

THE SYNTHESIS PROJECT

NEW INSIGHTS FROM RESEARCH RESULTS

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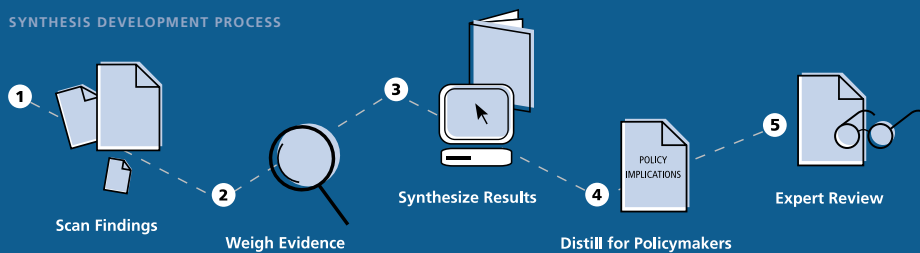
From Coverage to Care: Exploring Links Between Health Insurance, a Usual Source of Care, and Access

TABLE OF CONTENTS

1	Introduction
3	Findings
11	Implications for Policymakers
13	The Need for Additional Information
APPENDICES	
14	References
15	Studies Reviewed for This Research Synthesis
16	Methodological Overview

THE SYNTHESIS PROJECT (Synthesis) is a new initiative of the Robert Wood Johnson Foundation. It aims to produce relevant, concise, and thought-provoking briefs and reports on today's important health policy issues. By synthesizing what is known, while weighing the strength of findings and exposing gaps in knowledge, Synthesis products give decisionmakers reliable information and new insights to inform complex policy decisions. This 16-page Research Synthesis Report, prepared as part of The Synthesis Project, summarizes key research on the relationship between coverage, having a usual source of care, and access. A related 4-page Policy Brief presents an even more concise summary of the research on these topics. The information contained in both reports is available online at www.policysynthesis.org.

SYNTHESIS DEVELOPMENT PROCESS



INTRODUCTION

With the percentage of Americans lacking health insurance at historically high levels, federal and state policymakers are seeking ways to extend coverage to more people, especially those with low incomes. As they do so, they should consider how insurance coverage translates into better access to health services and improved health status, and how to incorporate that understanding into current policy recommendations. Gaining coverage is not an end in itself but a primary means of improving access.

An important link in the association between coverage and access to care is the relationship between coverage and having a usual source of care—a place where one receives health care on a regular basis. Several researchers have shown that having a usual source of care is an important determinant of access. In particular, research has shown that having a usual source of care is strongly associated with fewer delays in obtaining care, better preventive care, and better treatment (5,11,13,16,18,21).

Given the link between having a usual source of care and access, policy-makers designing health insurance coverage initiatives should consider how alternative strategies might affect the likelihood that individuals who are currently uninsured gain a stable source of care, in addition to gaining coverage.

To assist analysts who are addressing such policy issues, this research synthesis summarizes research findings on the following interrelated questions:

q1: What is the relationship between health insurance coverage and having a usual source of care?

q2: How is the likelihood of having a usual source of care affected by insurance transitions, or cycling?

q3: To ensure the receipt of important preventive services, which is more important: coverage or having a usual source of care?

q4: What are the main reasons people say they lack a usual source of care?

q5: How is access to services from a usual source of care affected by insurance status and provider type?

There is an abundance of research literature addressing many of these topics, but the evidence base varies considerably in quality and strength. As discussed in Appendix II, the author of this research synthesis reviewed coverage and access to care studies and prioritized results giving greater weight to those that were more reliable and robust. The strongest studies use data from large and nationally representative surveys (FIGURE 1).

FIGURE 1. Recent National Surveys Focusing on Access to Care

Survey	Time Period of Data Collection	Number of Respondents*
Urban Institute National Survey of America's Families (NSAF)	1999	42,360
Robert Wood Johnson Foundation/Center for Studying Health System Change Community Tracking Study (CTS)	1996–1997	60,446
Henry J. Kaiser Family Foundation/Commonwealth Fund State Low-Income Survey (LIS)	1995–1997	15,085
Henry J. Kaiser Family Foundation Survey of Family Health Experiences (FHE)	1995–1997	3,981
AHRQ Medical Expenditure Panel Survey (MEPS) Household Component—Full Year File	1996	21,571
Robert Wood Johnson Foundation National Access to Care Survey (ACS) National Probability Sample	1994	3,450

* Number of respondents is the number of individuals responding except for the NSAF which indicates the number of households responding.

