AN EXAMINATION OF STATIC AND DYNAMIC ASPECTS OF UNINSURANCE IN TEXAS

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Introduction

The objectives of this paper are:

1. To compare and contrast dynamic measures of health uninsurance to static measures of health uninsurance; and,
2. To develop a small-area measurement of health uninsurance that incorporates dynamic and static indicators.

Toward these ends, the paper:

- compares the Survey of Income and Program Participation (SIPP) results to cross-sectional uninsurance rates
- analyzes spells of uninsurance using data from the SIPP
- applies these findings to Texas counties
- discusses the implications for health insurance policy

Understanding the Measurement of Health Uninsurance

Introduction. Discussions of America's health care delivery system often center on the number of uninsured or the rates of uninsurance among certain demographic groups. However, the most commonly cited surveys often present widely divergent estimates of uninsurance. This is because there are many different ways to measure uninsurance. As a consequence, how uninsurance is measured is a critical factor for policy that seeks to address health insurance coverage. These issues are discussed in more detail below.

Why is the Lack of Health Insurance Important? The U.S. Census Bureau estimates that 49.9 million Americans were uninsured in 2010 (Census 2011). This is a little over 16 percent of the total population. Given the high costs of health care, many of these uninsured have conditions that go undiagnosed and untreated. When the uninsured do seek medical care, many of them incur significant financial debt. As a consequence, the lack of health insurance has been characterized as a public health issue that can disproportionally impact the fiscal well-being of the uninsured (Bovbjerg and Hadley 2007).

Though the consequences of health uninsurance are important, it is difficult to gauge the magnitude of this problem. Most of our information comes from national surveys that use different designs and methodologies (SHADAC 2011). One major difference between the surveys is how the uninsurance question is presented in the questionnaire. Because they use different time referents, the surveys can produce vastly different uninsurance rates. So, the interpretation of uninsurance rates requires an understanding of the reference period.

How is Uninsurance Measured? At its simplest, uninsurance occurs when a person does not have health insurance. However, people can become insured and uninsured multiple times during their lifetime or even during a year. As such, uninsurance is time-specific and the measurement of uninsurance requires some kind of time referent. Typically, the surveys incorporate time in the questionnaire to derive three measures of uninsurance:

1. *Was the respondent uninsured for the entire 12 months preceding the survey?*
2. *Is the respondent uninsured at a certain point in time (typically, at the time of the survey)?*
3. *Was the respondent uninsured at any time during the 12 months preceding the survey?*

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Table 1 shows the time referents used by three of the most cited health insurance coverage surveys in the United States. Of these, only the SIPP uses all three measures of uninsurance.

Table 1: Uninsurance Time Referents for Three Commonly Cited Surveys*

	FULL YEAR	CERTAIN POINT IN TIME	ANY POINT IN YEAR
CPS – ASEC	●		
ACS		●	
SIPP	●	●	●

* CPS – ASEC is the Census Bureau's Current Population Survey – the Annual Social and Economic Supplement.
ACS is the Census Bureau's American Community Survey.
SIPP is the Census Bureau's Survey of Income and Program Participation.
Other national health insurance surveys include: the Medical Expenditure Panel Survey (U.S. Department of Health and Human Services); and, the Behavioral Risk Factor Surveillance and National Health Interview Surveys (U.S. Department of Health and Human Services). In addition, beginning with 2005, SAHIE (Small Area Health Insurance Estimates) produces annual, model-based estimates of state- and county-level uninsurance rates.

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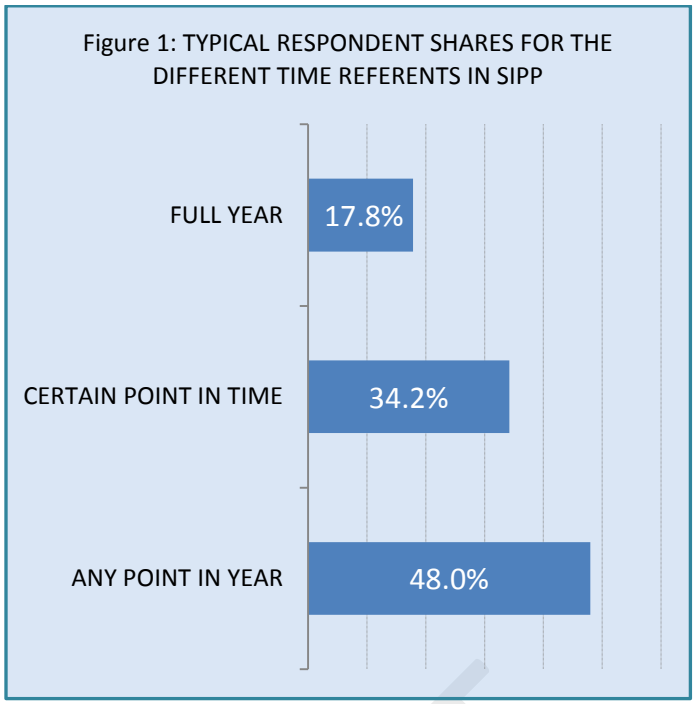
When SIPP's three measures of uninsurance are compared in Figure 1, we see that the largest group of respondents are those who report being uninsured at any point the previous year (48.0 percent). The smallest group is that which reports not being insured for a full year (17.8 percent) while those who were uninsured at a certain point in the previous year are in between the two extremes (34.2 percent). The wide range reflected here occurs because people experience both long and short spells of uninsurance. Thus, at any point in time, the number of uninsured persons will include those who are chronically uninsured as well as those who will be uninsured for only one or two months.



In the Figure 1 example, the uninsurance rate used by a policy-maker could vary substantially depending on which measure is selected. The relevant measure depends on the particular policy issues being considered.

Policy Implications. To the extent that uninsurance is regarded as a public health issue, we would assume that longer periods of uninsurance are more problematic than shorter periods. Thus, respondents with a full year of uninsurance would be a greater policy concern than those who were uninsured at any point in the year. While this argument has merit, we see from Figure 1 above that this approach would ignore the 48.0 percent of respondents who were uninsured at some point during the year – which is more than 2.5 times the full-year share. In another example, Tang, Olson, and Yudkowsky (2003) use MEPS to examine the widely cited Current Population Survey (CPS – ASEC) estimates of children without health insurance. CPS – ASEC counts the uninsured as lacking insurance for a whole year (DeNavas, Proctor, and Smith 2011). Tang *et al.* (2003) found a 5-to-3 ratio when comparing children without insurance for part of the year to children without insurance for the whole year. Consequently, Tang *et al.* (2003) conclude that CPS – ASEC substantially underestimates the need for additional children's insurance.

If, as assumed in Tang *et al.* (2003), the policy goal is to provide continuous access to health insurance, then the policy-maker would focus on how many people were uninsured at any time during the 12 preceding months. However, to successfully evaluate and implement such an approach would require information on how many people in which geographic locations were uninsured for how long. Presently, there are no surveys that provide the detailed data needed to conduct this kind of analysis.

Future Directions. In their assessment, Tang *et al.* (2003) calculate the total months of uninsurance spells for children. While the primary goal was to assess alternatives to the 'full-year uninsured' definition, this construct provides a more uniform measure of uninsurance than the various uninsurance rates from the national surveys. Such a construct requires detailed retrospective information which is not available in most cross-sectional surveys such as CPS-ASEC. Though the required retrospective data are available in panel surveys such as MEPS and SIPP, their small sample sizes preclude estimates below the state level of geography.

In the absence of direct estimations of small area data, it is possible to do indirect estimates based on the availability of data. One kind of indirect estimate is the synthetic estimate in which the variable of interest from one domain is applied

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to another (i.e., 'small area') domain. In the case of uninsurance, this would involve using the detailed characteristics of the uninsured in SIPP or MEPS to estimate the characteristics of the uninsured in counties. For example, SIPP could be used to estimate the average months of uninsurance for age-race/ethnicity specific groups. In turn, the derived SIPP rates could then be applied at the county level to the corresponding age-race/ethnicity specific groups. The resulting index would provide a way to compare county levels of uninsurance adjusted for county population size. This kind of index requires information on the dynamic aspects of uninsurance. The SIPP provides the data necessary to estimate the length of uninsurance for different demographic groups. The following section describes how SIPP was used to develop both static and dynamic measures of uninsurance.

Data and Methodology

Data Sources. The primary data used for the report are from the Survey of Income and Program Participation (SIPP) 2004 Panel, a longitudinal survey conducted by the U.S. Census Bureau that provides data on the sampled households on a monthly basis. There are twelve waves for the 2004 Panel. The first wave of interviews started in February 2004 to May 2004. The same households were then interviewed in person or by telephone every 4 months and information for the three months in between was collected as well as that for the month of the interview. The last part of the interview took place between October 2007 and January 2008.

The SIPP 2004 Panel includes a different topical module for each wave as well as a core data file for all the waves. Our analyses uses only the core data file, which provide data on demographic, education, income, employment, and health care information.

The sample we use for our monthly and yearly analyses includes between 600 to about 1,200 individuals in Texas and between 5,000 to 13,000 participants in the U.S., depending on the month or year at issue. The longitudinal sample we use only includes participants who have complete data for all 48 months of the length of the survey.

In addition, the 2008 SAHIE (Small Area Health Insurance Estimates) was used in conjunction with SIPP to produce county-level measures of uninsurance, months of uninsurance, and months of public insurance.

Methods. We use the number of uninsured in specified time periods to estimate static rates of uninsurance for various demographic groups. Using the full 48 months of SIPP data, we estimate dynamic measures of uninsurance such as the average length of an uninsurance spell and the proportions of people losing and gaining health insurance over time.

One of the advantages of SIPP data is that by employing the appropriate weight, users can obtain nationally representative estimates for a calendar month or a calendar year, or any extended period of time covered by the duration of the survey. We are thus able in our analyses to examine health insurance dynamics with various measures and tools.

In addition, synthetic estimation, as described in Future Directions sub-section above, was used to apply SIPP measurements to Texas counties. This was done as follows:

[1] First, SIPP data were used to estimate the average months of uninsurance for specific demographic groups:
For the i*th* age-race/ethnicity group: Total uninsured months$_i$ / Total population$_i$ = Average months uninsured$_i$

[2] Then, a county-level source is used to derive the population of the i*th* age-race/ethnicity group by county and this population is multiplied by the average months uninsured in step [1] above:
County population$_i$ *X* SIPP Average months uninsured$_i$ = Number of uninsured months for the i*th* population in the j*th* county.

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[3]Finally, a composite index is constructed by summing the months uninsured for the various age-race/ethnicity groups estimated in step [2] above:

$$N_{index_j} = \sum_{i=1}^{i=n} X_i / P_j$$

Where Xi is the number of uninsured months for the i*th* age-race/ethnicity group and

N_{index_j} is the Composite Index for the j*th* county and

n is the total number of age-race-ethnicity groups and

Pj is the total population in the j*th* county.

The 2008 SAHIE is used to incorporate the SIPP average months of uninsurance at the county level. To do this, the following steps were performed:

1. SAHIE is used to obtain state-level age-, race-, income-specific uninsurance rates and county-level age-, income-specific uninsurance rates;
2. ACS is used to obtain county-level populations by age and race;
3. IPF (iterative proportional fitting also known as 'raking') is used to derive county-level age-, race-, income-specific uninsurance rates. In this 'raking' process, the SAHIE and ACS data provide the marginal totals and the joint distributions (i.e., the county-specific rates) are derived through IPF.

