



2010 SURVEY DATA

PREPARED BY CENTER FOR HEALTH OUTCOMES AND PHARMACOECONOMICS RESEARCH, THE UNIVERSITY OF ARIZONA

Health Insurance Status and Medical Debt in Arizona



ARIZONA HEALTH SURVEY

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Overview

Financial hardship due to out-of-pocket medical expense continues to be a large and growing problem in the US.¹⁻⁶ Having health insurance should protect individuals from medical debt. However, in contrast to most insurance products which indemnify losses stemming from low-probability/high-consequence events, health insurance in the US rarely provides complete protection against unexpected healthcare-related financial loss. Instead, an increasing portion of medical costs are paid directly by the insured in the form of co-payments, deductibles, exclusions and limits on covered benefits, coinsurance provisions, and lifetime spending caps.⁶

Medical debt is also more damaging than other types of consumer debt—at least to some extent because medical bills are often incurred through an illness or injury that also limits ability to work. Specifically, problems paying medical costs are associated with higher credit card debt,⁷ more calls from bill collectors,⁷⁻⁹ increased bankruptcy rates,^{7,10-12} and diminished access to care.^{1-3,13-15}

This report provides an update to a recently published analysis of the impact of health insurance status on medical debt, and of both on access to care.¹⁶

Methodology

The *Arizona Health Survey* is a comprehensive survey of Arizona households designed to assess health insurance coverage, status, behaviors, and social and environmental factors that affect population health.¹⁷ Previous analyses and reports were based on the first *Arizona Health Survey* fielded in 2008 (found at arizonahealthsurvey.org/medical-debt-a-four-part-report). This update is based on data from both the 2008 survey and the most recent survey fielded in the first half of 2010. The aim of this update is to determine whether relationships found in the previous study between insurance status and medical debt, and between both of these and access to care are maintained by the 2010 data. Because individuals 65 years of age and older have access to Medicare, this study, like the 2008 analysis, focuses on adults 18 to 64 years of age.

As with the 2008 analysis, two sets of logistic regression models were specified and estimated. The first set examines predictors of medical debt, including insurance status. The second set examines the relative impact of medical debt and insurance status on whether needed medical care or prescribed medication is delayed or foregone. Because of the consistency between the 2008 and 2010 *Arizona Health Survey* instruments, the same sets of variables were available in both years. Nested model comparisons were used to test whether the relationships seen in 2008 (i.e., the adjusted odds ratios [AOR] estimated for each variable) changed significantly between 2008 and 2010.

Results

The prevalence of medical debt increased slightly between 2008 and 2010. The percent of those reporting problems paying bills increased from 20 percent in 2008 to 22 percent in 2010, reports of currently paying off medical bills increased from 19 percent in 2008 to 21 percent in 2010, and reports of either increased from 29 percent in 2008 to 31 percent in 2010 (See “Part 1: The Extent of the Problem” at arizonahealthsurvey.org). Similar to what was seen in 2008, in 2010 reports of problems paying medical bills were more prevalent than reports of currently paying off medical bills for both the uninsured and those with inconsistent insurance (Table 1). Problems paying medical bills and medical debt in general were more prevalent for those without insurance than for those with insurance. All measures of medical debt were highest in those who experienced lapses in coverage during some portion of the previous year (inconsistent coverage).

TABLE 1. Relationship Between Medical Debt and Insured Status, and Delayed Medication and Care*

