry article the researchers concluded that:

- "Individual level factors exert a very strong and dominant effect on access to care; however, community factors modify that effect by promoting or discouraging the development of a connection to the health care system by low-income residents and their obtaining needed health services."
- "A number of community factors can be modified by policy and community intervention." For example, the size of the population that must depend on the safety net can be reduced by the federal and state government through expanding Medicaid and CHIP (Children's Health Insurance Program) coverage and by assisting noncitizens to become naturalized and qualify for Medicaid coverage.

Funding

The Robert Wood Johnson Foundation (RWJF) provided two grants from September 1999 to August 2004 totaling \$576,302 to support this unsolicited project.

THE PROBLEM

During the 1990s, the nation's health care safety net—its system of providing medical care to low-income and other vulnerable populations—was "intact but endangered" according to a [report](#), "America's Health Care Safety Net: Intact but Endangered," by the Institute of Medicine. The report found that the safety net was a highly localized, "patchwork" system of community clinics, public hospitals and clinics and teaching

hospitals. Communities around the country varied significantly in terms of the ability of the uninsured and other vulnerable populations to get care.

Since the 1960s, researchers have investigated the individual-level factors that predict whether or not a person will be likely to have access to health care. Individual-level factors with a significant influence on access include:

- Race/ethnicity
- Income
- Insurance coverage
- Level of education.

Individual-level factors alone fail to fully account for variations in access or explain why residents of some geographic areas fare much better in accessing care than others. The community-level variables that define the environment in which access occurs also play a role. According to researchers at the University of California, Los Angeles (UCLA), Center for Health Policy Research, these variables include:

- Characteristics of the safety-net population (insured versus uninsured).
- Public policy support for low-income populations and the structure of the health care market.
- Safety-net services within that market.

The UCLA team noted that researchers lacked a comprehensive framework that they could use to evaluate how both individual- and community-level variables influence access to health care. Such a tool could help policy-makers and health care providers monitor the performance of the safety net in different geographic areas, and develop programs and strategies to ensure that the uninsured and other vulnerable populations get the care they need.

CONTEXT

RWJF has had a long interest in the safety net and improving the way access to care is provided to people who use it. See the following Program Results on RWJF's funding concerning the safety net:

- [In Four Major Cities, Providers to the Poor Just Barely Keep Up With Demand.](#) During 1995 and 1996, researchers at the Lewin Group, a health care and social services consulting firm based in Falls Church, Va., took a snapshot of the state of the health care safety net in Dallas, Los Angeles, Memphis, Tenn., and New York City.

- [Stricter Rules and Tighter Budgets Strain the System, But it Keeps on Ticking.](#) During 1995 and 1996, investigators at Kalkines, Arky, Zall and Bernstein took a snapshot of the state of the health care safety net in four major urban areas (Boston, Miami, Philadelphia and New York City).
- [Future of the Health Care Safety-Net Functions Hang by a String.](#) From 1995 to 1997, staff from the Alpha Center for Health Planning and the People-to-People Health Foundation (now called Project HOPE) sponsored a conference and published papers on the future financing of two critical health system functions in the United States—uncompensated care for those without insurance and graduate medical education.
- [Community-Based Clinics and Hospitals Key to Expanding Access to Underserved.](#) From 1998 to 2000, staff at Dartmouth Medical School examined ways to strengthen community health centers and other safety-net providers who provide much of the care for the country's uninsured.
- [How Can Safety-Net Providers Care for Uninsured Patients While Controlling Costs?](#) In 2000, researchers from the Lewin Group conducted a study of care management programs for uninsured and vulnerable populations.
- [Study Shows Safety Net of Free Hospital Care for Uninsured and Underinsured Has Major Holes.](#) During 2000 and 2001, Third Sector New England investigated how hospitals develop and implement their policies on providing free care to uninsured and underinsured people.