Results

Introduction. We begin by comparing SIPP to other measures of uninsurance. Then, we look at '*specific point in time*' measures of uninsurance rates in Tables 3 through 6. Next, Tables 7 through 10 present the results for '*any point in time*' measures are presented. After this, dynamic measures of uninsurance are examined in Tables 11 through 13 and Figures 2 through 11. In these analyses, we compare Texas with the U.S., and in some cases, we add other selected states for comparison. To understand differences among population groups, we show results by race/ethnicity and age group wherever sample size allows. Finally, an application of the synthetic estimation described in the Future Directions section is presented for Texas.

Comparison of SIPP to CPS and ACS.

Table 2 compares the 2004 SIPP point-in-time uninsurance rates for Texas to the rates produced by two other major surveys: the Current Population Survey (CPS) and the American Community Survey (ACS). In this table, we see that the estimates are reasonably close. For example, the SIPP data have the 2004 average monthly uninsurance rate in Texas at around 25 percent while the 2004 CPS and 2008 ACS both have the estimate at about 27 percent. The largest divergence is between the SIPP estimates of 82.8 percent uninsured non-citizen Hispanics 0-17 years old and the CPS estimate of 68.0 percent. A likely cause of this difference is the relatively small samples for this demographic group.

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Table 2: Comparison of SIPP Point-in-Time Insurance Measures with CPS and ACS

Race	Age	SIPP 2004 (monthly average rate)	CPS 2004	ACS 2008
All	**All**	**25.4%**	27.2%	27.1%
White	0-17	14.8%	10.6%	10.1%
White	18-64	15.5%	18.4%	18.7%
White	**All**	**15.3%**	16.3%	16.5%
Black	0-17	17.8%	20.9%	13.7%
Black	18-64	29.1%	25.4%	30.3%
Black	**All**	**25.0%**	23.8%	24.9%
Hispanic (Citi)	0-17	25.4%	23.7%	21.5%
Hispanic (Citi)	18-64	35.8%	37.3%	37.0%
Hsipanic (Citi)	**All**	**31.3%**	31.2%	29.9%
Hispanic (Non_citi)	0-17	82.8%	68.0%	73.2%
Hispanic (Non_citi)	18-64	65.9%	70.5%	72.2%
Hispanic (Non_citi)	**All**	**67.9%**	70.2%	72.4%

Specific Point in Time Estimates.

Tables 3 through 6 depict the average monthly uninsurance rates for the years 2004-2007. As such, these tables provide a 'specific point in time' measure of uninsurance. These tables compare the rates in Texas to those for the United States for various age and race/ethnicity groups. The data show that for all groups in all years, the uninsurance rates are higher in Texas than the United States. For example, in Table 3, the total monthly average uninsurance rate in Texas in 2004 was 25.4 percent and this compares to 16.5 percent for the United States. Of the various groups, Hispanic non-citizens 0-17 years of age in Texas had the highest uninsurance rates ranging from 66.4 percent in 2007 (Table 6) to 82.8 percent in 2004 (Table 3). For the U.S., the comparable range was 53.9 percent in 2007 and 63.6 percent in 2004. In general, Black adults were more likely to be uninsured than Black children in both Texas and the United States. In 2007, for example, in Texas 30.5 percent of 18-64 year old Blacks were uninsured compared to 25.9 percent of the 0-17 year old Black population. In the U.S., the Black adult rate was 20.5 percent while the Black child rate was 19.1 percent. Except for 2004, the lowest rates of uninsurance occur among 18-64 year old Whites. In 2007, White Texas adults had an uninsurance rate of 15.6 percent while the figure for the United States was 12.5 percent.

In summary, Texans in all groups and years, were more likely to be uninsured monthly in each year, compared to persons in the rest of the United States. Hispanic non-citizen children were most likely not to have insurance monthly for all years. For whites and Hispanics (citizens and non-citizens), children were more likely to be uninsured monthly compared to adults in all years. For Blacks, adults were more likely than children to be uninsured monthly for all years. With the exception of 2004, white adults were least likely to be uninsured monthly.

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Table 3: Number and Percentage of People Not Being Insured Monthly in Texas and the U.S., 2004

			Texas			U.S.		
Year	Race	Age	%	Number	Sample Size	%	Number	Sample Size
2004	**All**		**25.4%**	**4,804,794**	**1,270**	**16.5%**	**39,059,318**	**13,317**
	White	0-17	14.8%	366,907	86	9.9%	4,249,339	1,653
	White	18-64	15.5%	1,083,591	270	13.2%	16,313,565	5,972
	White	**All**	**15.3%**	**1,450,498**	**355**	**12.4%**	**20,562,905**	**7,625**
	Black	0-17	17.8%	147,644	40	12.2%	1,328,647	504
	Black	18-64	29.1%	419,553	113	21.5%	4,533,646	1,631
	Black	**All**	**25.0%**	**567,196**	**153**	**18.3%**	**5,862,293**	**2,135**
	Hispanic (Citi)	0-17	25.4%	616,517	189	19.4%	2,507,551	816
	Hispanic (Citi)	18-64	35.8%	1,177,983	308	27.4%	4,557,074	1,168
	Hispanic (Citi)	**All**	**31.3%**	**1,794,500**	**497**	**23.9%**	**7,064,625**	**1,984**
	Hispanic (Non_citi)	0-17	82.8%	142,548	44	63.6%	695,069	250
	Hispanic (Non_citi)	18-64	65.9%	850,051	220	60.0%	4,874,426	1,322
	Hispanic (Non_citi)	**All**	**67.9%**	**992,599**	**264**	**60.5%**	**5,569,495**	**1,572**

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Table 4: Number and Percentage of People Not Being Insured Monthly in Texas and the U.S., 2005

			Texas			U.S.		
Year	Race	Age	%	Number	Sample Size	%	Number	Sample Size
2005	**All**		**27.5%**	**5,306,091**	**1,279**	**17.2%**	**41,083,630**	**12,963**
	White	0-17	19.5%	468,422	104	13.8%	5,874,073	2,131
	White	18-64	15.8%	1,122,670	254	13.1%	16,193,902	5,549
	White	**All**	**16.7%**	**1,591,092**	**357**	**13.2%**	**22,067,975**	**7,681**
	Black	0-17	24.4%	205,759	50	15.2%	1,644,767	579
	Black	18-64	29.5%	452,512	103	20.6%	4,408,217	1,442
	Black	**All**	**27.6%**	**658,271**	**154**	**18.8%**	**6,052,984**	**2,021**
	Hispanic (Citi)	0-17	35.7%	905,096	256	24.2%	3,271,190	948
	Hispanic (Citi)	18-64	35.4%	1,206,368	288	25.8%	4,457,880	1,035
	Hispanic (Citi)	**All**	**35.5%**	**2,111,464**	**544**	**25.1%**	**7,729,070**	**1,983**
	Hispanic (Non_citi)	0-17	80.5%	134,454	38	57.0%	581,677	187
	Hispanic (Non_citi)	18-64	64.0%	810,809	187	56.4%	4,651,925	1,090
	Hispanic (Non_citi)	**All**	**65.9%**	**945,263**	**225**	**56.5%**	**5,233,601**	**1,278**

Table 5: Number and Percentage of People Not Being Insured Monthly in Texas and the U.S., 2006

			Texas			U.S.		
Year	Race	Age	%	Number	Sample Size	%	Number	Sample Size
2006	**All**		**28.6%**	**5,569,626**	**1,030**	**17.4%**	**41,861,171**	**9,600**
	White	0-17	18.7%	452,535	73	14.1%	6,002,665	1,600
	White	18-64	15.9%	1,137,627	185	12.6%	15,681,067	3,930
	White	**All**	**16.6%**	**1,590,162**	**259**	**13.0%**	**21,683,732**	**5,530**
	Black	0-17	25.6%	219,356	40	16.5%	1,762,952	459
	Black	18-64	31.4%	485,055	81	20.9%	4,569,529	1,048
	Black	**All**	**29.3%**	**704,411**	**121**	**19.4%**	**6,332,481**	**1,507**
	Hispanic (Citi)	0-17	38.0%	967,829	213	26.7%	3,700,457	773
	Hispanic (Citi)	18-64	34.7%	1,072,342	207	23.5%	3,769,672	675
	Hispanic (Citi)	**All**	**36.2%**	**2,040,171**	**419**	**25.0%**	**7,470,129**	**1,448**
	Hispanic (Non_citi)	0-17	81.3%	186,249	41	58.8%	688,704	156
	Hispanic (Non_citi)	18-64	64.3%	1,048,633	190	56.2%	5,686,125	959
	Hispanic (Non_citi)	**All**	**66.4%**	**1,234,882**	**231**	**56.5%**	**6,374,830**	**1,115**

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Table 6: Number and Percentage of People Not Being Insured Monthly in Texas and the U.S., 2007

			Texas			U.S.		
Year	Race	Age	%	Number	Sample Size	%	Number	Sample Size
2007	**All**		**28.0%**	**4,964,608**	**678**	17.2%	36,531,993	5,048
	White	0-17	16.8%	371,476	41	12.8%	4,806,294	728
	White	18-64	15.6%	994,499	106	12.5%	13,610,008	1,953
	White	**All**	**15.9%**	**1,365,975**	**147**	**12.6%**	**18,416,303**	**2,680**
	Black	0-17	25.9%	198,390	22	19.1%	1,752,733	276
	Black	18-64	30.5%	443,802	48	20.5%	3,998,493	534
	Black	**All**	**28.9%**	**642,192**	**70**	**20.1%**	**5,751,226**	**810**
	Hispanic (Citi)	0-17	37.8%	896,254	153	27.5%	3,490,257	486
	Hispanic (Citi)	18-64	32.5%	913,318	138	23.2%	3,405,190	416
	Hispanic (Citi)	**All**	**35.0%**	**1,809,572**	**290**	**25.2%**	**6,895,446**	**902**
	Hispanic (Non_citi)	0-17	66.4%	130,724	24	53.9%	538,676	84
	Hispanic (Non_citi)	18-64	63.4%	1,016,146	147	53.9%	4,930,342	571
	Hispanic (Non_citi)	**All**	**63.7%**	**1,146,870**	**170**	**53.9%**	**5,469,017**	**655**

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Any Point in Time.

Tables 7 through 10 have data for those uninsured for any one month during a year. This represents an 'any point-in-time' measure of uninsurance. The series compares Texas to the United States for the years 2004-2007. The tables show that, compared to the United States, there were higher percentages of Texans uninsured for a month. For example, in 2004 (Table 7) we find that 34.8 percent of all Texans had at least one month of uninsurance and this compares to 23.5 percent for the United States. Among the various demographic groups, Hispanic non-citizens 0-17 years old had the highest 'any point-in-time' uninsurance rates. In 2007 (Table 10), for example, 81.3 percent of Texans in this group experienced at least one month of uninsurance compared to 33.2 percent of all Texans. For the United States, the comparable figures were 79.7 percent and 22.2 percent.

