

# Insured But Not Protected: How Many Adults Are Underinsured?

The experiences of adults with inadequate coverage mirror those of their uninsured peers, especially among the chronically ill.

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**ABSTRACT:** Health insurance is in the midst of a design shift toward greater financial risk for patients. Where medical cost exposure is high relative to income, the shift will increase the numbers of underinsured people. This study estimates that nearly sixteen million people ages 19–64 were underinsured in 2003. Underinsured adults were more likely to forgo needed care than those with more adequate coverage and had rates of financial stress similar to those of the uninsured. Including adults uninsured during the year, 35 percent (sixty-one million) were under- or uninsured. These findings highlight the need for policy attention to insurance design that considers the adequacy of coverage.

THE RELENTLESS RISE IN HEALTH CARE COSTS and insurance premiums has spurred a move away from more-comprehensive insurance benefits for the population under age sixty-five. Trends instead point toward plans with higher deductibles, patient cost sharing, and, in some instances, a more restricted scope of benefits. Faced with the fourth consecutive year of double-digit premium inflation and the demise of managed care options, employers have sought to moderate their premium costs by offering new insurance products that shift more financial risk to workers.<sup>1</sup> Insurance plans sold to small businesses, in particular, have moved to sharply higher deductibles; however, increases are also spreading across larger firms.<sup>2</sup>

Recent federal policies have also pushed toward higher patient cost sharing through enactment of new tax-protected health savings accounts (HSAs) available only to people with insurance policies having deductibles of at least \$1,000 per person. Some proposals would further encourage such high-deductible plans.<sup>3</sup> Although the United States already stands out among industrialized countries for the high share of medical costs its citizens pay out of pocket, trends point to still greater patient and family exposure to medical care costs in the future, reversing

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gains in more comprehensive coverage that occurred in the 1990s.<sup>4</sup>

To date, efforts to redesign insurance have proceeded with little regard to patients’ or families’ ability to pay or the consequences of exposure to financial risk. To the extent that patient cost sharing or benefit gaps leave insured adults without adequate financial protection in the event of illness, erosion in the quality of insurance coverage will raise the number of Americans who are underinsured. If inadequate protection erects barriers to appropriate care, market trends could undermine the central goals of health insurance: to facilitate timely access to care when needed and to protect patients from costs that would be catastrophic relative to their income.

The adverse access and health effects of increased cost sharing can be particularly acute for low-income populations, because plans rarely adjust cost exposure relative to income.<sup>5</sup> Moreover, higher cost sharing, by design, shifts costs to sicker populations. The combination of poor health and low income increases the risk of both access barriers and financial stress. For example, a recent Canadian study of the impact of increased patient payments for prescription drugs for the elderly and welfare recipients found reductions in use of essential drugs in both populations, which, in turn, led to higher rates of serious adverse events and emergency department visits.<sup>6</sup> A study of copayments for medications among chronically ill Americans similarly found sizable reductions in use and increased risk to health, including a 23 percent reduction in use of antidiabetic drugs among diabetics.<sup>7</sup> Another U.S. study that followed chronically ill adults over four years found that higher cost sharing reduced care for both serious and minor symptoms.<sup>8</sup> In general, past studies, including the RAND Health Insurance Experiment, indicate a need for caution in insurance designs that put patients at increased financial risk, particularly those who are poor and sick.<sup>9</sup>

Even though concerns that inadequate insurance can contribute to access barriers and financial hardships have long been recognized, the extent of the underinsured problem among nonelderly U.S. adults has not been assessed since the seminal work by Pamela Farley Short and Jessica Banthin in 1995.<sup>10</sup> Their study included a methodology developed by Short that relied on detailed analyses of private insurance policies to estimate out-of-pocket costs that would be high relative to family income in the event of catastrophic illness. The paucity of research since the mid-1990s stems in part from the difficulty of gathering the type of detailed insurance and demographic information they used to count the underinsured as well as a lack of consensus on what it means to be underinsured.<sup>11</sup> To enable periodic national updates on the number of Americans who are underinsured and monitor the impact on access, policymakers need a working definition of *under-*

*insured* that can be easily applied.