FINDINGS

Links Between Health Insurance, a Usual Source of Care, and Access

The research evidence for the overall relationship between health insurance coverage and having a usual source of care is strong. The evidence on the reasons people lack a usual source of care and the dynamics of how people acquire and maintain their usual sources of care is weaker.

Q1: WHAT IS THE RELATIONSHIP BETWEEN HEALTH INSURANCE COVERAGE AND HAVING A USUAL SOURCE OF CARE?

Uninsured people are more likely than are continuously insured people to lack a usual source of care.

- Several studies find a strong association between being uninsured and lacking a usual source of care (FIGURE 2). Schoen’s analysis⁽¹⁴⁾ of the Community Tracking Study (CTS), for example, shows that 35 percent of the uninsured lack a usual source of care compared with only 10 percent of the continuously insured. After controlling for important population differences, including income and health status, the uninsured are almost four times as likely as the insured to lack a usual source of care. The same pattern of higher usual source of care rates for the continuously insured is also evident among low-income Americans, as shown by findings from the Low-Income Survey (LIS).

Results for the low-income and overall populations cannot be directly compared, because the surveys use different definitions for key variables. The observed differences by income do, however, suggest that poverty may also be a risk factor for lacking a usual source of care.

FIGURE 2. Probability of Lacking a Usual Source of Care, by Insurance Status and Income

Survey	Percent with No Usual Source of Care		ODDS RATIO*	CONFIDENCE INTERVAL	P-VALUE
	UNINSURED	CONTINUOUSLY INSURED			
Overall Population: CTS	35	10	3.8	(3.4–4.6)	p≤.01
Low-Income Population: LIS	60	31	2.9	(2.6–3.2)	p≤.01

* Odds ratios for lacking a usual source of care compare uninsured to insured and control for income, health status, age and sex.

Source: Schoen

CTS: No usual source of care. Continuously insured have coverage for last year.

LIS: No regular provider. Continuously insured have coverage for last two years.

The large majority of both privately and publicly insured people have a usual source of care.

- An analysis of the 1996 Medical Expenditure Panel Survey (MEPS) by Weinick (20) finds that more than 80 percent of publicly insured and privately insured people have a usual source of care (FIGURE 3).

FIGURE 3. Percent of Nonelderly with Usual Source of Care, by Insurance Status, Health Status, and Income

Stratification Variable	Author	Publicly Covered	Privately Covered
None	Weinick	86.7	85.5
Health Status		Medicaid	Privately Covered
Good/excellent health status	Berk	86.3	86.6
Fair/poor health status	Berk	88.9	85.6
Income		Medicaid	Privately Covered
Low-Income	Lillie-Blanton	91.0	92.0
Low-Income	Urban Institute	83.3	84.8

Sources: Weinick, 1998, Berk, Lillie-Blanton, Urban Institute

Other researchers who have adjusted their results for health status or income differences report similar findings (FIGURE 3). Berk’s analysis of the Access to Care Survey (ACS), for example, shows that whether the insured were in good or fair health, and regardless of the source of their coverage, the likelihood of having a usual source of care falls in the narrow range between 86 percent and 89 percent (2). In addition, a study by Lillie-Blanton, based on the LIS, shows identical proportions of the low-income privately insured and Medicaid populations possessing a usual source of care (10). Analysis of the Urban Institute’s National Survey of America’s Families (NSAF) data from 1999 produces a similar result, although the overall percentages are somewhat lower.

The studies by Weinick, Lillie-Blanton and Berk, and the Urban Institute data differ along several dimensions (FIGURE 4), and these differences limit comparisons among them. One cannot, for example, infer whether people with fair to poor health status are more or less likely to have a usual source of care than the overall population; neither can one examine whether there has been a deterioration in usual source of care rates among the low-income population between the 1995–1996 LIS and the 1999 NSAF. Nonetheless, the findings of these studies do confirm that individuals with insurance coverage—whatever the type—are highly likely to have a usual source of care.