In summary, the 'any point-in-time' uninsurance rate for Texans was greater than for the United States. For both Texas and the United States, the rankings for 'any point-in-time' uninsurance were, from highest to lowest: Hispanic non-citizens, Hispanic citizens, Blacks, and Whites. For Hispanic citizens, children had higher percentages of 'any point-in-time' uninsurance for every year except 2004. For Hispanic non-citizen children, this pattern occurred in every year.

Table 7: Number and Percentage of People Not Insured Any Time in the Past Year, 2004

			Texas				U.S.		
Year	Race	Age	%	Number	C.V.*	Sample Size	%	Number	Sample Size
2004	**All**		**34.8%**	**6,244,731**	**2.8**	**1,409**	**23.5%**	**54,797,463**	**15,624**
	White	0-17	27.3%	649,355	10.0	137	17.9%	7,687,620	2,569
	White	18-64	21.0%	1,397,805	5.0	281	18.5%	22,495,452	6,678
	White	**All**	**22.7%**	**2,047,159**	**5.0**	**418**	**18.3%**	**30,183,071**	**9,247**
	Black	0-17	36.4%	285,796	13.4	63	23.5%	2,547,148	790
	Black	18-64	36.9%	521,401	7.8	119	30.2%	6,244,406	1,817
	Black	**All**	**36.7%**	**807,197**	**8.2**	**182**	**27.9%**	**8,791,555**	**2,607**
	Hispanic (Citi)	0-17	40.3%	901,340	5.4	247	32.7%	4,012,961	1,124
	Hispanic (Citi)	18-64	46.2%	1,424,916	3.9	312	35.5%	5,560,087	1,161
	Hispanic (Citi)	**All**	**43.7%**	**2,326,256**	**3.8**	**559**	**34.3%**	**9,573,048**	**2,285**
	Hispanic (Non_citi)	0-17	89.8%	161,654	4.4	44	75.9%	907,716	269
	Hispanic (Non_citi)	18-64	73.5%	902,465	3.2	206	68.4%	5,342,073	1,216
	Hispanic (Non_citi)	**All**	**75.6%**	**1,064,119**	**3.2**	**250**	**69.4%**	**6,249,789**	**1,485**

* C.V. is the coefficient of variation expressed as a percent. It is calculated as the Standard Error divided by the Estimate.
The C.V. is a measure of data reliability. Lower C.V. values indicate more precise estimates.
As a rule of thumb, C.V. values above 30 percent are considered imprecise.

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Table 8: Number and Percentage of People Not Insured Any Time in the Past Year, 2005

			Texas				U.S.		
Year	Race	Age	%	Number	C.V.*	Sample Size	%	Number	Sample Size
2005	**All**		**37.3%**	**7,012,605**	**2.9**	**1,297**	**24.3%**	**57,269,891**	**14,331**
	White	0-17	33.6%	795,465	10.4	137	24.9%	10,638,786	3,177
	White	18-64	20.3%	1,393,000	7.1	231	17.5%	21,388,877	5,631
	White	**All**	**23.7%**	**2,188,464**	**6.6**	**368**	**19.4%**	**32,027,663**	**8,808**
	Black	0-17	37.9%	327,806	12.6	56	26.3%	2,857,810	764
	Black	18-64	39.7%	605,134	8.4	97	28.0%	5,855,424	1,429
	Black	**All**	**39.0%**	**932,940**	**8.7**	**153**	**27.4%**	**8,713,233**	**2,193**
	Hispanic (Citi)	0-17	54.2%	1,340,364	4.5	303	38.8%	5,013,531	1,192
	Hispanic (Citi)	18-64	47.7%	1,596,931	4.4	291	35.0%	5,960,110	1,056
	Hispanic (Citi)	**All**	**50.5%**	**2,937,295**	**3.4**	**594**	**36.6%**	**10,973,641**	**2,248**
	Hispanic (Non_citi)	0-17	86.9%	138,479	4.8	31	73.4%	728,357	188
	Hispanic (Non_citi)	18-64	68.4%	815,425	4.3	151	64.8%	4,826,996	894
	Hispanic (Non_citi)	**All**	**70.6%**	**953,905**	**3.9**	**182**	**65.8%**	**5,555,354**	**1,082**

* C.V. is the coefficient of variation expressed as a percent. It is calculated as the Standard Error divided by the Estimate.
The C.V. is a measure of data reliability. Lower C.V. values indicate more precise estimates.
As a rule of thumb, C.V. values above 30 percent are considered imprecise.

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Table 9: Number and Percentage of People Not Insured Any Time in the Past Year, 2006

			Texas				U.S.		
Year	Race	Age	%	Number	C.V.*	Sample Size	%	Number	Sample Size
2006	**All**		**35.5%**	**6,722,664**	**5.2**	**734**	**22.7%**	**53,766,523**	**6,217**
	White	0-17	21.2%	495,441	15.8	41	18.9%	8,024,126	1,058
	White	18-64	18.3%	1,282,873	12.3	107	16.0%	19,670,344	2,287
	White	**All**	**19.0%**	**1,778,314**	**11.7**	**148**	**16.7%**	**27,694,471**	**3,345**
	Black	0-17	42.8%	351,530	19.1	31	27.1%	2,873,574	377
	Black	18-64	39.6%	594,462	12.4	52	27.5%	5,861,922	619
	Black	**All**	**40.7%**	**945,992**	**12.5**	**83**	**27.4%**	**8,735,496**	**996**
	Hispanic (Citi)	0-17	48.5%	1,154,342	7.4	168	38.4%	5,042,539	640
	Hispanic (Citi)	18-64	46.8%	1,331,660	5.0	149	31.7%	4,802,972	474
	Hispanic (Citi)	**All**	**47.6%**	**2,486,002**	**4.9**	**317**	**34.8%**	**9,845,510**	**1,114**
	Hispanic (Non_citi)	0-17	85.0%	262,130	8.2	35	73.3%	1,025,719	126
	Hispanic (Non_citi)	18-64	71.2%	1,250,226	4.3	151	64.6%	6,465,327	636
	Hispanic (Non_citi)	**All**	**73.3%**	**1,512,356**	**4.6**	**186**	**65.7%**	**7,491,046**	**762**

* C.V. is the coefficient of variation expressed as a percent. It is calculated as the Standard Error divided by the Estimate.
The C.V. is a measure of data reliability. Lower C.V. values indicate more precise estimates.
As a rule of thumb, C.V. values above 30 percent are considered imprecise.

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Table 10: Number and Percentage of People Not Insured Any Time in the Past Year, 2007

			Texas				U.S.		
Year	Race	Age	%	Number	C.V.*	Sample Size	%	Number	Sample Size
2007	**All**		**33.2%**	**6,790,611**	**7.2**	**232**	**22.2%**	**53,362,284**	**1,505**
	White	0-17	16.7%	399,668	32.0	10	15.5%	6,510,704	208
	White	18-64	19.2%	1,446,513	15.4	33	17.1%	21,208,675	583
	White	**All**	**18.6%**	**1,846,181**	**18.3**	**43**	**16.7%**	**27,719,379**	**791**
	Black	0-17	31.7%	288,748	40.3	6	28.5%	2,876,731	87
	Black	18-64	35.6%	552,968	23.4	12	28.6%	6,337,599	151
	Black	**All**	**34.2%**	**841,716**	**26.9**	**18**	**28.6%**	**9,214,330**	**238**
	Hispanic (Citi)	0-17	44.5%	1,335,552	12.4	61	37.8%	5,510,276	167
	Hispanic (Citi)	18-64	40.8%	1,236,315	9.7	52	23.8%	4,008,102	124
	Hispanic (Citi)	**All**	**42.6%**	**2,571,868**	**9.4**	**113**	**30.3%**	**9,518,379**	**291**
	Hispanic (Non_citi)	0-17	81.3%	102,061	16.1	5	79.7%	677,119	24
	Hispanic (Non_citi)	18-64	75.2%	1,428,784	5.6	53	66.6%	6,233,077	161
	Hispanic (Non_citi)	**All**	**75.6%**	**1,530,845**	**5.3**	**58**	**67.7%**	**6,910,196**	**185**

* C.V. is the coefficient of variation expressed as a percent. It is calculated as the Standard Error divided by the Estimate.
The C.V. is a measure of data reliability. Lower C.V. values indicate more precise estimates.
As a rule of thumb, C.V. values above 30 percent are considered imprecise.

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Dynamic Measures of Uninsurance. Tables 11 through 13 present information on insurance coverage over time. In these tables, uses the longitudinal sample that only includes individuals who have complete data for all 48 months of the survey and have positive longitudinal weights. Except for the sample size, the percentages and numbers reported are weighted to represent the estimates at state and national level.

Table 11 shows the number and percent of people with continuous insurance for all 48 months of the SIPP survey. Please note that the small sample size for Hispanic non-citizens 0-17 years old in Texas excludes this group from Table 11. The table indicates that the U.S. had proportionately more people with insurance for all 48 months than Texas. For the U.S., 65.8 percent were insured during all 48 months of the survey while in Texas, the figure is 50.8 percent. As such, almost half (i.e., 49.2 percent) of the Texas population did not have continuous coverage during the four years of the survey. When the various demographic groups are examined, we see that among race/ethnicity groups, Whites had the highest rates of continuous insurance in both Texas and the United States with 65.9 percent and 72.7 percent respectively. The lowest rates were for Hispanics with 32.0 percent of citizen Hispanics and 18.3 percent for non-citizen Hispanics in Texas. For the United States, the respective figures were 47.9 percent and 21.9 percent. In contrast, Blacks in Texas a continuous insurance rate of 58.9 percent which is greater than the 57.5 percent rate for the United States. For all the demographic groups in both Texas and the United States, adults had higher rates of continuous insurance than children. In summary, the U.S. had the highest percentages of people with insurance for all 48 months compared to Texas. Among racial and ethnic groups, Whites had the highest percentage of persons insured for all 48 months followed by Blacks, Hispanic citizens, and then Hispanic non-citizens. For all racial and ethnic groups, adults had higher percentages insured for the entire 48 months than children.

Table 12 shows the number and percentage of people who have more than two spells, that is, two consecutive months without insurance. Nationwide, about 23 million and about 2 million people in Texas have more than two spells without health insurance in a 48 month period. That accounts for about one third of the total population in the U.S. and about 30 percent of the population in Texas. The citizen and non-citizen Hispanics have the highest percentage in this category, with 33.4 percent of the Hispanic citizen population in Texas and 39.9 percent of the Hispanic citizen population in the U.S. not having insurance for more than two consecutive months. The percentage of Whites in this category is slightly lower than that for Blacks at the national level (30.8 percent and 33.9 percent, respectively), whereas in Texas Blacks have a much lower rate at 19.3 percent than Whites (26.4 percent). However, these results should be viewed cautiously due to the very small sample size for Blacks in Texas.

Either across race/ethnicity groups or between the U.S. and Texas, Table 12 shows no apparent patterns when children under 18 years of age are compared to adults ages 18 to 64 years. Among Whites in Texas and in the U.S., adults 18 to 64 have higher percentages of people with multiple spells of uninsurance during the 48 months period. There are, however, fewer children in Texas that have more than two spells when compared to the U.S. in general. Overall, White and Black children in Texas have the lowest percentages (17 percent and 13 percent, respectively) with more than two spells of uninsurance, whereas citizen and non-citizen Hispanic children in the U.S. have the highest percentage (about 45 percent) in this category.