The primary goal of this study is to focus policy attention on the issue of the underinsured and potential risks for access. The study also seeks to develop household survey measures that can be easily updated to monitor trends.

We define *underinsured* as being insured all year but without adequate financial protection. Using a 2003 cross-sectional survey of adults, we estimated the number of adults who were underinsured based on exposure to out-of-pocket costs that were high relative to incomes.<sup>12</sup> We then examined the effects of being underinsured on access to care, with comparisons to insured adults having more adequate coverage and to the uninsured.

## Study Data And Methods

■ **Data.** Study data come from the Commonwealth Fund 2003 Biennial Health Insurance Survey, a nationally representative telephone survey of 4,052 adults age nineteen and older living in the continental United States, conducted by Princeton Survey Research Associates. Interviews took place from 3 September 2003 through 4 January 2004. In this study we restricted the analysis to the sample of 3,293 people ages 19–64 who participated in the survey.

The survey consisted of twenty-five-minute telephone interviews administered in either English or Spanish. To enable more detailed analyses of adults with low incomes, the survey oversampled adults from telephone exchanges with a high density of low-income households. The final sample weights corrected for the disproportionate sample design and weighted the adult population by age, sex, race/ethnicity, education, household size, and region, using the 2003 Annual Social and Economic Supplement of the U.S. census. The resulting sample for analysis is representative of the 172 million people ages 19–64 living in the continental United States. The overall survey response rate was 50 percent.<sup>13</sup>

■ **Key study variables and methods.** The survey included an array of questions about access and care experiences, out-of-pocket medical care costs, insurance, income, and other demographic characteristics. When surveyed, 36 percent of all respondents had health problems: They either rated their health as fair or poor or had some type of disability or one of four chronic diseases.<sup>14</sup>

Respondents reported their current insurance status and also whether they had been uninsured at any time during the past year. We used these responses to categorize adults as insured all year or uninsured during the year.<sup>15</sup>

■ **Defining “underinsured.”** The study used indicators of financial risk to define *underinsured*. Following the lead of earlier work on the underinsured, we assessed risk by comparing cost exposure to family income.<sup>16</sup> Using respondents’ estimates of out-of-pocket medical care expenses, plan deductibles, and income, we classified them as underinsured if they were insured all year but reported at least one of three indicators: (1) Medical expenses amounted to 10 percent of income or more; (2) among low-income adults (below 200 percent of the federal poverty level), medical

expenses amounted to at least 5 percent of income; and (3) health plan deductibles equaled or exceeded 5 percent of income.<sup>17</sup>

We selected 10 percent of income because it was the threshold most commonly used in past studies of the underinsured or analyses of catastrophic costs. We included the lower threshold, 5 percent of income, for low-income adults based on the national policy embedded in the State Children's Health Insurance Program (SCHIP) that permitted some cost sharing for low-income families but limited total exposure to 5 percent of income. The RAND experiment also used a 5 percent threshold for low-income participants.<sup>18</sup>

The deductible indicator measures potential risk and was the only measure of plan cost sharing available in the survey. We specified the 5 percent threshold based on analysis revealing that the majority of adults with deductibles this high were in families with two or more people and that 93 percent had incomes below 200 percent of poverty (63 percent had incomes below 100 percent of poverty). Thus, deductibles exposed families to financial risks equal to this study's other two cost-to-income thresholds.

Two of three indicators (with deductibles as the exception) relied on current-year out-of-pocket costs and medical bills. As a result, unlike methods that simulate expenses based on analysis of insurance plans, age, and health, this "snapshot" approach will miss healthier adults with inadequate coverage who had little need for medical care during the year. The methodology thus likely underestimates the number of underinsured people.

■ **Analysis.** We used this composite indicator variable to divide continuously insured adults into two groups: underinsured and not underinsured. The "not underinsured" group also includes 545 insured adults (25 percent of the insured group) who did not provide sufficient income or expense information to assess financial risk (missing numerator or denominator values).