FIGURE 4. Key Differences Among Studies Reviewed

	Weinick (MEPS)	Lillie-Blanton (LIS)	Berk (ACS)	Urban Institute (NSAF)
Definition of Coverage Types	Public/Private	Medicaid/Private	Medicaid/Private	Medicaid, SCHIP*/Private
Unit of Analysis	Any usual source of care	Any usual source of care except emergency room	Any usual source of care	Any usual source of care except emergency room
Age Group Studied	Nonelderly adults and children	Nonelderly adults	Nonelderly adults and children	Nonelderly adults
Survey Year(s)	1996	1995–1996	1994	1999

* State Children’s Health Insurance Program

Insurance transitions affect the likelihood of having a usual source of care.

- ▶ Longitudinal analyses provide the best opportunity to examine the impact of insurance transitions on the likelihood of having a usual source of care. Only one recent study, by Kasper (9), examines this issue. Kasper’s results (FIGURE 5) show a strong overall association between coverage and having a usual source of care, supporting the findings of other studies. In addition, they show striking differences between nonelderly adults with continuous insurance and those who experience an insurance transition.

FIGURE 5. Percent of Nonelderly Adults with a Usual Source of Care, by Coverage Experience

Coverage Experience	Baseline		Followup		Significance
Lost Coverage	Medicaid	90.4	Uninsured	64.6	p≤.05* p≤.05**
	Private	78.1	Uninsured	76.5	
Gained Coverage	Uninsured	67.4	Insured	79.5	p≤.05***
Coverage Stayed the Same	Medicaid	94.7	Medicaid	88.0	
	Uninsured	60.9	Uninsured	59.3	
	Private	90.3	Private	92.4	

* p-value for difference in likelihood of having a usual source of care between this coverage group and those with continuous Medicaid

** p-value for difference in likelihood of having a usual source of care between this coverage group and those with continuous private coverage

Source: Kasper

*** p-value for difference in likelihood of having a usual source of care between this coverage group and those who are continuously uninsured

Using data from the Survey of Family Health Experiences (FHE), Kasper tracked people’s insurance status from 1995 to 1997. She classified them according to whether their insurance status changed between the 1995 baseline and the followup surveys in 1996 and 1997. As has been shown in other studies, a large proportion of Medicaid enrollees and the uninsured experienced an insurance change in this period. Almost one-quarter of the people who began on Medicaid were uninsured at one or both of the followup interviews, and almost one-half of the people who initially were uninsured gained coverage. By contrast, less than five percent of the people with private insurance in 1995 subsequently lost coverage.

People who lose public coverage often lose their usual source of care.

- ▶ More than a quarter of the Medicaid enrollees who lost coverage also lost their usual source of care. While covered, about 90 percent of Medicaid enrollees had a usual source of care, but only about 65 percent did after they lost Medicaid coverage. Because the comparison group (those without insurance transitions) did not experience substantial changes in the likelihood of having a usual source of care from baseline to followup, temporal changes do not explain the observed differences.

People with unstable private coverage have a relatively low likelihood of having a usual source of care, both before and after losing coverage.

- ▶ In contrast to the experience of those losing public coverage, people who lost private coverage experienced little change in their likelihood of having a usual source of care, but they had a relatively low probability of having one whether insured or not. Less than 80 percent of those who subsequently lost private coverage had a usual source of care while insured, compared to about 90 percent of those with continuous private or public insurance.

The reasons for that lower probability are unclear, and warrant further examination. One possibility is that those losing private coverage are a subgroup that values health care less. This low value for health care might cause both the lower likelihood of having a usual source of care and the dropping of private coverage. However, if this were the case, we might also expect to see persistently lower likelihood of having a usual source of care for the cohort losing public coverage, which we do not. Unfortunately, we cannot fully explore this issue of causality using data from available nonexperimental studies.

Gaining insurance coverage is associated with acquiring a usual source of care.

- ▶ Among people gaining either private or public coverage, the probability of having a usual source of care increased from less than 70 percent when the cohort was uninsured to nearly 80 percent after the group acquired coverage, a level below that found for those with continuous private insurance.

The reasons for this finding of an increase in the likelihood of having a usual source of care for the newly insured, but not to the level of the continuously insured, are again not altogether clear, and also deserve further study. One reason for this lower level may be that coverage triggers and supports changes in healthcare-seeking behavior that are not immediate but that develop gradually over time.