In summary, Texans had a smaller percentage of two or more spells of not being insured compared to others in the U.S. This could because they were more likely to be uninsured over the whole period. In Texas and nationally, Hispanics had the highest percent with more than two episodes of uninsurance. Non-citizen Hispanics had the highest percent with more than two episodes of uninsurance in Texas and Hispanic citizens had the highest percentage in the U.S. Among Hispanic citizens in Texas, a higher percentage of children had more than two episodes of not being insured compared to adults. For Hispanic citizens in the U.S., a higher percentage of adults had more than two episodes of uninsurance

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compared to children. For Hispanic non-citizens in Texas, a higher percentage of adults had more than two episodes of not being insured compared to children, although this estimate comes from a very small sample.

Table 13 contains the average length of spells without health insurance and the total number of spells without insurance experienced by the participants in the 2004 SIPP panel in the 48 months period. Generally, uninsurance spells are longer in Texas than in the U.S. The average length of spells in Texas is almost 21 months whereas in the U.S., the length is less than 16 months. In fact, with the exception of White children 0-17 years old, all the race/ethnicity and age groups in Texas experienced longer spells without insurance than the U.S. In Texas, Black adults 18 to 64 have the longest length of spells with an average of almost 30 months. White children under 18, on the other hand, have the shortest spells, averaging 11.5 months. This is less than the U.S. average for this group which is 12.3 months.

In summary, the average length of an uninsurance spell was greater for Texas than for the U.S. Hispanic non-citizens had the longest spells of uninsurance in both Texas and the U.S. For all racial and ethnic groups, except for Hispanic non-citizens in Texas, adults had longer average spells without insurance than children.

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Table 11: Percentage of People Insured for All 48 Months, 2004-2007

		Texas			U.S.		
Race	**Age**	**%**	**Number**	**Sample Size**	**%**	**Number**	**Sample Size**
All		**50.8**	**8,034,607**	**606**	**65.8**	**141,396,676**	**12,970**
White	0-17	53.9	1,158,243	79	66.4	28,062,810	2,696
White	18-64	70.4	4,060,334	292	75.1	83,231,380	7,799
White	**All**	**65.9**	**5,218,577**	**371**	**72.7**	**111,294,190**	**10,495**
Black	0-17	56.4	460,807	23	53.8	5,696,997	435
Black	18-64	60.8	619,690	39	59.7	10,915,025	936
Black	**All**	**58.9**	**1,080,498**	**62**	**57.5**	**16,612,022**	**1,371**
Hispanic (Citi)	0-17	25.4	491,424	60	42.5	4,747,444	460
Hispanic (Citi)	18-64	37.0	967,179	90	52.5	6,837,112	488
Hispanic (Citi)	**All**	**32.0**	**1,458,603**	**150**	**47.9**	**11,584,556**	**948**
Hispanic (Non_citi)	0-17	0.0	0	0	7.9	114,319	10
Hispanic (Non_citi)	18-64	21.9	276,930	23	24.7	1,791,590	146
Hispanic (Non_citi)	**All**	**18.3**	**276,930**	**23**	**21.9**	**1,905,909**	**156**

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Table 12: Percentage of People Having More Than Two Spells* of Uninsurance within 48 Months, 2004-2007

		Texas			U.S.		
Race	**Age**	**%**	**Number**	**Sample Size**	**%**	**Number**	**Sample Size**
All		**29.9%**	**2,214,009**	**198**	**33.7%**	**23,305,328**	**1,991**
White	0-17	17.0%	155,842	11	26.1%	3,516,619	351
White	18-64	32.1%	484,963	30	33.3%	8,369,833	687
White	**All**	**26.4%**	**640,805**	**41**	**30.8%**	**11,886,451**	**1,038**
Black	0-17	26.8%	90,106	6	32.5%	1,540,974	118
Black	18-64	13.1%	52,267	4	34.8%	2,430,049	193
Black	**All**	**19.3%**	**142,372**	**10**	**33.9%**	**3,971,023**	**311**
Hispanic (Citi)	0-17	37.6%	543,786	62	45.5%	2,822,543	271
Hispanic (Citi)	18-64	29.6%	469,635	43	34.0%	2,000,933	152
Hispanic (Citi)	**All**	**33.4%**	**1,013,421**	**105**	**39.9%**	**4,823,477**	**423**
Hispanic (Non_citi)	0-17	30.7%	75,216	7	46.1%	613,192	53
Hispanic (Non_citi)	18-64	35.2%	342,194	35	37.7%	2,011,185	166
Hispanic (Non_citi)	**All**	**34.3%**	**417,411**	**42**	**39.3%**	**2,624,377**	**219**

* Where a spell is defined as two consecutive months without insurance.

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Table 13: Average Length of All Spells Without Insurance During 48 Months, 2004-2007

		Texas			U.S.		
Race	**Age**	**Avg_Length (months)**	**Number**	**Sample Size**	**Avg_Length (months)**	**Number**	**Sample Size**
All		**20.7**	**211,328,063**	**18,840**	**15.6**	**1,525,229,145**	**133,572**
White	0-17	11.5	13,165,168	945	12.3	219,616,465	21,160
White	18-64	21.9	43,862,139	2,612	16.6	583,168,194	50,343
White	**All**	**18.1**	**57,027,307**	**3,557**	**15.1**	**802,784,659**	**71,503**
Black	0-17	18.1	7,895,882	447	10.7	70,609,589	5,566
Black	18-64	29.6	14,006,403	1,115	16.3	163,209,489	12,569
Black	**All**	**24.1**	**21,902,285**	**1,562**	**14.1**	**233,819,078**	**18,135**
Hispanic (Citi)	0-17	17.0	36,839,541	4,363	12.3	123,607,069	12,850
Hispanic (Citi)	18-64	22.9	51,221,935	4,757	17.4	146,291,467	12,088
Hispanic (Citi)	**All**	**20.0**	**88,061,475**	**9,120**	**14.6**	**269,898,536**	**24,938**
Hispanic (Non_citi)	0-17	26.0	8,710,126	882	19.2	40,418,074	3,816
Hispanic (Non_citi)	18-64	25.7	35,626,869	3,719	22.7	178,308,798	15,180
Hispanic (Non_citi)	**All**	**25.8**	**44,336,996**	**4,601**	**22.0**	**218,726,872**	**18,996**

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Figures 2 through 11 show the cumulative survival curves for two groups of SIPP participants in the U.S., Texas, California, Arizona, Colorado, and New Mexico (as a group), and Florida. In these figures, the vertical axis shows the cumulative survival rates and the horizontal axis shows time in months. Because of the small sample size of the Black and Other groups, the cumulative survival curves are only shown for Whites and the Hispanics.

Figures 2 through 6 include people who enter the SIPP survey with health insurance, either public or private. The survival function is the cumulative survival chances for the first loss of insurance. In all the states shown, as is with the U.S. in general, the curve for the non-Hispanic whites are much smoother than that for the Hispanics. In other words, for those who have insurance when entering the survey, Hispanics are much more likely to lose their health insurance and at a faster pace. For example, in Figure 3 for Texas, we find that after 24 months, 91.5 percent of Whites still have insurance coverage compared to around 74.2 percent of Hispanics.

The graphs in Figures 7 through 11 depict people who enter the SIPP survey without health insurance. The survival function is the cumulative survival chances for getting health insurance. Contrary to what was seen in Figures 2-6, the curves are sharper for the non-Hispanic Whites. In other words, non-Hispanic whites are much more likely to get health insurance and at a faster pace than the Hispanics even if they do not have insurance when entering the survey. For example, in Figure 8 for Texas, at 24 months 52.0 percent of Whites still have no insurance while the share of Hispanics is 64.5 percent. Looked at another way, in Figure 8, the median survival time (the point where the survival curve crosses the vertical axis at 0.50), is about 28 months for non-Hispanic Whites and around 44 months for Hispanics. The difference between the two race-ethnicity groups is consistent across the states and in the U.S., although less pronounced in the state of California (Figure 10).

In summary, the survival functions show that, compared to non-Hispanic Whites, insured Hispanics are more likely to lose insurance and uninsured Hispanics are less likely to obtain insurance within a given time frame. Taken together, the two dynamics help to explain why, at any given point in time, the Hispanic uninsurance rate is greater than that for non-Hispanic Whites.

Figure 2: Survival Function 2004-2007: First Loss of Insurance for Those Insured at the Beginning, United States

NH-White	Hispanics
1.000	1.000
0.992	0.980
0.974	0.927
0.958	0.876
0.945	0.825
0.935	0.798
0.921	0.765
0.912	0.743
0.904	0.727
0.897	0.709
0.890	0.695
0.883	0.678
0.877	0.663

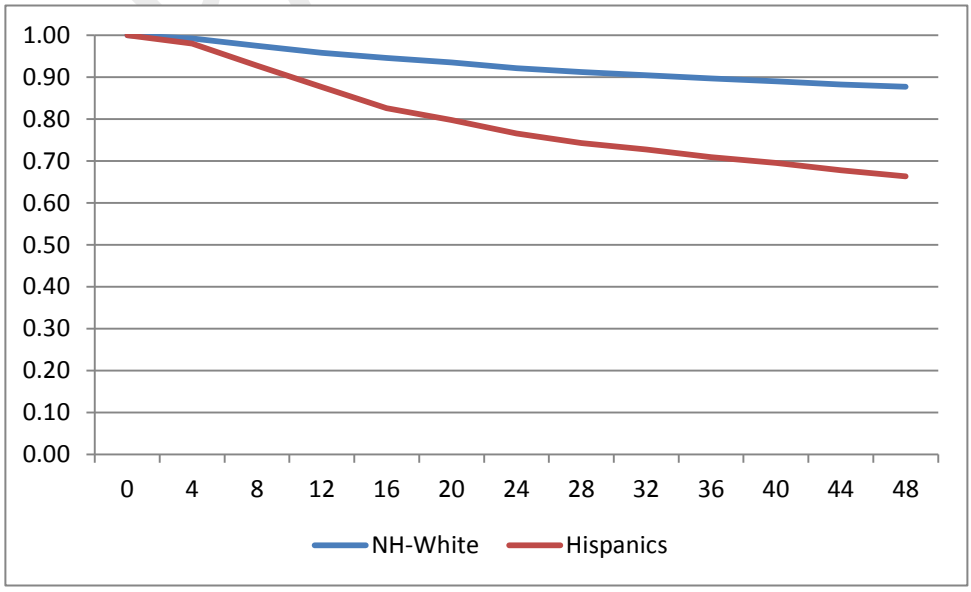

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Figure 3: Survival Function 2004-2007: First Loss of Insurance for Those Insured at the Beginning, Texas

NH-White	Hispanics
1.000	1.000
0.985	0.971
0.965	0.920
0.949	0.874
0.936	0.805
0.923	0.765
0.915	0.742
0.902	0.719
0.899	0.702
0.891	0.696
0.878	0.678
0.869	0.678
0.861	0.667