The analysis compared the care experiences of underinsured adults with those of adults having more adequate insurance and to uninsured adults. By construction, the "underinsured" category includes only adults who were insured all year, which allowed us to associate access experiences and out-of-pocket costs during the year with the quality of insurance and avoided the chance that events occurred at a time when the person was uninsured.

Exhibits compare experiences by insurance groups and indicate where differences are significant at the 5 percent level or better, using "adequate" insurance as the referent group. We used statistical software (STATA 7.0) that took into account the sample weights and adjusted the standard errors for the stratified sampling design.

## Study Results

■ **How many insured adults are underinsured?** Three of four people ages 19–64 said that they had been insured all year. When we applied the three indicators of

being underinsured, 12 percent of these insured adults—nearly sixteen million—were underinsured. Exhibit 1 shows the incidence of each indicator separately as well as the cumulative effect as indicators are added sequentially following the hierarchy in the exhibit. Based on reported expenses and income, about 7 percent of continuously insured adults spent 10 percent or more of their income on family medical expenses during the year. Adding low-income adults who reached or exceeded the threshold of 5 percent of income, 11 percent of adults had expenses at or above the two income-related out-of-pocket indicators during the past year; 3 percent faced deductibles that amounted to 5 percent or more of their income. Respondents often met more than one threshold, accounting for the difference between the marginal contribution of each indicator and its incidence.

■ **How many adults are uninsured and underinsured?** About one-quarter of adults—an estimated forty-five million people—were uninsured for all or part of the year, based on the survey (Exhibit 2). When uninsured adults were added to those who were underinsured based on financial indicators, we found that an estimated sixty-one million adults, or 35 percent of the population ages 19–64, had either no insurance, sporadic coverage, or insurance that exposed them to catastrophic medical costs during 2003.

Adults with lower incomes were more likely than those with higher incomes to be uninsured and, when insured, to be underinsured (Exhibit 2). In total, seven of ten low-income adults (with household income below 200 percent of poverty) were either uninsured or underinsured during the year. Similarly, underinsured adults were disproportionately low income: 73 percent had annual incomes below 200 percent of poverty (data not shown.)

Underinsured rates were also high among adults with health problems, reflecting the use of indicators based on recent out-of-pocket expenses. Among sicker adults defined broadly, 43 percent were either uninsured or inadequately insured,

#### **EXHIBIT 1** **Financial Indicators For Underinsured Adults Among Continually Insured People Ages 19–64, 2003**

Indicator	Insured adults with each indicator			
	Millions	Percent	Cumulative millions	Cumulative percent
Family out-of-pocket medical expenses represent 10% or more of income	8.9	7.1	8.9	7.1
Family out-of-pocket medical expenses for low-income families represent 5% or more of income	9.8	7.8	13.8	10.9
Deductible represents 5% or more of income	3.7	2.9	15.6	12.3
Any of three indicators	15.6	12.3	15.6	12.3

**SOURCE:** Commonwealth Fund Biennial Health Insurance Survey, 2003.

**EXHIBIT 2****Percentage Of People Ages 19–64 Who Were Uninsured And Underinsured, By Various Characteristics, 2003**

Characteristic	People ages 19–64			Among insured adults, percent who were underinsured (n = 310)
	Insured, not underinsured (n = 2,031)	Underinsured (n = 310)	Uninsured during the year (n = 952)	
All adults, millions	110.9	15.6	45.5	15.6
All adults, percent	65%	9%	26%	12.2%
Age (years)				
19–29	51%	9%	40%	16%
30–49	66	8	26	11
50–64	74	11	15	13
Sex				
Male	67	6	27	9
Female	62	12	26	16
Race				
White, non-Hispanic	70	9	21	12
Black, non-Hispanic	54	9	37	15
Hispanic	44	9	47	17
Income				
Less than \$20,000	31	17	53	36
\$20,000–\$34,999	47	17	35	27
\$35,000–\$59,999	79	5	16	6
\$60,000 or more	93	3	4	3
Poverty status				
Under 200% of poverty	32	19	49	38
200% of poverty or more	83	4	13	5
Health status				
Excellent/very good	73	7	21	8
Good	60	9	30	13
Fair/poor	46	17	37	27
Chronic conditions				
Heart disease, cancer, diabetes, or arthritis	61	15	24	19
None of the above	66	7	27	10
Health status				
Healthier	69	7	24	9
Sicker <sup>a</sup>	57	13	30	19
Family structure				
Single, no children	53	10	36	16
Single, with children	51	10	38	17
Married, no children	76	8	17	9
Married, with children	70	9	22	11

