

Supplementary Appendix

This appendix has been provided by the authors to give readers additional information about their work.

Supplement to: Cutler DM, Gelber AM. Changes in the incidence and duration of periods without insurance. N Engl J Med 2009;360:1740-8.

Appendix

As a longitudinal survey, the SIPP includes a variety of weights – one set for cross-sectional analysis and another for longitudinal analysis. The Longitudinal Panel Weight covering all waves of the 2001-04 SIPP (i.e. waves 1-9) is the correct weight for the purpose of our hazard model. We have used this weight in all the tables in the paper relating to the 2001-04 survey and the analogous weight for the 1983-86 survey. The Census Bureau also recommended using this weight for analyzing the percent of the population uninsured at a given time.²⁹ In revising the paper, we re-contacted the Census Bureau, and they indicated that the Longitudinal Panel Weight could be used for analyzing the percent of the population uninsured at any given time, but that the Final Person Weight (applicable to analyzing data from a cross-section) could also be used.

Appendix Table 1 shows that when we use the Final Person Weight for 2001-04 (rather than the Longitudinal Panel Weight, used in Table 1), the increase in the share uninsured is more similar to the Current Population Survey and to published statistics on the 2001-04 SIPP, such as those produced by the Kaiser Family Foundation.

Education is defined slightly differently in the 1983-86 and 2001-04 SIPP surveys. The 1983-86 SIPP asks for the highest grade the person attended, and whether the person completed that grade. The 2001-04 SIPP asks specifically about the highest grade completed or highest degree received. We code these to make them consistent across the surveys. “College graduate” refers to those with a four-year college degree and those with a graduate degree.

Appendix Table 2 displays estimated hazard ratios and standard errors for the probability of losing coverage, including health status as a regressor. The sample is limited to the population aged 18 and older (for whom health status is ascertained) and the time period after the first year (at the end of which health status was asked). Health status is available for those 15 and older, but we limit the sample to those 18 and older in order to make the results more directly comparable to other results we show for adults 18 and older. Appendix Table 3 displays estimated hazard ratios and standard errors for the determinants of insurance status including health status as a regressor, with the shorter time period and the smaller age sample. Appendix Table 4 shows the predicted probability of obtaining insurance coverage after 24 months, separately by demographic group and by source of insurance coverage.

Appendix Table 1. Characteristics of the Study Samples Using Different Weights

(percent of sample)

	1983-86		2001-04	
	Cross-section	Longitudinal	Cross-section	Longitudinal
	weights	weights	weights	weights
Measure	(N=35,538)	(N=25,946)	(N=56,146)	(N=40,282)
Age (%)				
<18	34.1	32.0	28.5	28.7
18-61	65.9	68.0	71.5	71.3
Female (%)	50.6	50.6	50.5	50.6
Race (%)				
White	84.7	84.7	80.9	80.8
Black	12.2	12.1	13.4	13.4
Other	3.1	3.1	5.7	5.8
Education of highest earner(%)				

<High School Diploma	25.5	24.8	13.1	13.1
High School Diploma	33.6	33.8	29.1	29.3
Some College	19.7	20.0	30.4	30.7
College Graduate	21.1	21.4	27.4	26.9
Uninsured in Month (%)	16.0	15.8	16.5	15.9
Any Uninsured Spell (%)	38.7	35.4	38.3	37.3
Health Fair/Poor (%) ⁺	10.6	10.9	10.6	10.5

Note: Sample sizes are larger under cross-sectional weights than under longitudinal weights

because longitudinal weights are zero for those for whom there is at least one month of data missing (for example, because of cutbacks in the sample size by the SIPP).

⁺ Ages 18+.

Appendix Table 2: Hazard Ratios of Losing

Private and Public Insurance, 1983-86 and 2001-04, with Health Status as a Regressor

Variable	1983-86		2001-04	
	Hazard Ratio	95% Confidence Interval	Hazard Ratio	95% Confidence Interval
Hazard Ratio for Private Coverage				
<i>Education of highest earner (relative to No High School Diploma)</i>				
Exactly a High School Diploma	.87	(.78, .97)	.67	(.61, .75)
Some College	.92	(.81, 1.04)	.60	(.54, .67)
College Graduate	.63	(.55, .71)	.34	(.30, .38)
Women (relative to Men)	.89	(.82, .96)	.80	(.75, .85)
<i>Race (relative to Whites)</i>				