These findings suggest that people with unstable coverage are less likely than people with stable coverage to have a usual source of care.

- ▶ Kasper's research indicates that people who recently gained coverage are less likely to have a usual source of care than those with continuous coverage; that those losing Medicaid are at significant risk of losing a usual source of care; and that those losing private coverage are less likely to have a usual source of care at any time.

Schoen's analysis of the CTS supports those findings. She finds that 10 percent of the continuously insured have no usual source of care compared with almost one-quarter of those who recently gained coverage⁽¹⁴⁾. After adjusting for other factors including income, health status and age, people who gained coverage recently are twice as likely as those with continuous insurance to lack a usual source of care.

A usual source of care may better assure receipt of preventive services than coverage.

- ▶ A few studies show that usual source of care, taken by itself, is more strongly associated with better access to and receipt of some services than is insurance. That is, having a usual source of care may be a better guarantee of access than is coverage per se. Moy, in his 1995 study of hypertensive care (11), finds that receiving inadequate followup care for hypertension is more strongly associated with lacking a usual source of care than with lacking insurance (FIGURE 6). After controlling for other factors, the odds ratio for having inadequate followup care is much larger for those lacking a usual source of care than for those lacking insurance. A similar pattern holds for hypertension screening.

FIGURE 6. Probability of Lacking Hypertension Screening and Adequate Followup Care, by Usual Source of Care and Insurance Status

	Hypertension Screening			Followup Care		
	PERCENT WITH NO HYPERTENSION SCREENING	ODDS RATIO	CONFIDENCE INTERVAL	PERCENT WITH INADEQUATE FOLLOWUP CARE	ODDS RATIO	CONFIDENCE INTERVAL
Usual Source of Care						
None	43.3			60.3		
MD's Office	19.7	2.56*	(2.23–2.94)	18.9	4.31*	(3.47–5.34)
Insurance Status						
Uninsured	39.9			43.1		
Any Private	24.0	1.51**	(1.34–1.69)	22.9	1.57**	(1.17–2.10)

* Odds ratios for lacking screening/adequate followup care comparing those with no usual source of care to those with an MD's office as their usual source of care

** Odds ratios for lacking screening/adequate followup care comparing the uninsured to those with any private insurance

Source: Moy

Zambrana (23) has a comparable finding for cancer screening among Hispanic women. After controlling for usual source of care, having insurance shows no, or only a weak, effect on the likelihood of women being screened for cancer. (Zambrana, however, does not adjust the findings for any association between insurance status and usual source of care.) Likewise, a less robust study of emergency room patients in Boston finds that without a usual source of care, the uninsured and Medicaid enrollees have strikingly similar odds of delay in seeking care (16).

Although having coverage and having a usual source of care are highly correlated, some insured people—especially those in low-income families or with unstable coverage—lack a usual source of care. The evidence discussed above suggests these people may be at risk for access problems.

These findings must be interpreted cautiously, however, since available studies focus mainly on receipt of preventive services. It is unknown if the relationship holds for other types of health care services.

People lack a usual source of care for any of several reasons: because they seldom or never get sick, because they recently moved or don't know where to get care, because of the cost of care, and other reasons.

- ▶ Weinick, in his analysis of 1996 MEPS data (20), finds that most people who report lacking a usual source of care say the primary reason is that they seldom or never got sick—not that they cannot afford care (FIGURE 7). This observation holds even among people without health insurance, although the cost of care is cited as a reason for not having a usual source of care far more frequently among people without health insurance than among people with health insurance.

FIGURE 7. Main Reasons Given by Nonelderly Adults for Lacking a Usual Source of Care

Insurance Status (and percent without a usual source of care)	Percent Distribution by Insurance Status			
	SELDOM OR NEVER GET SICK	RECENTLY MOVED OR DON'T KNOW WHERE TO GET CARE	COST OF MEDICAL CARE	OTHER MAIN REASONS
Any private insurance (14.5%)	70.0	8.0	3.0	19.0
Public insurance only (13.3%)	66.2	4.6	8.8	20.4
Uninsured (38%)	63.4	3.6	18.4	14.6

Source: Weinick, 1998

The MEPS data analyzed by Weinick suggest that factors beyond insurance coverage play a role in determining whether people have a usual source of care. Low demand for a usual source of care is probably a contributor. Underlying demand may be low regardless of whether someone has insurance, but health plan requirements (that enrollees sign up with a primary care provider or that providers schedule followup preventive care after an initial sick visit) may counteract some of the effects among the insured.