**SOURCE:** Commonwealth Fund Biennial Health Insurance Survey, 2003.

**NOTES:** Exhibits indicate unweighted sample size and adult population estimates in millions. Rows may not add to 100 percent because of rounding.

<sup>a</sup> Includes adults in fair/poor health with any of the four chronic diseases or a disability.

compared with 31 percent of healthier adults (Exhibit 2).

African American and Hispanic adults were at high risk of being uninsured and, when insured, were somewhat more likely than white, non-Hispanic adults to have inadequate insurance. The elevated rates with gaps and inadequate coverage



were related to income: 52 percent of African American and 59 percent of Hispanics adults reported incomes below 200 percent of poverty, compared with 27 percent of whites (data not shown).

■ **Access and care experiences by insurance group.** Comparisons of care, satisfaction, and confidence among the three insurance groups revealed the importance of having adequate insurance to facilitate access and more positive medical care experiences (Exhibit 3). Relative to adults with more adequate insurance, underinsured as well as uninsured adults were significantly more likely to go without care because of costs, to lack confidence that they would receive high-quality care when they needed it, and to rate care experiences negatively. More than half of the underinsured (54 percent) and uninsured (59 percent) went without at least one of four needed medical care services during the year—double the rate among those with more adequate insurance. Across the measures of cost-related access problems, underinsured adults reported forgone care at rates two to four times higher than those reported by adults classified as having more protective insurance.

### EXHIBIT 3

#### Access Barriers, Preventive Care, Satisfaction, And Confidence In Quality Of Care, By Insurance Status, Among People Ages 19–64, 2003

Access problem in past year	All adults (%)	Insured all year (%)		
		Insured, not underinsured	Underinsured	Uninsured during year (%)
Went without care because of costs				
Did not fill prescription	23%	15	38***	38***
Skipped test, treatment, or follow-up care recommended by a doctor	19	9	30***	38***
Had a medical problem but did not visit doctor	22	10	32***	47***
Did not get needed specialist care	13	8	18***	24***
At least one of the above	37	25	54***	59***
Would have received better care if had been insured or had different insurance plan	38	27	50***	60***
Doctor connection				
No regular doctor	24	14	13	51***
No visit to doctor in past year	19	15	8**	32***
Confidence and satisfaction				
Confident will get quality care when needed				
Very confident	29	35	21***	16***
Not too confident or not at all confident	28	21	39***	42***
Satisfaction with quality of care received in past year				
Very satisfied	39	46	37***	23***
Somewhat or very dissatisfied	14	9	21***	23***
Medical bill problems				
Contacted by collection agency about owing money for medical bills	23	11	46***	44***
Changed way of life to pay medical bills	15	7	35***	28***

**SOURCE:** Commonwealth Fund Biennial Health Insurance Survey, 2003.

**NOTES:** Exhibits indicate unweighted sample size and adult population estimates in millions. Statistical significance denotes significant difference compared with “insured, not underinsured.”

\*\* $p < .05$  \*\*\* $p \leq .01$

*“Being underinsured is related to underlying gaps in benefit structure, cost sharing, and other insurance limits.”*

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Notably, despite being insured all year, underinsured adults reported negative care experiences at rates similar to those of uninsured adults. Having a regular doctor was the only measure for which underinsured adults’ responses were similar to those of adults with adequate insurance.

Underinsured adults were also significantly less confident about their ability to get care in the future and less satisfied with the quality of the care received than were those with more protective coverage. Perhaps signaling underlying anxiety about their ability to get care when needed, half of underinsured adults thought that they would have received better care if they had been covered by a different insurance plan.