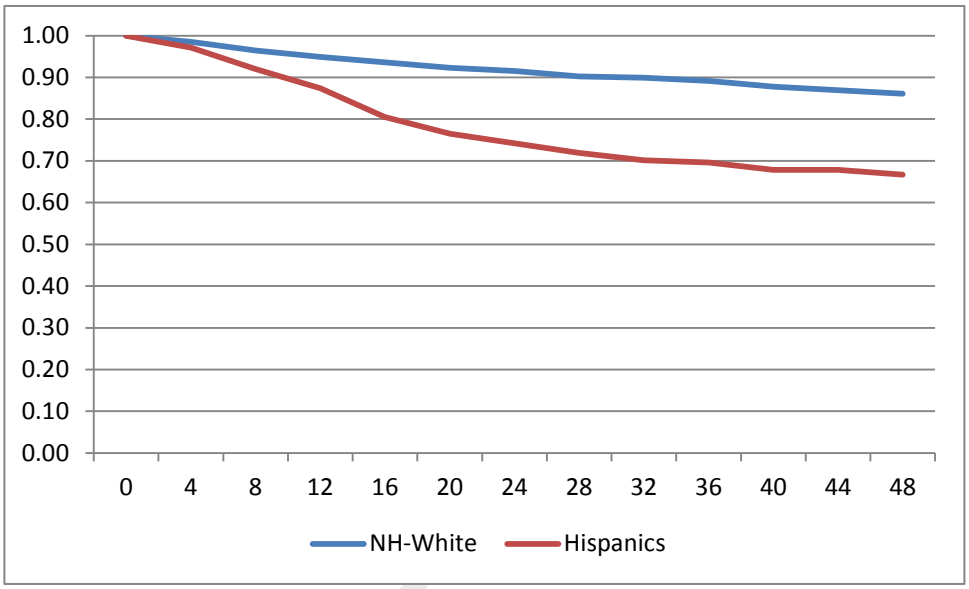

Figure 4: Survival Function 2004-2007: First Loss of Insurance for Those Insured at the Beginning, Arizona, Colorado, and New Mexico

NH-White	Hispanics
1.000	1.000
0.992	0.986
0.974	0.971
0.951	0.913
0.945	0.884
0.924	0.840
0.908	0.781
0.898	0.766
0.884	0.766
0.870	0.737
0.854	0.737
0.840	0.722
0.834	0.707

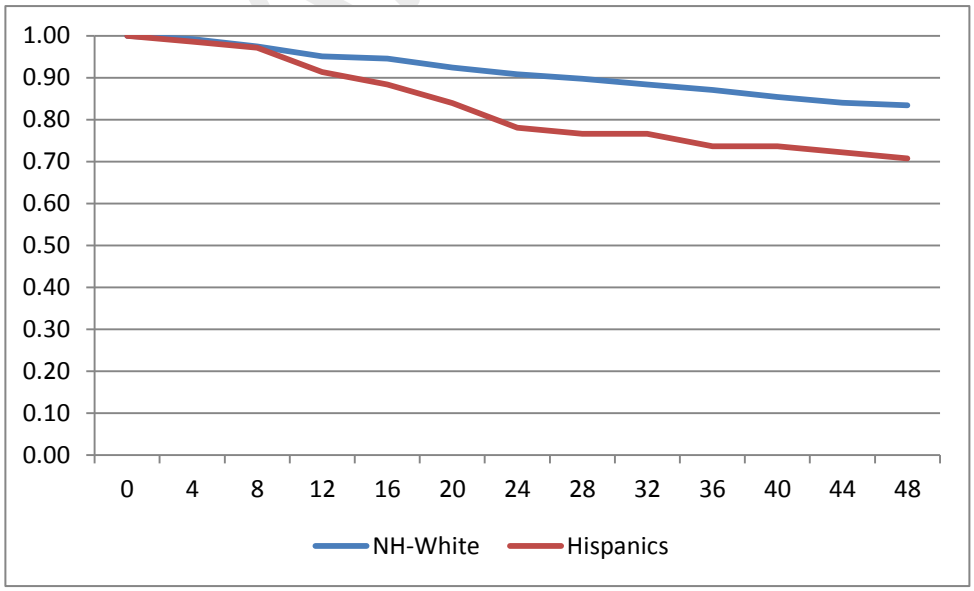

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Figure 5: Survival Function 2004-2007: First Loss of Insurance for Those Insured at the Beginning, California

NH-White	Hispanics
1.000	1.000
0.993	0.985
0.984	0.936
0.966	0.881
0.956	0.816
0.939	0.789
0.925	0.770
0.919	0.733
0.906	0.721
0.902	0.696
0.896	0.677
0.885	0.652
0.879	0.649

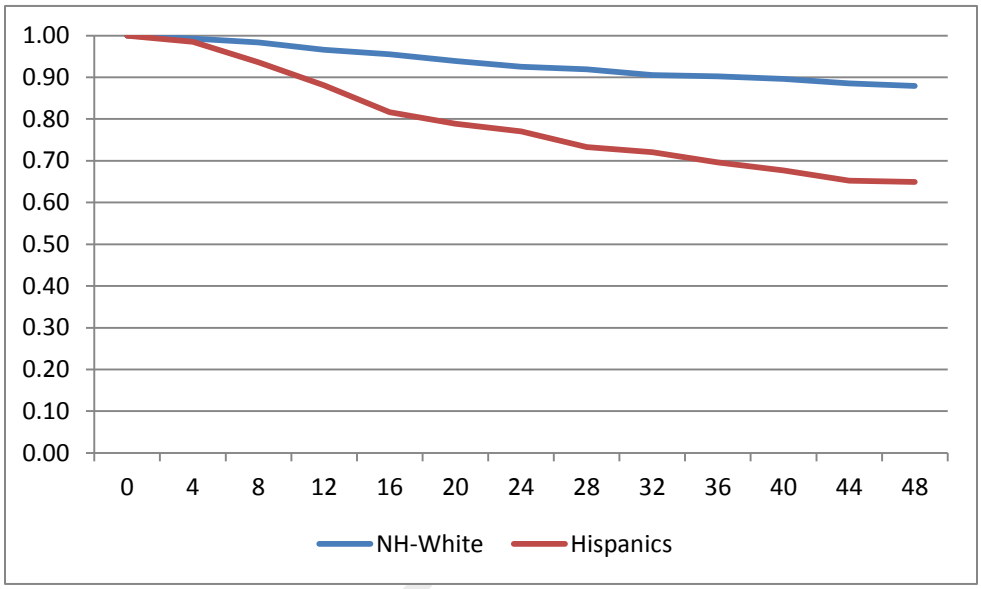


Figure 6: Survival Function 2004-2007: First Loss of Insurance for Those Insured at the Beginning, Florida

NH-White	Hispanics
1.000	1.000
0.996	0.980
0.983	0.871
0.962	0.831
0.945	0.800
0.941	0.800
0.915	0.780
0.900	0.749
0.891	0.749
0.878	0.749
0.871	0.749
0.866	0.729
0.862	0.729

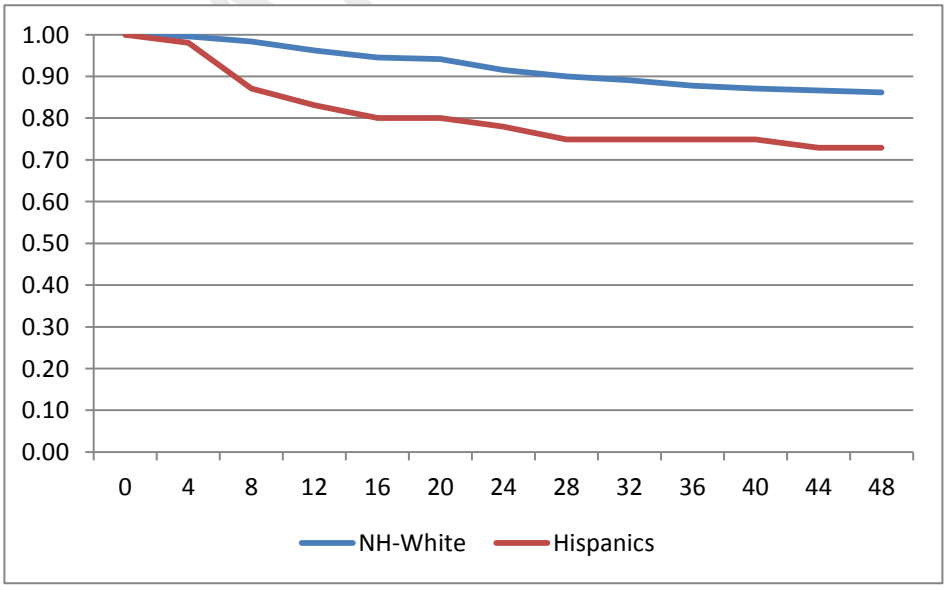


Figure 7: Survival Function 2004-2007: Getting Insurance for Those Uninsured at the Beginning, United States

NH-White	Hispanics
1.000	1.000
0.930	0.972
0.755	0.851
0.644	0.757
0.557	0.683
0.508	0.641
0.460	0.584
0.422	0.533
0.389	0.505
0.364	0.475
0.324	0.448
0.306	0.425
0.289	0.392

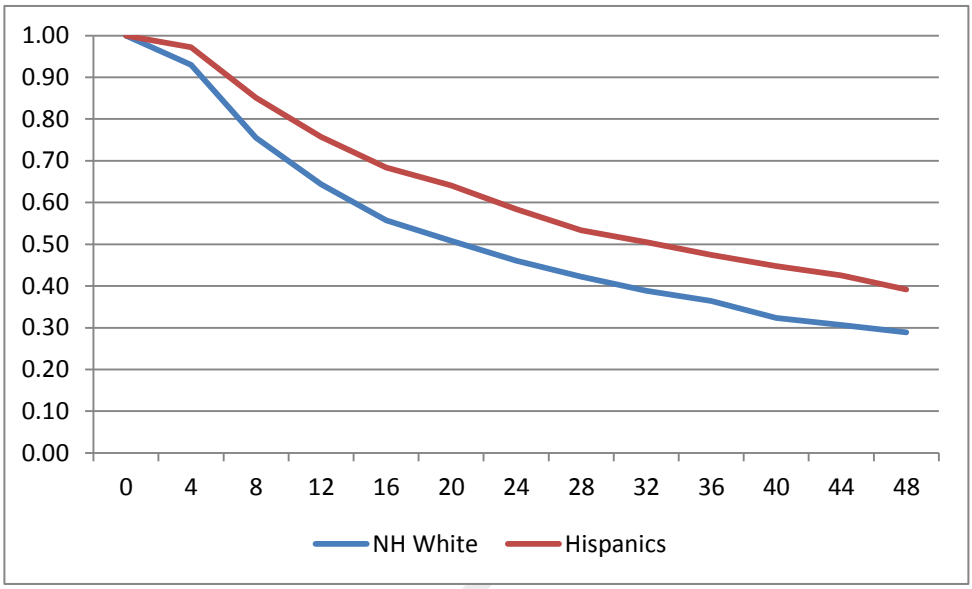


Figure 8: Survival Function 2004-2007: Getting Insurance for Those Uninsured at the Beginning, Texas