THE PROJECT

Researchers with the Safety Net Assessment Project (SNAP), a collaborative research project, examined how individual- and community-level factors that influence access to health care for low-income residents, defined as those who reported a household income less than or equal to 250 percent of the federal poverty level, and why their access varies in different metropolitan regions of the United States.

The researchers were affiliated with [New York University](#), [Robert F. Wagner Graduate School of Public Service](#), the [UCLA Center for Health Policy Research](#) and [Rutgers Center for State Health Policy](#), which conducted its work under a subcontract with the [UCLA Center for Health Policy Research](#).

The purpose of the collaborative research project was to assess the effects of safety net characteristics and other contextual, or community-level, factors on geographic variations in access to health care.

Activities

UCLA Center for Health Policy Research

- Conducted a comprehensive review and synthesis of the research literature from 1990 to 2000 on community-level determinants of access to health care for low-income populations (1990 to 2000). The team chose 32 articles for in-depth analysis and summarized their findings in an unpublished paper. (See the [Bibliography](#).) Key findings from the literature review included:
 - Demand for safety-net services is affected by percentages of uninsured, underinsured and Medicaid beneficiaries that cycle on and off coverage.
 - As federal reimbursement for Medicaid and Medicare declines, not-for-profit and public hospitals are able to provide less uncompensated care because of lower surplus revenues.
 - Medicaid managed care is creating competitive pressures that can be mitigated or intensified by state policies.
 - Local revenues are important to all safety-net providers—particularly county or city-owned hospitals. This is particularly so in states with high uninsurance rates and high levels of private competition.
- Developed a framework for selecting and analyzing community-level factors that influence low-income people's use of medical care. In their work, the UCLA team described five community factors that influence access to health care:
 - The size of the population in a geographic area that tends to rely on the health care safety net.
 - The level of support for low-income populations.
 - The extent of safety-net services.
 - Amount of support for the safety net.
 - The supply of health care services that provide for the health care needs of the broader population.

In an article in the Spring 2004 issue of the journal *Inquiry*, available [online](#), the researchers provide a detailed description of the framework. See the [Bibliography](#).

- Conducted a study of geographic variation in access to health care. The researchers used data obtained from the 1995 and 1996 [National Health Interview Survey](#), a large, annual survey sponsored by the National Center for Health Statistics. The researchers restricted their analysis to lower-income adults, ages 19-64 years, in 54 metropolitan statistical areas (MSA) with populations exceeding 330,000 and ranging up to more than nine million.

To compare differences in access to health care for residents of these areas, the researchers examined two indicators of access to care:

- Having a usual source of care—one doctor, person or place that the individual can go to when sick or in need of advice about health issues.
- Having had a physician visit in the past 12 months.

Rutgers Center for State Health Policy

- Conducted a review of community-level population surveys to assess which surveys were most useful for assessing community safety-net performance.

New York University (NYU)

- Used administrative data—such as hospital discharge data, vital statistics (birth records) and cancer registries—to analyze geographic variation in health care outcomes for residents of the selected metropolitan areas. The research team used administrative data because it is often more readily available and less costly than survey data. The NYU team examined preventable hospital admissions from hospital discharge data sets. These are admissions for "ambulatory care sensitive" (ACS) conditions for which access to timely and effective care can help prevent the need for hospitalization. Examples include:
 - Chronic conditions, such as diabetes and asthma.
 - Acute conditions, such as ear infections.
 - Preventable illnesses, such as pneumonia.

For a detailed list of examples, see [Appendix B: Ambulatory Care Sensitive Conditions](#) in *Tools for Monitoring the Health Care Safety Net*.

Communications

The New York University team presented data from the project to the Institute of Medicine Committee on the Changing Market, Managed Care, and the Future Viability of Safety Net Providers and a joint safety-net working group of the federal Agency for Healthcare Research and Quality (AHRQ) and the federal Health Resources and Services Administration (HRSA).