■ **Medical bill burdens by insurance group.** Underinsured and uninsured adults also were at risk for facing collection agencies and enduring high levels of financial stress as a result of medical bills. Nearly half (46 percent) of underinsured adults reported that they were contacted by a collection agency during the past year about owing money for medical bills; more than one-third (35 percent) said that they had to change their way of life dramatically to pay for medical bills. The latter group includes a high proportion saying that they took on high levels of credit card debt or took out a loan or mortgage against their home to pay medical bills (data not shown). As illustrated, rates of medical bill stress among the underinsured were almost equal to those reported by the uninsured.

■ **Insurance adequacy and access for adults with health problems.** Access and care concerns were most acute among adults with health problems who were either underinsured or uninsured (Exhibit 4). Two-thirds of sicker adults who were underinsured and three-fourths of sicker adults who were uninsured went without needed care because of costs during the year. Notably, nearly half of underinsured sicker adults with chronic diseases or poor health did not adhere to medications, 38 percent did not see a doctor when sick, and one-third did not follow up on diagnostic treatments or care recommended by their doctors because of costs. Nearly half of sicker adults who were underinsured lacked confidence in access—near the levels reported by uninsured adults with health problems.

Inadequate coverage as well as being uninsured also left sicker adults grappling with medical bill burdens. Nearly three of five in each group faced collection agencies during the year. Nearly half of underinsured sicker adults said that medical expenses resulted in a major change in family life circumstances to pay bills.

These findings reflect the double jeopardy of health problems and low incomes among the uninsured and problems with policies that entail substantial cost sharing relative to income. Seventy percent of underinsured sicker adults and 65 percent of uninsured sicker adults shown in Exhibit 4 had incomes below 200 per-



**EXHIBIT 4****Access And Care Experiences Among People Ages 19–64 With Health Problems, By Insurance Status, 2003**

	Total (N = 1,294)	Insured all year		
		Insured, not underinsured (n = 702)	Underinsured (n = 176)	Uninsured during year (n = 416)
Total sicker adults (weighted, in millions)	61.8	35.0	8.3	18.5
No doctor visit in the past year	13%	7%	4%	27%***
Went without care because of costs in past year				
Did not fill prescription	36	22	46***	56***
Skipped recommended test or follow-up	30	16	35***	56***
Had a medical problem, did not visit doctor or clinic	33	16	38***	62***
Did not get needed specialist care	22	13	22***	39***
Any access problems due to cost	52	36	64***	76***
Not too or not at all confident will get high- quality care when needed	38	29	45***	52***
Somewhat or very dissatisfied with quality of care received in the past year	20	14	27***	29***
In the past year:	37	20	59***	58***
Contacted by a collection agency	26	12	48***	41***
Changed way of life to pay medical bills				

**SOURCE:** Commonwealth Fund Biennial Health Insurance Survey, 2003.

**NOTES:** Sicker adults are those rating their health as fair/poor, with a disability or any of four chronic conditions. Statistical significance denotes significant difference compared with “insured, not underinsured.”

\*\*\* $p \leq .01$

cent of poverty.

To control for the differences in income, health, age, and other demographic characteristics across insurance categories, we also conducted a series of multivariate analyses. In all regression analyses, the underinsured and the uninsured remained significantly more likely to report access concerns or negative care experiences than those with adequate coverage, after demographic differences were adjusted for.<sup>19</sup>

■ **Inadequate insurance and other insurance characteristics.** Using descriptions of insurance plans and plan experiences, the study found that being underinsured is related to underlying gaps in benefit structure, cost sharing, and other insurance limits (Exhibit 5). Compared with those having more adequate coverage, adults who were underinsured were less likely to have prescription drug coverage, dental coverage, or vision benefits and more likely to report having none of these benefits. Underinsured adults were also significantly more likely to have deductibles of \$500 or more, a possible indication of overall higher cost sharing.