Blacks	1.55	(1.37,	1.27	(1.16,
		1.75)		1.40)
Other Races	1.56	(1.27,	1.39	(1.21,
		1.93)		1.58)

Health status (relative to good/very good/excellent)

Fair/poor	1.01	(.88, 1.17)	.70	(.60, .80)
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Hazard Ratio for Public Coverage

Education of highest earner (relative to No High School Diploma)

Exactly a High School Diploma	.63	(.44, .89)	.70	(.58, .84)
Some College	.28	(.17, .47)	.44	(.35, .54)
College Graduate	.34	(.20, .57)	.23	(.17, .31)

Women (relative to Men)	1.98	(1.46,	2.27	(1.96,
		2.69)		2.63)

Race (relative to White)

Black	1.74	(1.24,	1.49	(1.24,
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		2.44)		1.78)
Other Races	.46	(.16, 1.29)	1.50	(1.16, 1.93)

Health status (relative to good/very good/excellent)

Fair/poor	1.61	(1.12, 2.31)	2.01	(1.62, 2.50)
N	15,894		26,346	

Appendix Table 3: Hazard Ratios of Obtaining

Private and Public Insurance, 1983-86 and 2001-04, with Health Status as a Regressor

Variable	1983-86		2001-04	
	Hazard Ratio	95% Confidence Interval	Hazard Ratio	95% Confidence Interval
Hazard Ratio for Private Coverage				
<i>Education of highest earner (relative to No High School Diploma)</i>				
Exactly a High School Diploma	1.34	(1.22, 1.47)	1.36	(1.25, 1.49)
Some College	1.46	(1.31, 1.62)	1.65	(1.51, 1.80)
College Graduate	1.45	(1.30, 1.61)	1.92	(1.74, 2.11)

Women (relative to Men)	1.09	(1.02,	.94	(.89, 1.00)
		1.16)		

Race (relative to Whites)

Blacks	1.01	(.91, 1.12)	1.01	(.94, 1.09)
Other Races	1.01	(.85, 1.21)	.95	(.85, 1.07)

Health status (relative to good/very good/excellent)

Fair/poor	.73	(.64, .83)	.78	(.70, .86)
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Hazard Ratio for Public Coverage

Education of highest earner (relative to No High School Diploma)

Exactly a High School Diploma	.68	(.50, .91)	.61	(.52, .71)
Some College	.42	(.27, .65)	.40	(.33, .48)
College Graduate	.41	(.26, .65)	.28	(.22, .36)
Women (relative to Men)	1.93	(1.46,	2.29	(2.00,
		2.53)		2.62)

Race (relative to White)

Black	1.76	(1.29, 2.40)	1.44	(1.23, 1.68)
Other Races	1.18	(.61, 2.30)	1.23	(.96, 1.58)
<i>Health status (relative to good/very good/excellent)</i>				
Fair/poor	2.38	(1.83, 3.43)	2.25	(1.88, 2.70)
N	4,340		8,170	

Appendix Table 4: Predicted Probability of Insurance Coverage after 24 Months Among

Those Who Lose Coverage (%)

Demographic Group	Private Insurance			Public Insurance		
	1983-	2001-	P-value	1983-	2001-	P-value
	86	04		86	04	
<i>All</i>	65.2	59.2	<.001	8.7	20.4	<.001
<i>Children (Under 18)</i>	62.3	58.5	<.001	13.9	29.7	<.001
<i>Adults (18-61)</i>	66.4	59.6	<.001	6.4	16.4	<.001
<i>Education of highest earner</i>						
<High School Diploma	53.2	41.2	<.001	18.8	39.4	<.001
High School Diploma	64.7	56.2	<.001	9.6	22.9	<.001
Some College	70.3	64.9	<.001	5.1	14.4	<.001
College Graduate	69.8	71.4	.04	3.2	8.6	<.001
<i>Health Status⁺</i>						

Fair/poor	33.4	29.3	.01	27.1	53.4	<.001
Good-Excellent	49.3	49.4	.47	8.5	22.4	<.001

Note: Estimates are obtained for each demographic group and weighted by the average population share of the demographic group over both time periods. Models are estimated for all individuals and predictions are made for newly uninsured.

⁺ Results for health status rely on a sample of only those 18-61 and without the first 12 months of the sample period. Results shown for those in fair/poor or good-excellent health represent the predicted probability of insurance coverage after 16 months.