Frequency	Proportion of All 18 to 64 Year Olds	Problems Paying or Unable to Pay Medical Bills in Past Year	Currently Paying off Medical Bills	Problems Paying OR Current Medical Bills	No Medical Debt
Percent of Each of the Categories Below Reporting Each Type of Medical Debt					
All Arizonans 18 to 64 years of age	100.0%	21.6%	21.2%	31.3%	68.7%
No insurance	19.6%	31.4%	20.6%	39.0%	61.0%
Insured	80.4%	19.2%	21.3%	29.5%	70.5%
Insured now, but uninsured in past year	6.1%	43.7%	24.3%	51.1%	48.9%
Not insured now, but insured in past year	6.3%	42.5%	31.2%	51.9%	48.1%
Percent of All 18 to 64 Year Olds with Each Type of Medical Debt Who Reported Each Delayed Care					
Delayed or did not get a prescription	13.8%	33.6%	25.0%	27.4%	7.5%
Insurance or cost one reason	8.8%	26.7%	18.2%	20.3%	3.6%
Delayed or did not get needed care	20.6%	44.7%	32.6%	36.4%	13.5%
Insurance or cost one reason	11.5%	31.5%	20.9%	24.5%	5.6%
No delayed care or prescription	73.0%	46.0%	56.9%	53.8%	81.8%
Neither with insurance or cost as reason	84.3%	59.0%	71.2%	67.5%	91.9%

* Weighted data.

Reports of delayed medication and care were slightly lower in 2010 than in 2008 (see “Part 4: Consequences of Medical Debt at arizonahealthsurvey.org) both for overall prevalence and for each type of medical debt. However, as seen in 2008, delayed medication and care are highest among those who report problems paying medical bills and lowest among those who report no medical debt problems.

Complete data on 7,075 cases (93 percent of the sample; n=2,365 from 2008 and n=4,714 from 2010) were available for analysis in the logistic regression models. Significant p -values ($p \leq .05$) for the nested model comparisons indicated that there were significant changes between 2008 and 2010 in the relationships found between both measures of medical debt and their predictors, and between delayed care and medications and their predictors. However, further analyses revealed that these changes were generally concentrated in just a few of the predictor variables. The changes seen in the relationships between those variables and each model’s dependent variable are discussed below.

Medical Debt

Two significant changes were seen between 2008 and 2010 in the predictors of the first type of medical debt: problems paying bills. The first is that those with inconsistent insurance have even higher odds of reporting problems paying bills in 2010 than in 2008. In 2008 those with inconsistent insurance had 2.5 times the odds (AOR=2.48) of this type of medical debt. In 2010 these odds almost doubled (AOR=4.42, 95%CI 3.26-5.98). The second significant change was that in 2010 (but not in 2008), and compared to those with employer insurance, those with AHCCCS coverage had about two-thirds the odds of problems paying bills (AOR=0.62, 95%CI 0.46-0.83).

There was only one significant change between 2008 and 2010 in the predictors of the second type of medical debt: currently paying off medical bills. Compared to 2008, those in 2010 who self-identified as Hispanic had significantly higher odds of reporting current medical bills. However, although the change from 2008 was statistically significant, in neither year was the relationship (i.e., the AOR) between Hispanic identification and currently paying bills significant.

Access to Care

There were three statistically significant changes seen between 2008 and 2010 in the predictors of delayed care. First, compared to 2008, in 2010 a higher income level was associated with higher odds of delayed care. This effect cancels out the protective effect of income seen in 2008 and results in an AOR for income in 2010 that is not statically different than 1.0 (AOR=0.999, 95%CI 0.996-1.001). Second, those who were married or living with a partner in 2010 had lower odds of delayed care compared to 2008. However, as with Hispanic status above, in neither year was the relationship between being married or living with a partner and delayed care statistically significant. The third difference between 2008 and 2010 was that the effect on delayed care due to having current medical bills dropped significantly. In 2008 the odds of delayed care for those reporting that they were currently paying off medical bills were three times (AOR=3.04) that of those without current bills. In 2010 those odds dropped by almost half (AOR=1.74, 95%CI 1.21-2.49).