Experiences with plan limitations indicate generally more restrictive coverage. Underinsured adults were more likely than those with more adequate coverage to encounter limits on what their plans would pay to treat an illness or injury or to discover that their plans did not cover care they had thought would be covered.

**EXHIBIT 5****Characteristics Of Insurance Plans By Insurance Adequacy, Among Continually Insured People Ages 19–64, 2003**

Characteristic	All insured adults	Insured all year	
		Insured, not underinsured	Underinsured
Scope of benefits			
Prescription coverage	91%	92%	84%***
Dental	73	75	59***
Vision	63	66	47***
All of the above	54	57	36***
None of the above	5	5	11***
Insurance plan experiences with current policy			
Plan would not pay for care thought to be covered	22	20	41***
Reached limit of what insurance would pay for specific treatment of illness	14	12	26***
Annual deductible per person			
Less than \$500	82	84	65 <sup>a</sup>
\$500 or more	18	16	35
Annual share of premium costs			
Less than \$500	28	28	28
\$500–\$1,499	23	23	23
\$1,500 or more	31	31	37
Premium represents 5% or more of family income	18	13	47***
Premium represents 10% or more of family income	5	3	19***
Among those with premium costs 5%+ of income			
Annual deductible less than \$500	60	68	46***
Annual deductible \$500 or more	29	20	46
Rating of insurance plan			
Excellent or very good	50	53	31 <sup>a</sup>
Good	29	29	33
Fair or poor	20	17	36
Insurance source			
Employer-sponsored	80	82	64***
Small firm (<50 workers)	24	24	28
Midsized firm (50–499 workers)	26	26	31
Large firm (500+ workers)	48	49	40
Individual purchase	6	6	8
Public and other	14	13	27
Employer-sponsored coverage by wage level			
Under \$10 per hour	14	12	37 <sup>a</sup>
\$10–\$15 per hour	24	22	36
More than \$15 per hour	53	56	20

**SOURCE:** Commonwealth Fund Biennial Health Insurance Survey, 2003.

**NOTES:** Statistical significance denotes significant difference compared with “insured, not underinsured.”

<sup>a</sup> Chi-square  $p < .01$  for the full distribution of deductibles, insurance rating, and employer-sponsored coverage by wage level.

\*\*\* $p \leq .01$

On both measures, underinsured adults reported coverage limitations at double the rate of those with more adequate coverage.

Overall, underinsured adults were more likely than those with more adequate coverage to face higher cost sharing, plan limits, and more restrictive benefits. Yet, despite more limited coverage, underinsured adults often incurred high annual

premium costs: One-third had annual premium shares of \$1,500 or higher, and 47 percent paid premiums that amounted to 5 percent or more of their annual incomes. These results indicate that the underinsured are coping with financial stress from both premiums and out-of-pocket costs.

Likely reflecting the benefit structure, financial exposure, and access experiences, one-third of the underinsured rated their insurance negatively, about double the rate of those with more adequate insurance (Exhibit 5). Negative plan ratings were correlated with benefit gaps as well as exposure to financial risk among both insurance groups.

Sources of insurance varied somewhat among the two insured groups. The underinsured were more likely than those with more adequate coverage to be insured by sources other than employer-based plans. Among those with job-based coverage, the distribution by firm size was similar (Exhibit 5). Within employer groups, low-wage workers were the most likely to have inadequate coverage. This pattern likely reflects both the types of policies available from lower-wage employers and the fact that any level of cost sharing will expose low-wage workers to relatively greater financial risk than that faced by their higher-income coworkers.

## Discussion And Policy Implications

Based on a financial definition of inadequate insurance and recent cost experience, the study indicates that nearly sixteen million adults with full-year coverage were underinsured in 2003. Including those who lacked coverage at any time during the year, one in three U.S. adults were underinsured or uninsured.

The findings indicate that having inadequate insurance as well as being uninsured undermines access to care, satisfaction, and confidence in the quality of care obtained. Access barriers reported by the underinsured at times approach rates observed among uninsured adults.