Uninsured and publicly insured people are more likely to use institutional providers as their usual source of care and to face barriers to access.

- ▶ Regardless of their source of coverage, the large majority of people with a usual source of care rely on an office-based physician as their usual source of care (21). Nonetheless, uninsured and publicly insured people are more likely than privately insured people to use an institutional provider (e.g., a hospital outpatient department, clinic, or emergency room) as their usual source of care (FIGURE 8).

FIGURE 8. Location of Usual Source of Care for Nonelderly, by Insurance Status

Insurance Status	Percent Distribution by Insurance Status*		
	OFFICE-BASED PROVIDER	HOSPITAL OUTPATIENT DEPARTMENT OR CLINIC	EMERGENCY ROOM
Uninsured	84	15	2
Public Insurance Only	82	16	1
Private Insurance	90	9	–

Source: Weinick, 1997

* Percent calculated for the group that has a usual source of care

Uninsured and publicly insured people also experience more problems than privately insured people accessing their usual sources of care, although these problems are not as prevalent as one might anticipate. Shi and colleagues (15) used MEPS to assess characteristics of the primary care experience by patients' insurance status (FIGURE 9). Across nearly every measure of organizational barriers, the uninsured and the publicly insured are more likely than the privately insured to have difficulties. In particular, the uninsured and publicly insured are more likely to have a long wait for care in the provider's office, to walk in rather than have an appointment, and to have difficulty contacting their provider by telephone. In addition, only about one-half of the uninsured and two-thirds of those with public coverage are very satisfied their families can get care, compared with about four-fifths of people with private coverage.

FIGURE 9. Primary Care Access Outcomes, by Insurance Status

Primary Care Access Outcomes	Percent by Insurance Status				Odds Ratio	
	UNINSURED	PUBLICLY INSURED	PRIVATE H.M.O.	PRIVATE FEE FOR-SERVICE	INSURED vs UNINSURED	PRIVATELY INSURED vs PUBLICLY INSURED
Has appointment rather than walk in	65	63	79	78	1.38***	1.65***
Very difficult getting an appointment	10	10	9	7	0.83	0.72**
Wait time before appointment no more than 30 minutes	78	73	86	86	1.28***	1.77***
Very difficult contacting provider by phone	11	12	9	6	0.78***	0.68***
Provider has office hours nights and weekends	47	44	56	51	1.03	1.68***
Very satisfied family can get care	53	66	79	82	2.63***	1.63***

Source: Shi

*p<.05 **p<.01 ***p<.001

Available evidence, though scant, suggests that people who rely on physicians' offices or clinics rather than emergency departments as their usual source of care may receive better access to and quality of care.

- Few studies have addressed the effect of the location of people's usual source of care on access to and quality of care. The limited evidence that is available, however, suggests that people who use doctor's offices or community clinics as their usual source of care get better access to and quality of care than patients who use hospital emergency departments.

In his study of hypertensive care, Moy (11) finds that patients using an emergency department as their usual source of care are less likely to be screened for hypertension and are more likely to receive inadequate followup care than patients using a physician's office (FIGURE 10). By contrast, patients using a clinic have similar screening and followup care results to those using a physician's office.

FIGURE 10. Likelihood of Lacking Hypertension Screening and Treatment, by Location of Usual Source of Care

Screening and Treatment for Hypertension	Physician's Office		Clinic		Emergency Room	
	ODDS RATIO	CONFIDENCE INTERVAL	ODDS RATIO	CONFIDENCE INTERVAL	ODDS RATIO	CONFIDENCE INTERVAL
No Hypertension Screening	1.00	(Reference)	1.16	(1.01-1.33)	1.43	(1.09-1.89)
Inadequate Followup Care	1.00	(Reference)	0.96	(0.76-1.22)	2.94	(1.67-5.20)

Source: Moy

Wilson (22) reports a similar finding in his study of adolescent health care. People who use the emergency department as their usual source of care are less likely to have regular checkups and more likely to miss needed care compared to people using other sources of care.