Between 2008 and 2010 there were five statistically significant changes in the predictors of delayed medications. First, the odds of delayed medication for those with inconsistent coverage dropped significantly between 2008 and 2010. In 2008 those with inconsistent coverage had almost five times the odds (AOR=4.67) of delayed medication than those without. In 2010 these odds drop to only being twice that of those without (AOR=2.03, 95%CI 1.34-3.07). Compared to 2008, in 2010 the odds of delayed medications are significantly higher for those with dental coverage and for not having a usual source of care. However, in both cases neither the 2008 nor the 2010 AORs are statistically different than 1.0. The fourth significant change is in the effect of current medical bills on delayed medications. As was the case with delayed care, the odds of delayed medication for those currently paying off medical bills dropped significantly between 2008 and 2010. However, in this case the effect of current bills dropped so much that in 2010 the AOR was no longer significantly different than 1.0 (AOR=1.41, 95%CI 0.93-2.14). Finally, the additive effect of reporting both problems paying bills and currently paying bills significantly increased between 2008 and 2010 to the point that the 2010 AOR is no longer statistically different than 1.0 (AOR=1.09, 95%CI 0.65-1.82).

Discussion

Analysis of the 2010 *Arizona Health Survey* data indicates that some of the relationships between medical debt and its predictors and between delayed care and medications and their predictors have changed significantly between 2008 and 2010. However, the main conclusions of the previous study have not substantially changed. Based on the analysis of the 2008 data we concluded that simply being insured does not appear to lower the odds of accruing medical debt. In general, this conclusion holds for the 2010 data with the following exception: for those with insurance and compared to employer-sponsored insurance, in 2010 AHCCCS coverage appears to offer some protection from problems paying medical bills. Our second major conclusion from the 2008 analysis was that, when compared to insurance status, medical debt is an independent and better predictor of delayed or missed medical care and medications. This conclusion also generally holds for the 2010 data. However, in 2010 it is mainly the report of problems paying bills (and not currently paying bills) that is associated with delayed care and medications.

That AHCCCS coverage offers some protection against problems paying medical bills is not surprising given that AHCCCS coverage has no deductible, small co-payments, no coinsurance, and no cap on covered expenditures. Given that neither AHCCCS benefits nor eligibility changed substantially between 2008 and the summer of 2010, what is surprising is that it only became significantly protective in 2010. Two changes between 2008 and 2010 may help explain this change. First, Medicaid enrollment in Arizona increased substantially between 2008 and 2010 from 16 percent to 20 percent of the 18-to-64 year old population (see arizonahealthsurvey.org/arizona-adults-access-to-health-care). Second, compared to the 2008 survey, the 2010 *Arizona Health Survey* sample included more respondents from outside major metropolitan areas — i.e., from rural areas, which also have a higher proportion of AHCCCS enrollment. The proportion of the 18-to-64 year old sample that came from Maricopa and Pima Counties (the two most populous counties in the state) went from 70 percent and 9 percent, respectively in 2008 (when Maricopa was purposely oversampled), to 35 percent and 25 percent in 2010 (when rural areas were purposely oversampled). It could be that these newer and/or more rural enrollees reported fewer problems paying medical bills either because their out-of-pocket medical expenses were lower or because paying these bills was not considered a problem.

It is also interesting that the impact of current medical bills on delayed care and medications dropped significantly between 2008 and 2010. The proportion of Arizonans 18 to 24 years old who report that they are currently paying off medical bills increased only slightly between 2008 and 2010 from 19 percent to 21 percent. It is possible that because of the dramatic increases in unemployment and home foreclosures seen between the two surveys — and the attendant financial hardship imposed by both — we are becoming numb to the concept of having bills to pay. If this is true, it may have lessened the effect of current medical bills on whether someone delays or forgoes prescribed medication and needed care.

Conclusion

The implications of these results for health system reform are two-fold. First, consistent coverage is essential, suggesting that health insurance should be made portable, universally available, or both. Second, although a primary purpose of health insurance is to provide protection from the financial impact of unexpected medical bills, simply being insured does not appear to lower the odds of medical debt once confounding factors are considered — especially for those not eligible for AHCCCS. These analyses show that, at least in Arizona, health insurance is still not protecting individuals and families from medical debt, and that medical debt is a substantial and independent predictor of delayed or missed care and medication. Therefore, the need for efforts to reduce large out-of-pocket medical expenditures persists.

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