■ **Implications of higher cost sharing.** Some policymakers and researchers have endorsed the move toward greater cost sharing, arguing that encouraging people to pay more of the health care dollar will make them more prudent consumers of health care services and help moderate health care cost inflation. Those advocating insurance redesign often envision coupling high deductibles with employer-funded or personally funded HSAs that could be used to pay front-end costs. The most recent published studies, however, indicate that only a small share of high-deductible plans included employer-funded accounts.<sup>20</sup> HSAs also tend to favor healthier and higher-income adults who have the most to gain from tax-preferred status.<sup>21</sup>

This study indicates that without targeted protections, insurance policies that expose patients to costs that are high relative to income are likely to have a negative effect on access and adherence to recommended care. The risks are particularly high for low-income patients and those with chronic illnesses.

Past studies of the effects of cost sharing indicate that it is at best a blunt tool. Patients are nearly as likely to cut back on essential care as on more elective or dis-

*“Given the public policy push toward higher deductibles, it will be important to track coverage adequacy over time.”*

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cretionary services.<sup>22</sup> The RAND experiment found that low-income families were particularly sensitive to costs and that steep reductions in physician visits undercut doctors' ability to assess and screen as well as to treat chronic or acute disease. These results are particularly notable because RAND made an effort to protect those with lower incomes by putting a ceiling on cost exposure relative to income and having lower caps for the poor and near-poor.<sup>23</sup>

In the current marketplace, insurance policies rarely adjust patient cost sharing or out-of-pocket limits for varying incomes. Yet the effect on care patterns is likely to relate directly to incomes. A \$1,000 deductible might appear to carry modest financial risk from the viewpoint of a family earning \$100,000 or more per year with assets. The same policy would expose a minimum-wage family earning \$10,000 a year to substantial risk, leaving them reluctant to seek care.

A clear consequence of deductibles and cost sharing will be to shift more of the costs of medical care to the sickest patients and their families. Given the concentration of health expenditures, this shift may do little to address underlying cost trends yet unduly burden families that are already under stress because of poor health.<sup>24</sup>

■ **Shifting trends.** The findings are likely to be symptoms of more to come. The survey took place at the end of 2003, at the onset of a shift toward higher deductibles and cost sharing. In the survey a small percentage of insured adults—just 6 percent—reported deductibles of \$1,000 or more. Given the public policy push and market trends toward higher deductibles, it will be important to track coverage adequacy and related care patterns over time. The United States may well be on a path to where it becomes harder to distinguish the insured from the uninsured if insurance no longer provides either access or financial protection.

■ **Study limitations and strengths.** Estimates of the number of insured people whose coverage is inadequate will clearly vary depending on the method and measures used to categorize insurance. In this study, except for deductibles, we used indicators of financial risk that relied on cost experiences. A limitation of this methodology is that it misses healthier adults having inadequate policies who have used medical care less recently. Thus, the study—and any approach that relies on experiences—likely underestimates the number of underinsured adults.

Despite this limitation, the methodology offers an approach that could easily be adapted to national federal surveys such as the Medical Expenditure Panel Survey (MEPS) and the National Health Interview Survey (NHIS) to enable monitoring of trends. By relying on measures easily reported by adults in interviews, without recourse to extensive review of insurance documents, the indicators provide an efficient means of identifying the extent of financial stress and of tracking change.

Although likely to undercount the underinsured, these indicators could yield a first alert to inform policy if markets move to higher front-end cost sharing or benefit limits on essential services.

■ **Need for attention to insurance benefit design.** Overall, the study points to a need for new policy and research attention to health insurance benefit design, with a focus on assessing design effects on access and financial protection relative to income. International studies repeatedly find that the United States often lags behind other countries in key measures of health status and timely access to care while leading the world in exposure to medical care costs.<sup>25</sup> Without attention to insurance adequacy and whether patients receive effective care, an increase in the number of underinsured people could undermine health, productivity, and financial security in the future.

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The authors thank the anonymous reviewers for their helpful comments. The views presented here are those of the authors and should not be attributed to the Commonwealth Fund, its directors, or its officers.

## NOTES

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