In 2000 AHRQ and HRSA launched the [Safety Net Monitoring Initiative](#) to help local policy-makers, planners and analysts monitor the status of their local safety nets and the populations they serve. The Safety Net Monitoring Initiative Web site contains data books and tools derived from the Safety Net Assessment Project:

- [Book 1: Data for Metropolitan Areas](#), presents data from 90 metropolitan areas in 30 states and the District of Columbia, including 354 counties and 171 cities.

- *Book 2: Data for States and Counties*, presents data from all 1,818 counties in these states (nonmetropolitan and metropolitan counties).
- *Book 3: Tools for Monitoring the Health Care Safety Net*, is a collection of papers that describes methods for assessing the state of local health care safety nets. This book contains two articles summarizing activities conducted by members of the project team:
 - "Local Data Collection Strategies for Safety Net Assessment", prepared by Joel C. Cantor, Sc.D., Rutgers Center for State Health Policy, offers guidance to community organizations interested in conducting health access surveys.
 - "Using Administrative Data to Monitor Access, Identify Disparities, and Assess Performance of the Safety Net", by NYU's Project Director John Billings, J.D., describes how to use administrative data to monitor access and assess the performance of safety nets.

Challenges

Due to increasing privacy concerns, the federal government would only release the metropolitan statistical area of respondents who participated in the National Health Interview Survey in the years prior to 1996.

FINDINGS

In a spring 2004 article, "Effects of Community Factors on Access to Ambulatory Care for Lower-Income Adults in Large Urban Communities," in the journal *Inquiry*, the UCLA research team reported these key findings:

- **The 54 urban areas in the UCLA study varied greatly in the proportions of insured and uninsured low-income residents, defined as those who reported a household income less than or equal to 250 percent of the federal poverty level, who reported having a usual source of care (potential access), and having at least one physician visit in the last year (realized access).**
 - The percentage reporting a usual source of care ranged from 54.6 percent in West Palm Beach—Boca Raton, Fla., to 91.4 percent in Rochester, N.Y.
 - The percentage reporting at least one physician visit in the past year ranged from a low of 56.9 percent in San Jose, Calif., to 79.5 percent in the Providence, R.I., area.
- **Several individual-level factors contributed to differences in access among residents of the 54 metropolitan areas.** These factors helped account for differences in both potential access (having a usual source of care) and realized access (having a least one physician visit in the past year).

- Insured and uninsured people were half as likely to have a usual source of care if they had immigrated in the last five years (versus living in the United States longer).
- There was no difference in the likelihood of having a usual source of care for those with Medicaid-coverage and those with private insurance or Medicare.
- Insured Asian American and Pacific Islanders were less likely than insured non-Latino Whites to visit a physician at least once during the year.
- Insured Mexican adults were less likely than insured Whites to report at least one physician visit. There was no difference in the probability of having a physician visit among Latinos overall or among other populations of color.
- Low-income insured and uninsured residents who did not graduate from high school had a lower probability of visiting a physician than did those with a secondary education.
- Uninsured residents with a usual source of care were two and a half times more likely to visit a physician in the previous year than were those without a usual source of care, whereas insured residents with a usual source of care were three times more likely to do so. According to the research team, this underscores the importance of having a usual source of care as a measure of potential access.
- **Several community-level factors also influenced access for low-income residents, but, in many cases, they did so differently for insured and uninsured adults.**
 - The extent of the health care safety net in an area significantly affected potential access regardless of health insurance status.
 - A 10 percent increase in the number of federally qualified health centers per 10,000 residents resulted in a 6 percent increase in the probability that an adult would visit a physician within the year, a finding that underscored the importance of health clinics for low-income populations.
 - Low-income residents fared slightly better when their state's Medicaid program paid providers more, an important form of direct support for safety-net providers. The effect differed by insurance status.
 - Larger payments per Medicaid beneficiary increased the likelihood that uninsured residents would have a usual source of care.
 - For insured adults, the larger payments promoted use of physician services, but not whether they had a usual source of care.
 - Low-income insured adults in areas with a higher proportion of residents covered by HMOs were more likely to have a usual source of care, a finding consistent with the emphasis in managed care on coordination and "gate keeping" by a primary care provider.