NH-White	Hispanics
1.000	1.000
0.935	0.985
0.818	0.906
0.740	0.818
0.636	0.734
0.546	0.694
0.520	0.645
0.481	0.595
0.455	0.575
0.402	0.546
0.335	0.531
0.308	0.501
0.281	0.486

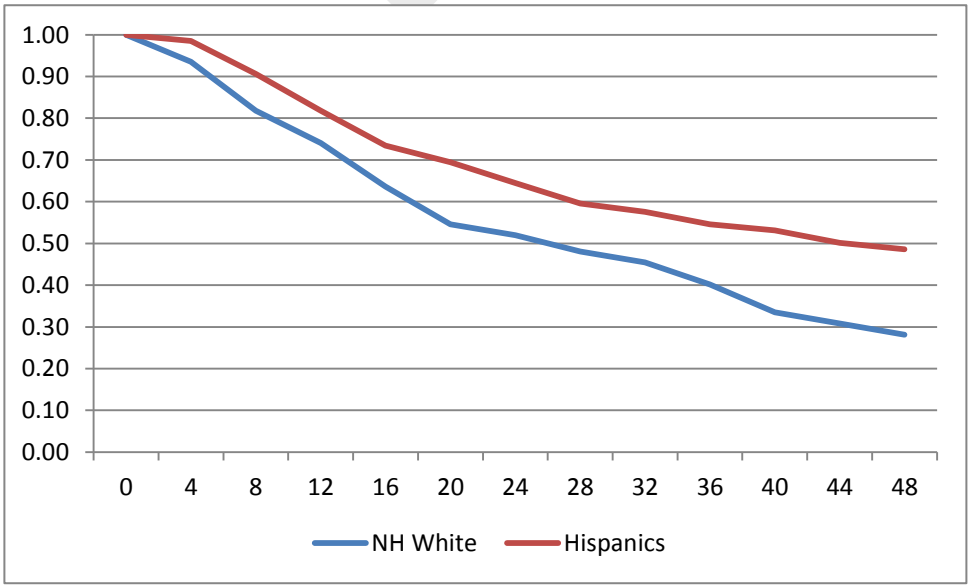


Figure 9: Survival Function 2004-2007: Getting Insurance for Those Uninsured at the Beginning, Arizona, Colorado, and New Mexico

NH-White	Hispanics
1.000	1.000
0.901	0.971
0.620	0.838
0.465	0.779
0.409	0.706
0.380	0.691
0.366	0.632
0.310	0.573
0.296	0.543
0.239	0.467
0.211	0.452
0.197	0.422
0.169	0.362

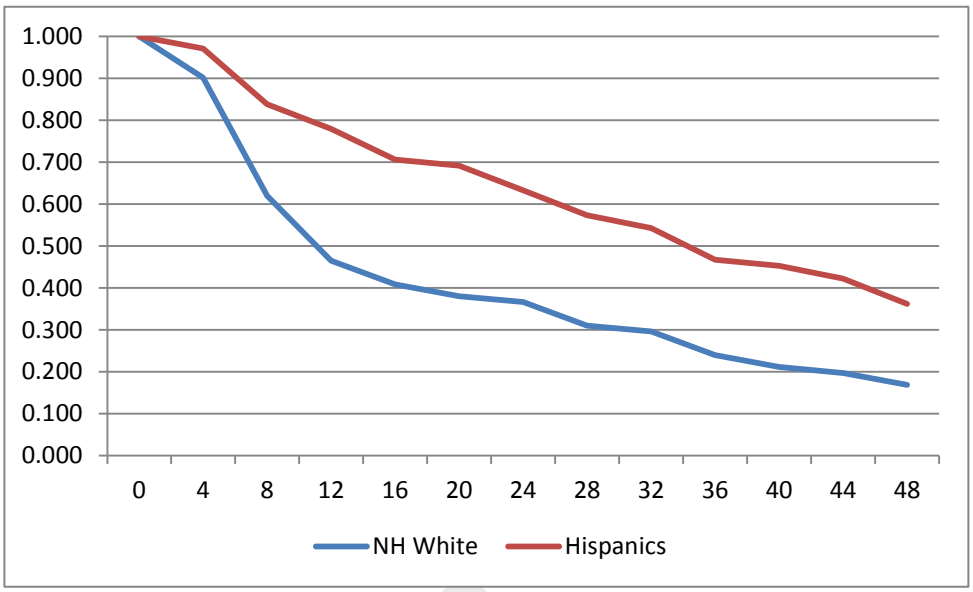


Figure 10: Survival Function 2004-2007: Getting Insurance for Those Uninsured at the Beginning, California

NH-White	Hispanics
1.000	1.000
0.929	0.982
0.743	0.787
0.686	0.704
0.628	0.627
0.585	0.550
0.511	0.508
0.465	0.490
0.390	0.447
0.390	0.405
0.375	0.375
0.314	0.351
0.250	0.296

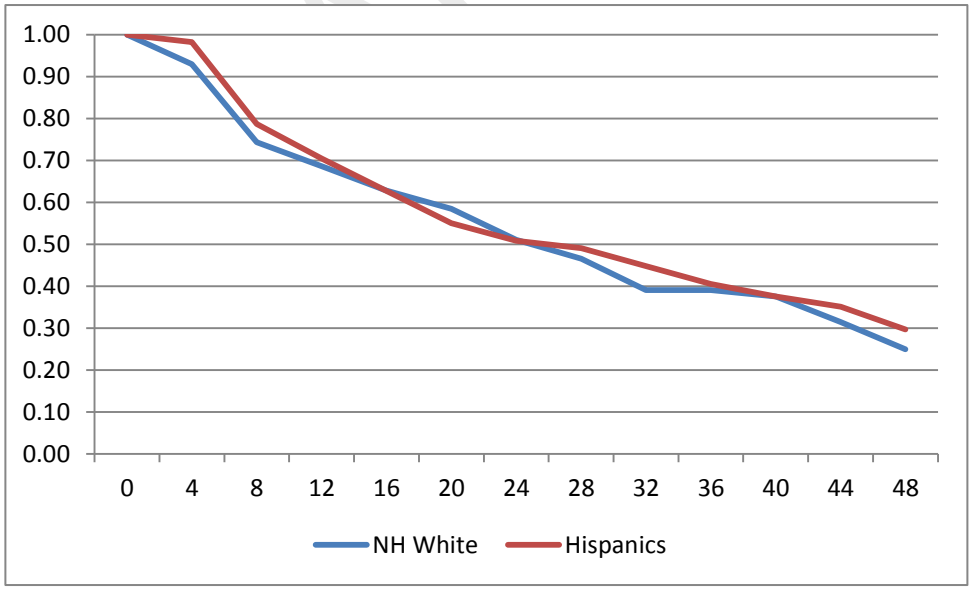
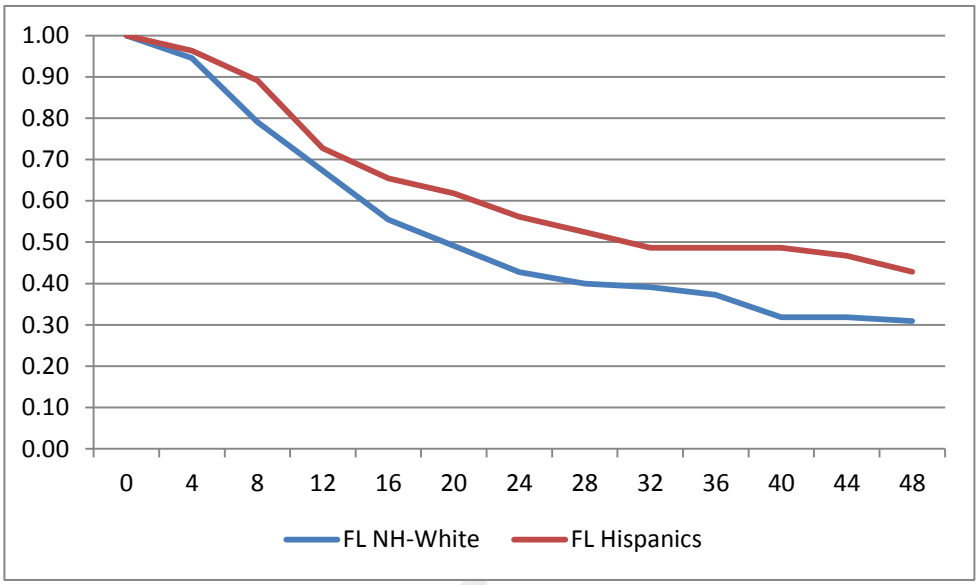


Figure 11: Survival Function 2004-2007: Getting Insurance for Those Uninsured at the Beginning, Florida

NH-White	Hispanics
1.000	1.000
0.946	0.964
0.791	0.891
0.673	0.727
0.555	0.655
0.491	0.618
0.427	0.562
0.400	0.524
0.391	0.487
0.373	0.487
0.318	0.487
0.318	0.467
0.309	0.428



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Synthetic Estimation Applied to Texas Counties. While the SIPP data provide static and dynamic uninsurance estimates that contain rich demographic detail, the sample sizes are not large enough to produce such estimates at the county level of geography. Other surveys such as ACS and SAIPE do have county-level estimates but these have limited demographic details and measure only point-in-time uninsurance rates. As discussed earlier in the sub-section Future Directions and operationalized in the Methods sub-section, indirect estimation can be used to apply SIPP data at the county level. In this, SIPP data were used to estimate the average (i.e., per capita) number of uninsured months for specific demographic groups. These group-specific estimates were then applied to county-level population estimates of uninsured months for the various demographic groups. The county-level were summed and divided by the total county population to derive county-level, per capita estimates of uninsured months. An additional step involved the weighting of the county-level estimates to account for variations in county uninsurance rates.

Table 14 has the average months of uninsurance for selected states. Because these are state-level, the data were obtained directly from SIPP. The table also has the 2008 SAHIE estimates of state-level uninsurance rates. In this table we see that Texas has the highest 2008 SAHIE uninsurance rate. It also reveals that Texas had the highest average months of uninsurance in 2006. Also, Texas' average months of public insurance were below those of Arizona, California, Florida, and New Mexico for all four years. This presents a somewhat mixed picture of uninsurance in Texas. For example, the 2008 25.7 percent uninsurance rate in Texas is higher than New Mexico's rate of 23.9 percent. But New Mexico residents had longer periods of uninsurance than Texas in three of the four years as well as longer periods of public insurance than Texas for all four years. By contrast, when compared to Florida, Texas has a roughly comparable 2008 uninsurance rate. However, Texas had longer periods of uninsurance than Florida for all four years and shorter periods of public insurance for all four years. It is of interest to note that Massachusetts enacted its health care reform law in 2006. Table 14 shows that for Massachusetts, the average months uninsured dropped to its lowest point in 2007 while the average months of public insurance rose to its highest level. This suggests that public and private expansion of health insurance availability led to greater continuity and fewer gaps in coverage among the 95.6 percent of the Massachusetts population that was insured in 2007.