A study by Starfield (17) supports Moy's finding that quality of care and access in community clinics and physicians' offices are comparable. She conducted a medical records review to study treatment patterns for four chronic conditions and provision of well-care for Medicaid enrollees in Maryland. This study finds no consistent differences in access, appropriateness or quality of care when comparing patients using hospital outpatient departments, office-based physicians and clinics.

This limited evidence of equivalent care in clinics and physicians' offices and sub-optimal care in emergency rooms supports the widespread and certainly logical conclusion that emergency rooms do not serve patients well as usual sources of care.

IMPLICATIONS FOR POLICYMAKERS

Much of the research analyzed in this research synthesis points to a strong association between having health insurance coverage—whether private or public—and having a usual source of care.

Thus, coverage expansions, by increasing the likelihood that people will have a usual source of care, will improve their access to care and continuity of care.

Furthermore, having a usual source of care may increase the likelihood of having continuous coverage since people with a usual source of care have an incentive to retain their insurance.

It is important to recognize, though, that several countervailing forces may weaken the relationship between coverage and usual source of care—especially among the target populations for coverage expansions:

- Insurance transitions and unstable coverage seem to reduce the likelihood that coverage will translate to having a usual source of care.
- The desire to establish a usual source of care may be low among some segments of both the insured and the uninsured populations.
- Uninsured and publicly insured people seem to face more barriers than those with private coverage in accessing their usual sources of care.

In developing health insurance coverage initiatives, therefore, policymakers should consider the features of program design that might promote more stable coverage and continuity of care; encourage new enrollees to establish and use an appropriate medical home; and limit organizational barriers to access. Recent experience with the State Children’s Health Insurance Program and Medicaid is throwing new light on these issues, but there is much still to be learned.

There is also evidence that people who use emergency departments as their usual source of care do not receive optimal health care. This finding, combined with evidence that those using emergency departments have experienced access barriers when seeking care elsewhere (12), suggest the need for more concentrated efforts to help vulnerable groups, including the uninsured, establish medical homes outside the emergency room.

The other key finding in this synthesis is that, taken alone, having a usual source of care may be more strongly associated than coverage with better access to preventive services. Consequently, providing coverage for the uninsured without also establishing a usual source of care may not have the desired impact on access to such services. Conversely, providing a medical home for the uninsured may increase their use of preventive care, even if they lack coverage.

Although this latter finding lends support to provider-based strategies such as safety net expansions, there is little evidence to date on their relative effectiveness in establishing a usual source of care for the low-income uninsured. Policymakers seeking to improve access, however, should consider how coverage and provider-based strategies might complement each other.

THE NEED FOR ADDITIONAL INFORMATION

This research synthesis suggests a critical need to evaluate the impact of coverage expansions and safety net programs on access to care, generally, and on usual source of care rates specifically. Also needed are longitudinal analyses and the incorporation of questions about insurance transitions in coverage surveys. This research synthesis reveals many unanswered questions and new research areas.

QUESTIONS FOR FURTHER RESEARCH

Processes and Barriers for Establishing a Usual Source of Care

- What motivates people to establish a usual source of care and what barriers do they encounter?
- What is the nature and cause of low demand for having a usual source of care among particular groups?
- What is the impact of logistical problems faced by the poor and uninsured on use of and demand for usual sources of care?

The Role of Health Insurance Coverage in Leading People to Establish a Usual Source of Care

- What is it about insurance that leads to establishing a usual source of care?
- What are the steps and processes in establishing a usual source of care? How do insurance transitions affect this dynamic?

- Why are people with unstable private coverage the least likely of any coverage group to have a usual source of care?

Strategies to Encourage People to Establish a Usual Source of Care

- How effective are different strategies such as outreach to the newly covered, social marketing campaigns or provider incentives to encourage the establishment of usual sources of care? Among the insured? Among the uninsured?
- Other than through insurance, are there effective ways to provide usual sources of care to the uninsured?

APPENDIX I: REFERENCES

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APPENDIX II: STUDIES REVIEWED FOR THIS RESEARCH SYNTHESIS

The significance of research findings for policy decisions depends in part on the rigor of the underlying research methodologies. When synthesizing research on a complex policy question, therefore, one should assess the strength of the evidence on which researchers base their conclusions.