- Because uninsured adults, by definition, are not enrolled in an HMO they cannot benefit from the HMO requirement that all enrollees connect with a primary care provider (usual source of care).
- Among low-income adults, living in a metropolitan area with a large population dependent on the health care safety net reduced the likelihood of having a usual source of care.
 - If an area had more low-income residents, especially those who were uninsured, it increased the financial burden on safety-net providers, making it more difficult for them to establish connections with adults in their communities.
- Although living in a metropolitan area with large "communities of color" did not affect access overall, the results differed for specific racial and ethnic groups.
 - Insured African Americans and Native Americans/Alaskan Natives were more likely than non-Latino whites to identify a specific source of care. This finding suggests that cities with well-established communities of color may have well-developed safety-net systems whereas low-income whites may be more isolated with fewer support institutions.
 - Uninsured Latinos are more likely than uninsured non-Latino whites to identify a usual source of care, but Latinos—specifically Mexicans—do worse in areas with large low-income populations and high HMO penetration. This includes some of the nation's largest metropolitan areas (e.g., Los Angeles and San Diego) where Latinos are concentrated.

Limitations

In "Effects of Community Factors on Access to Ambulatory Care for Lower-Income Adults in Large Urban Communities," the UCLA research team reported the following limitations:

- For some community factors, obtaining economic and health information to assess the safety-net system was difficult. For example, the researchers could obtain information about federally qualified health centers nationwide through the Health Resources and Services Administration (HRSA) [database](#), but similar information on non-federally qualified community clinics was not available.
- Although the researchers selected factors that could be measured at the level of metropolitan statistical areas, some of the variables would be more appropriately measured at the community level. For example it would have helped to examine characteristics of specific ethnic groups at the neighborhood level.

CONCLUSIONS

The article in *Inquiry* reported these key conclusions:

- **"Individual level factors exert a very strong and dominant effect on access to care; however, community factors modify that effect by promoting or discouraging the development of a connection to the health care system by low-income residents and their obtaining needed health services."**
- **"A number of community factors can be modified by policy and community intervention."** For example, the size of the population that must depend on the safety net can be reduced by the federal and state government by expanding Medicaid and SCHIP (State Children's Health Insurance Program) coverage and by assisting noncitizens to become naturalized and qualify for Medicaid coverage.

LESSONS LEARNED

1. **Researchers studying health care access should "drill down" to obtain information at the neighborhood level, not just at the metropolitan level.** Even though such studies are more expensive, they add to the understanding of how specific ethnic groups obtain care. (Project Director Brown, UCLA)

AFTERWARD

Work on the Safety Net Assessment Project ended at the conclusion of the grants. Lack of funding prevented AHRQ from developing its *Monitoring the Health Care Safety Net* initiative into an ongoing tool for monitoring the performance of the safety net. (As of September 2008, the data and tools developed with RWJF funding remain on the AHRQ Web site, but have not been updated.)

In 2001, the UCLA Center for Health Policy Research used lessons learned from the Safety Net Assessment Project to launch the *California Health Interview Survey (CHIS)*, the largest state health survey in the United States. CHIS gives health planners, policy-makers and communities a detailed picture of factors influencing access at the local as well as state level. RWJF has supported expansions of this survey with questions regarding housing and neighborhood environment (see [Program Results](#) on ID# 046008), childhood obesity (ID#s 052052, 058107 and 059045) and disparities in quality of care (ID# 059134).

The RWJF national program, *Urgent Matters* included comprehensive assessments of the safety nets in 10 communities. The assessments highlighted key issues affecting access to care for uninsured and underserved residents, and identified potential opportunities for improvement. A report, *Walking a Tightrope: The State of the Safety Net in Ten U.S. Communities*, analyzes the findings from the 10 individual assessments and provides a

perspective on the issues and challenges that face the health care safety net in the United States. See [Program Results](#) on *Urgent Matters* for more information on the program.

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