Table 14: Average Months Uninsured, Average Months of Public Insurance, and 2008 SAHIE Uninsurance Rate for Select States

	Average Months Uninsured				Average Months of Public Insurance				SAHIE Uninsurance Rate
States\ Years	2004	2005	2006	2007	2004	2005	2006	2007	2008
Arizona	2.31	2.31	2.39	2.42	2.09	2.38	2.19	2.13	20.5
California	2.28	2.32	2.43	2.29	2.05	2.15	2.05	2.09	19.2
Colorado	1.91	2.05	1.97	2.13	1.40	1.35	1.23	0.95	18.1
Florida	2.75	2.63	2.57	2.57	1.67	1.73	1.73	1.65	24.2
Massachusetts	1.14	1.18	1.19	0.85	1.59	1.74	2.10	2.27	4.4
New Mexico	3.45	3.29	3.23	3.73	2.54	2.77	2.67	1.83	23.9
Texas	3.02	3.28	3.40	3.34	1.63	1.49	1.59	1.60	25.7

Table 15 presents the synthetic estimates for Texas counties. These data are weighted by the county-level age-, race-, and income-specific population estimates used in the 2008 SAHIE. The table presents the 25 counties with the longest average periods of uninsurance in 2006. Of these 25 counties, 12 are located along the Texas-Mexico border and 18 are located in South Texas, areas with predominantly Hispanic populations. These same counties also are among the State's highest poverty areas. As such, we find both long periods of uninsurance and long periods of public insurance. Along

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with the relatively high unemployment rates in these counties, it is possible that a lack of employer-provided health insurance contributes to the insurance patterns observed here.

Table 15: Average Months Uninsured and Average Months of Public Insurance for the 25 Texas Counties with the Longest Periods of Uninsurance, 2006

County	Average Months Uninsured	Average Months of Public Insurance	Rank - Months Uninsured	Rank - Months of Public Insurance
Starr	5.78	2.73	1	1
Zavala	5.60	2.59	2	2
Maverick	5.53	2.54	3	3
Hidalgo	5.35	2.50	4	4
Brooks	5.32	2.42	5	7
Willacy	5.31	2.44	6	5
Cameron	5.20	2.41	7	8
Webb	5.19	2.44	8	6
Dimmit	5.17	2.34	9	10
Hudspeth	5.08	2.26	10	14
Presidio	5.08	2.39	11	9
Zapata	5.07	2.29	12	11
La Salle	5.01	2.27	13	13
Duval	4.88	2.12	14	20
Frio	4.88	2.28	15	12
Jim Hogg	4.85	2.11	16	21
El Paso	4.77	2.15	17	15
Culberson	4.69	2.04	18	25
Val Verde	4.68	2.15	19	16
Reeves	4.66	2.14	20	17
Uvalde	4.63	2.13	21	18
Jim Wells	4.48	1.94	22	38
Kenedy	4.47	1.88	23	45
Deaf Smith	4.46	2.08	24	22
Kleberg	4.42	1.86	25	52

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Figures 12 and 13 present the average months of uninsurance and the average months of public insurance in map form. Here we again see that for both measures, South Texas, and, particularly, the Texas-Mexico border have the highest concentrations for long periods of uninsurance (Figure 12) and long periods of public insurance (Figure 13). Also, we find that the Texas Panhandle is another area where the longer durations occur. The South Texas and Panhandle regions have relatively high concentrations of agricultural employment and other low-wage jobs that often are filled by undocumented immigrants and this might account for the insurance patterns we see in these areas.

Figure 12: Estimated Average Months of Uninsurance in Texas by County, 2006

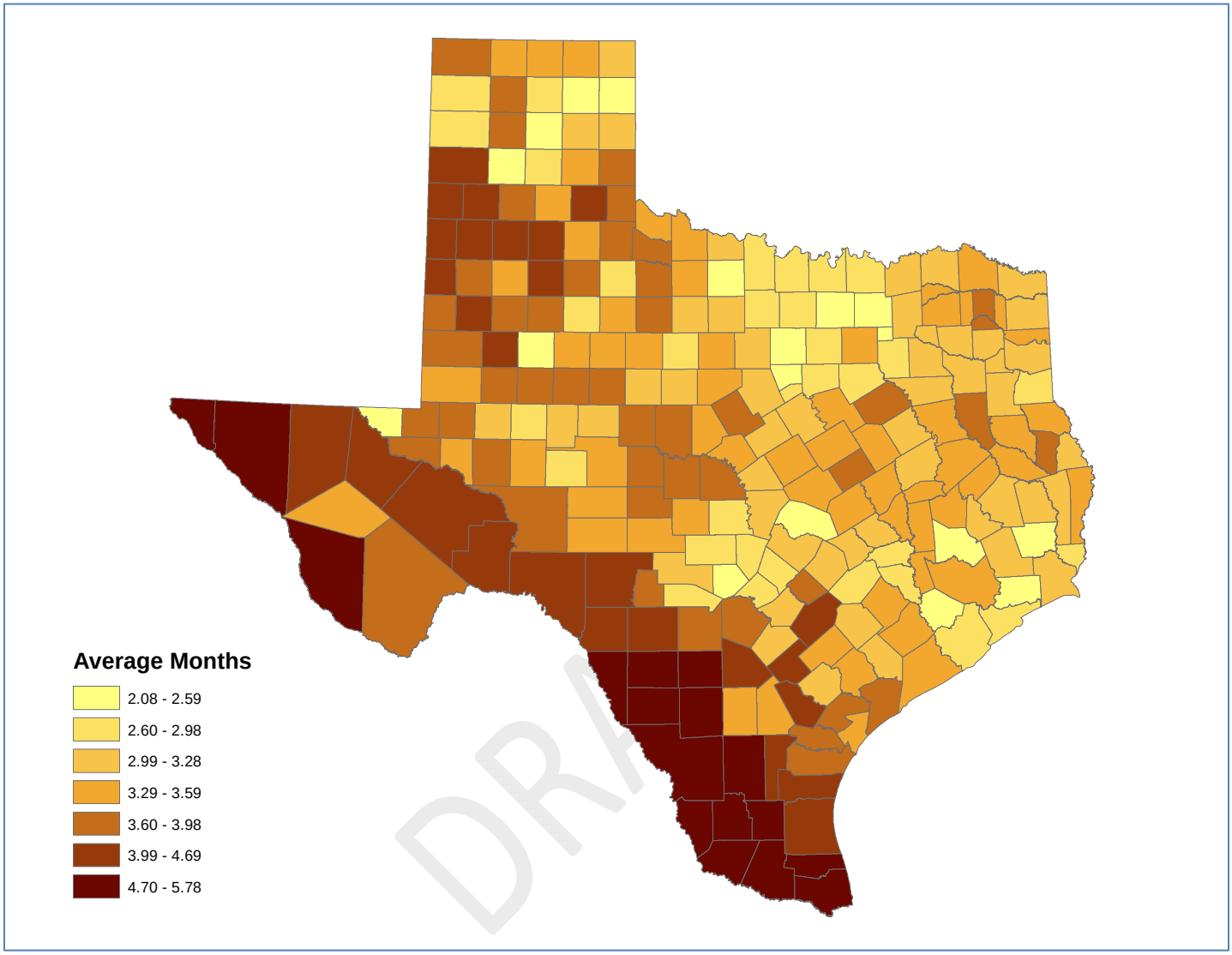
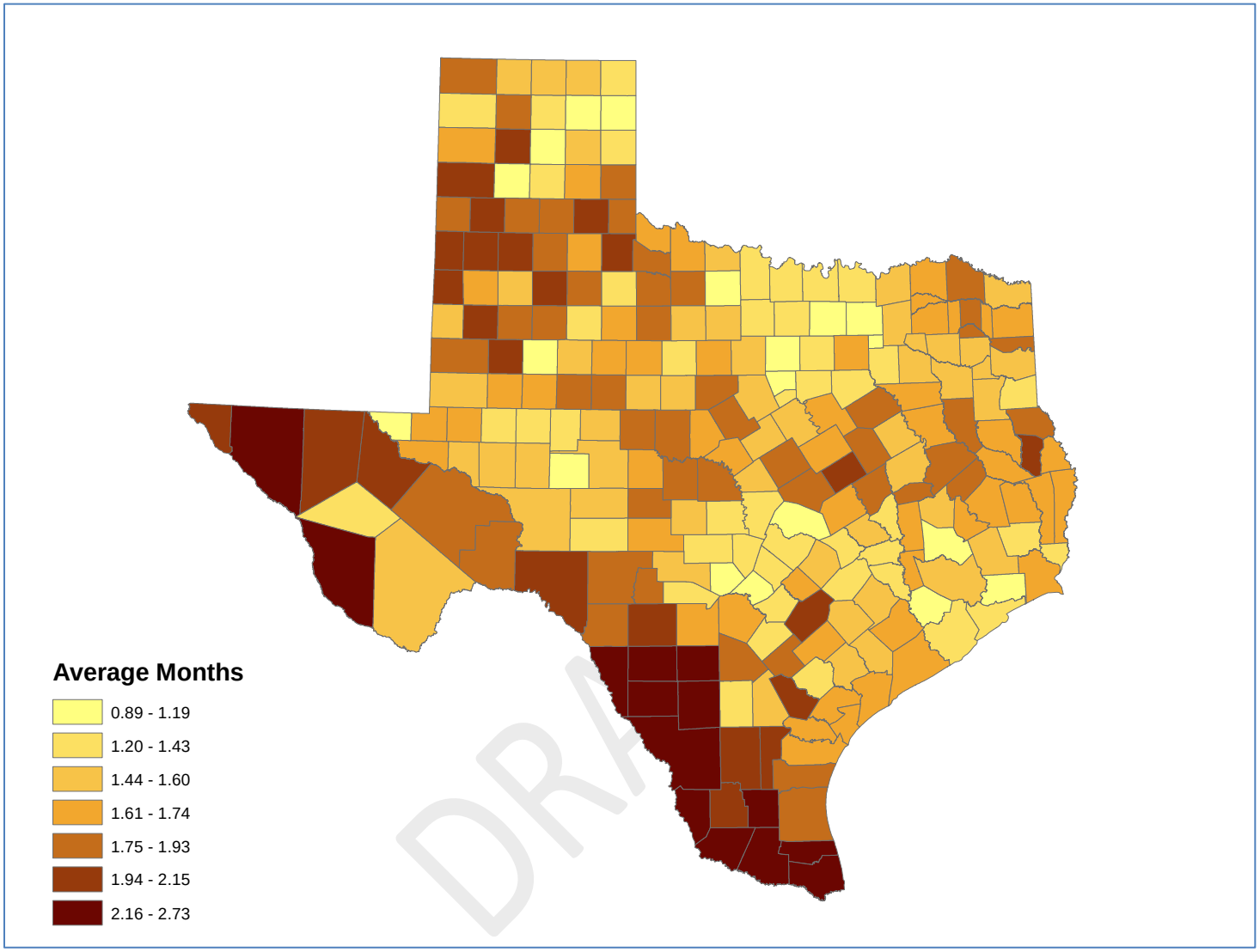


Figure 13: Estimated Average Months of Public Insurance inTexas by County, 2006



The per capita rates used in this section of the report are similar to a prevalence rate in that they measure the number of uninsurance months with respect to the population-at-risk of uninsurance. With this, two communities could have identical point-in-time uninsurance rates but different per capita rates. In such a case, the community with the higher per capita uninsured months would have: (a) more spells of uninsurance in a given time frame and/or (b) longer spells of uninsurance in a given time frame.