Accordingly, the author of this research synthesis reviewed the major methodological issues affecting coverage and access to care studies and prioritized results giving greater weight to those that were more reliable and robust (see page 16 for a discussion of the strengths and weaknesses of commonly used methodologies). A literature search revealed no recent randomized, experimental studies of the relationship between health insurance coverage and having a usual source of care. For that reason, the research findings reported in this research synthesis are based entirely on observational or descriptive studies.

Among observational studies, longitudinal studies that use comparison groups and multivariate analyses are among the strongest methodologically, and therefore receive the most weight in the research synthesis. As a study by Kasper (9) is the sole example of that type of design reviewed here, most of the findings derive from observational studies without longitudinal designs. Among these studies, the author gives the most weight to studies using control variables and multivariate analyses and to sets of studies that allow one to examine results before and after stratifying by potential confounders.

Another factor the author considers is the generalizability of a study's findings. Studies using large, nationally representative samples are preferred (FIGURE 1). The results of studies with small, local or convenience samples are used only for comparison with more robust analyses and to examine whether findings point in a consistent direction. Finally, given the magnitude of the changes in the health care system that have occurred over the past decade, this research synthesis reports only on studies that have been undertaken since the mid-1990s.

Many studies have addressed the relationship between coverage and having a usual source of care, yet the set of studies that meets the selection criteria, and on which one can base policy conclusions, is quite small. Even the studies cited here, which are methodologically the strongest, share the risk of bias present in observational studies. Nonetheless, the identification of strong and consistent patterns of findings among the studies, as well as areas where findings diverge, point to important policy issues and areas for further research.

APPENDIX III: METHODOLOGICAL OVERVIEW

Randomized, experimental studies—that is, studies that randomly assign individuals in the pool of all potential participants to either the experimental (treatment) group or the control group—are the “gold standard” for social science research. Such studies are rare, however, because they are costly, difficult to conduct, and often raise complex ethical questions.

More commonly used in social science research than randomized, experimental studies, therefore, are observational studies. The studies discussed in this research synthesis are all observational studies. Observational studies rely on the observation of a naturally occurring association between a dependent or outcome variable (“outcome”), such as having a usual source of care, with an independent or explanatory variable, such as having insurance coverage.

In observational studies, researchers typically do not control the introduction of the explanatory variables (for example, researchers cannot determine which members of the study population have insurance coverage as they could in a randomized, experimental design). Consequently, observational studies may be biased: the study and control groups may differ systematically, and those differences may affect the outcome independent of the explanatory variable under examination. As an example, uninsured people may be poorer than people who are insured, and lower income, rather than insurance, may

be the primary reason they are less likely to have a usual source of care. Thus, simple comparisons among groups are often misleading.

To control for this type of bias resulting from differences between the study and control groups, researchers use multivariate analyses, or stratification by potential confounders. Multivariate analyses allow researchers to examine the association between a given explanatory variable and outcome while separating the effects of other factors (“control variables”) known or hypothesized to affect the outcome. It is important to note, however, that many control variables—particularly those measuring health status—are imprecise. Furthermore, it is difficult to control for unobserved attitudinal or behavioral factors that may influence the outcome.

One way to address these problems with control variables is to use longitudinal studies that compare the value of the outcome—for example, the probability of having a usual source of care—before and after a policy intervention. In longitudinal studies, the group under study can be used as its own control. Consider, for example, a study of uninsured people who become insured in a subsequent period. These people are likely to have the same basic demographic characteristics before and after they gain insurance; thus, changes in their health insurance coverage status can more easily be linked to changes in their usual source of care. While

longitudinal studies are effective in controlling for some confounders, researchers using longitudinal designs need to test whether changes in the outcome might be associated with general changes occurring over time, rather than with changes in the explanatory variable. Selecting and tracking an appropriate comparison group is one way to achieve this.

Despite their methodological advantages, longitudinal studies using pre- and post-intervention designs may be affected by selection bias. In other words, the group of people who self-select into the intervention group, by signing up for public or private coverage, may have characteristics that differ from those of the group of people who remain uninsured. Consequently, although such a study may legitimately find that insurance leads to gaining a usual source of care for the group that acquires insurance, it may not be possible to extend, or generalize, the finding to the group that remains uninsured. Longitudinal designs focused on the impact of overall policy changes such as large coverage expansions—so-called natural experiments—can partially address this problem. But even when “natural experiments” are not present, researchers can check for selection bias by examining the characteristics of the study and control groups.

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