Table 16 contains the synthetic estimates of per capita uninsured months for selected counties in Texas in 2007. For the sake of brevity, only the 25 counties with the highest per capita rates are shown. These rates are compared to the 2007 SAHIE county-level estimates of uninsurance in Texas. Though the SIPP and SAHIE use different methodologies, the comparison illustrates how point-in-time estimates can mask underlying dynamics. For example, the SAHIE data have Hidalgo and Maverick counties with identical uninsurance rates of 31.5 percent. However, Maverick County has the second highest per capita rate at 4.98 months while Hidalgo County ranks 12th with a rate of 4.75 per capita months of uninsurance. This illustrates that even with equivalent point-in-time rates, one county can have a much greater exposure to uninsurance over time than the other. Similarly, though Starr County has the highest per capita rate at 5.01 months, it ranks 100th in SAIPE's estimate of uninsurance rates.

In summary, the synthetic estimates show that, among a selected group of states with large Hispanic populations, Texas had the second highest average of per capita uninsured months (i.e., 3.34) and the second lowest average of per capita public insurance months (i.e., 1.58) for the 2004-2007 time period. By contrast, Massachusetts, which initiated comprehensive health care reform in 2006, had the lowest average per capita uninsured months at 1.09 and a moderate average of per capita public insurance at 1.93. In 2007, the following insurance reform, the Massachusetts per capita uninsured months dropped to 0.85. When Texas counties were examined, we saw that counties along the Texas-Mexico border and in the Texas Panhandle had among the longest periods of uninsurance and the longest periods of public insurance. These are areas that have relatively high concentrations of agricultural workers and other low-jobs that are often filled with undocumented immigrants and seldom offer employer-provided health care. Finally, we presented an example where counties with identical point-in-time uninsurance rates could have very different average durations of uninsurance, suggesting that point-in-time rates do not always provide a complete picture of insurance coverage dynamics.

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Table 16: Comparison of the 25 Texas Counties with the Highest Per Capita Uninsured Months to the SAHIE Uninsurance Rates, 2007

County Name	Fips	2007 Population	2007 Per Capita Uninsured Months	Rank - 2007 Uninsured Months	2007 Percent Uninsured - SAHIE	Rank - 2007 Percent Uninsured
Brooks	48047	6,572	4.95	3	17.8	251
Cameron	48061	347,358	4.67	18	33.7	35
Culberson	48109	2,154	4.65	19	42.6	4
Dawson	48115	12,057	4.53	24	25.0	165
Deaf Smith	48117	16,449	4.45	25	31.8	53
Dimmit	48127	8,622	4.85	8	23.7	199
Duval	48131	10,611	4.70	16	16.7	253
El Paso	48141	674,370	4.59	20	33.0	42
Hidalgo	48215	655,904	4.75	12	31.5	56
Hudspeth	48229	2,993	4.71	14	48.5	2
Jim Hogg	48247	4,307	4.93	6	19.0	246
Kenedy	48261	302	4.75	13	49.5	1
Kleberg	48273	26,975	4.55	23	25.9	139
La Salle	48283	5,138	4.79	11	18.8	247
Maverick	48323	47,332	4.98	2	31.5	56
Pecos	48371	14,551	4.55	22	33.2	38
Presidio	48377	6,983	4.82	9	40.8	5
Reeves	48389	9,915	4.67	17	25.3	154
Starr	48427	57,002	5.01	1	27.8	100
Uvalde	48463	22,280	4.59	21	29.5	72
Val Verde	48465	41,971	4.70	15	29.7	69
Webb	48479	221,350	4.82	10	38.7	12
Willacy	48489	18,526	4.91	7	25.3	154
Zapata	48505	12,272	4.93	5	35.0	25
Zavala	48507	10,526	4.94	4	23.0	210

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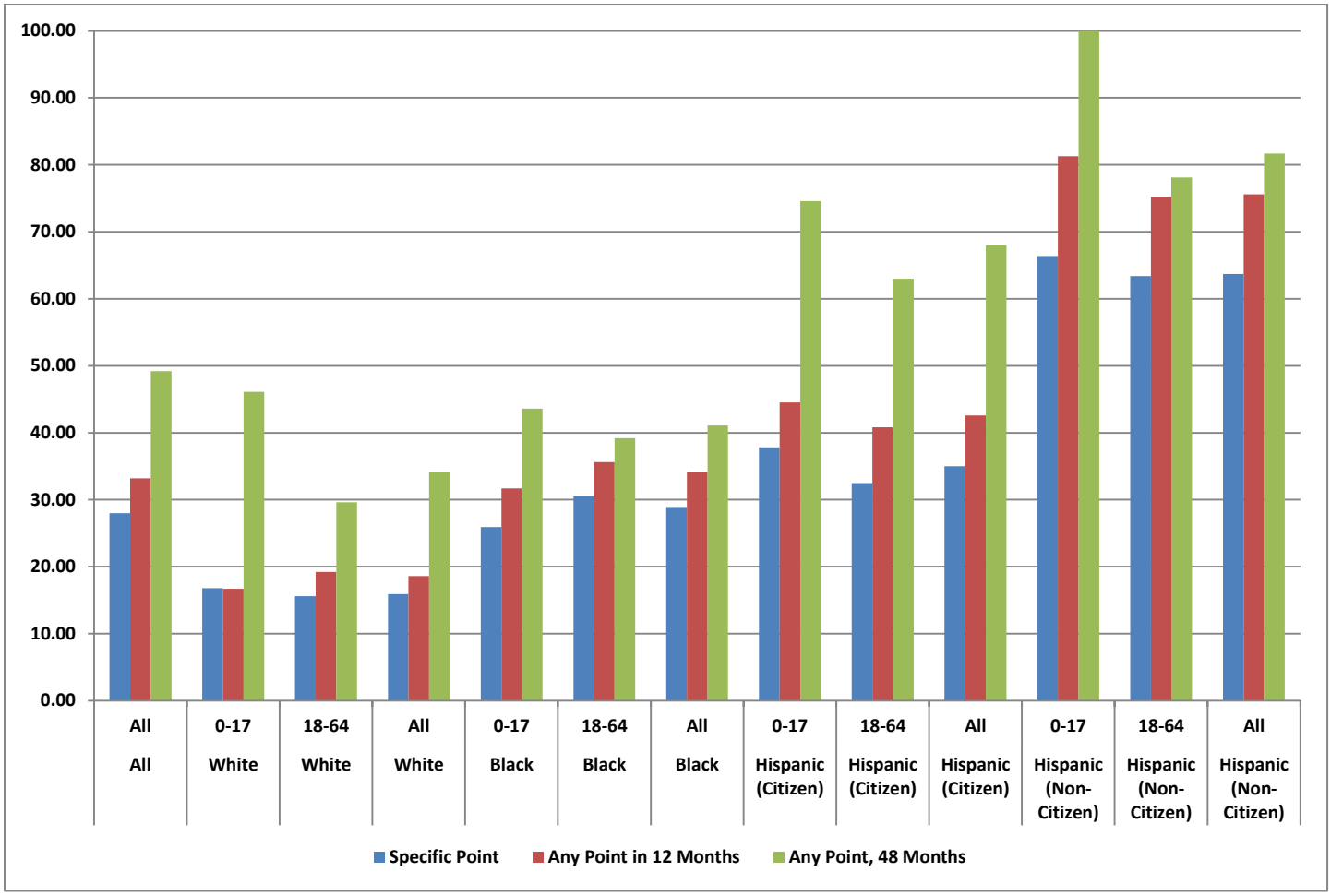
Summary and Conclusions

Access to health insurance is an important topic that has received wide attention in recent years. However, the various rates of uninsurance cited by investigators and the popular press can vary considerably. Some of this variation occurs because of differences in survey designs and sample sizes. But a more basic reason for differences in uninsurance rates is the reference period used when people are questioned about their insurance status. Figure 14 below compares 2007 uninsurance rates in Texas using three common reference periods used in surveys.

Figure 14: Comparison of Three SIPP Uninsurance Rates for Selected Age-Race/Ethnicity Groups in Texas, 2007



Though small sample sizes affect some of the point estimates in Figure 14, the basic pattern reflects what other research and common sense would suggest. That is, in the absence of universal health care coverage, longer reference periods increase the likelihood that people will report spells of uninsurance. Figure 14 also shows that no matter how it is measured, uninsurance varies greatly across different age, race/ethnicity, and citizenship categories. Consequently, the use of a single uninsurance rate will overstate the insurance coverage of some groups and understate the insurance coverage of other groups. Also, as seen in the Results section of this report, there also are substantial variations in the county-level measures of uninsurance in Texas. Taken together, the differences in uninsurance measures, uninsurance rates among different age and race/ethnicity groups, and variations in county-level insurance rates suggest that health insurance coverage is a complex and multifaceted phenomenon.

Using a variety of uninsurance measures, this report found the following general patterns for Texas:

1. Texas has higher uninsurance rates than the United States;
2. Adults (less than 65 years old) have higher uninsurance rates than children;
3. Hispanics have higher uninsurance rates than non-Hispanics;
4. Non-citizens have higher uninsurance rates than citizens; and,
5. Counties along the Texas-Mexico border have higher uninsurance rates than non-border counties.

Using dynamic measures of uninsurance, it was found that, compared to non-Hispanic Whites, insured Hispanics are more likely to lose insurance and uninsured Hispanics are less likely to obtain insurance within a given time frame. The combination of these two dynamics ensures that the Hispanic point-in-time uninsurance rate is greater than that for non-Hispanic Whites. Other dynamic measures show that Texas has among the highest per capita average months of uninsurance and among the lowest per capita average months of public insurance. Within the state, these patterns were most extreme along the Texas-Mexico border and in the Texas Panhandle, two areas that have high concentrations of low-wage workers. Often, these low-wage jobs do not have employer-provided health insurance and, historically, many of these jobs have been filled by undocumented immigrants.

Overall, the analysis suggests that the measure or measures of uninsurance used to inform policy should be closely aligned to the stated goals and objectives of that policy. For example, if the goal is reduce breaks in insurance coverage, then the 'full year' or 'specific point-in-time' would not be the best measures because these would tend to undercount those who had cycled on and off of insurance. Instead, a more dynamic and retrospective measure of uninsurance would be a better measurement. Unfortunately, such measures typically are not available below the state level of geography and this makes it difficult to allocate resources where they are most needed.

In this paper, we used existing data sets to synthesize county-level measurements of average uninsured months and average months of public insurance. While this represents a first step at developing more dynamic small-area measures of insurance coverage, data limitations in the SAHIE made it difficult to obtain county-level age-, race, and income-specific insurance rates. Though the American Community Survey has insurance coverage by age and race/ethnicity, the insurance questions were not added until 2008. Consequently, data for all counties will not be available until the release of the 2008-2012 ACS in late 2013. In the meantime, future efforts should be aimed at exploring other data sources and methods that would allow the development of more dynamic measures of small-area insurance coverage.

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