Evaluating Subannual Health Insurance Coverage Estimates in the Current Population Survey Annual Social and Economic Supplement (CPS ASEC)

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Research Objective. To compare Current Population Survey Annual Social and Economic Supplement (CPS ASEC) monthly coverage estimates with estimates from the Medical Expenditure Panel Study Household Component (MEPS-HC) in 2017 and 2018 and the Survey of Income and Program Participation (SIPP) for 2017.[1]

Data Sources/Study Setting. Adults ages 19 to 64 and children under age 19 sampled in the 2018 and 2019 CPS ASEC, the 2017 and 2018 MEPS-HC, and the 2018 SIPP Panel Wave 1. This paper analyzes health insurance coverage during the 2017 and 2018 calendar years.

Study Design. We compare uninsured rates, transitions in health insurance coverage and the duration of uninsured spells in CPS ASEC, MEPS and SIPP. We focus on descriptive comparisons and Kaplan-Meier estimates to evaluate data quality of subannual coverage in the CPS ASEC.

Principal Findings. Fewer people were uninsured for part of the year in the CPS ASEC, and the average duration of individuals' longest uninsured spell was longer in the CPS ASEC than in MEPS. There were also fewer incident health insurance transitions in the CPS ASEC than in MEPS. Among the three surveys, SIPP showed the fewest incident transitions to uninsured spells, while the CPS ASEC showed the fewest incident transitions to insured spells in 2017.

Conclusions and Implications. This study found significant differences in health insurance transitions and spell length across surveys, with the CPS ASEC and SIPP showing more stability in uninsured status than MEPS. Some of these differences may be due to design differences across surveys, including a longer retrospective recall period for the cross-sectional CPS ASEC compared to MEPS. Although seam bias and attrition may be more likely to impact estimates of transitions in longitudinal panel surveys like MEPS, the relative within-year stability of insurance status in the CPS ASEC poses a challenge to understanding transitions in coverage and insurance churning among subgroups.

[1] This analysis compares the CPS ASEC with MEPS for calendar year 2018 and 2017, and the CPS ASEC, MEPS and SIPP for calendar year 2017.

Although annual estimates of health coverage paint a broad picture of the health care landscape, estimates of within-year transitions in coverage or health insurance churning provides a more nuanced portrait of the nation's health and spending on healthcare. Understanding who loses coverage and for how long is crucial for measuring potential health needs and medical expenditures of the population (Graves & Swartz, 2013; Sudano & Baker, 2003). For example, people who lose health insurance coverage for one or more months are more likely to delay treatment (Aiken, 2004; Sudano & Baker 2004), experience negative health events, and face higher healthcare costs than those insured for the entire year (DeVoe et al., 2003; Schoen & DesRoches, 2000). Further, enrolling and re-enrolling individuals on plans increases administrative costs and aggregate health care spending. As health insurance instability is associated with higher costs (DeVoe et al., 2003; Schoen & DesRoches, 2000), and longer periods without health insurance coverage are associated with poorer health outcomes (DeVoe et al., 2008; Olson et al., 2005), additional research can inform which subgroups are most likely to experience transitions in coverage and the health policy implications of health insurance transitions.

This paper evaluates monthly health insurance data in the Current Population Survey Annual Social and Economic Supplement (CPS ASEC). Prior research indicates that the 2014 CPS ASEC questionnaire redesign helped to improve the quality of *annual* estimates of health insurance coverage in the CPS ASEC (e.g., Medalia, O'Hara, & Smith, 2015; Pascale, Boudreaux, & King, 2015).[2] Updates to the CPS ASEC processing system completed in 2019 further improved these estimates (Jackson and Berchick, 2020; Berchick and Jackson, 2019). Yet, no existing research has evaluated the subannual estimates of coverage available in the redesigned CPS ASEC. Using restricted-use CPS ASEC data, this analysis fills this gap by comparing 2018 and 2019 CPS ASEC health insurance spell and transition data with the 2017 and 2018 Medical Expenditure Panel Study (MEPS) and the 2018 Survey of Income and

[2] All comparative statements in this report have undergone statistical testing, and unless otherwise noted, all comparisons are statistically significant at the 5 percent level. Standard errors used in statistical testing and margins of errors presented in tables reflect the use of replicate weights to account for the complex sampling design of the CPS ASEC.

Program Participation (SIPP) Wave 1, two of the most commonly used datasets for examining subannual dynamics in health coverage (e.g., Graves & Mishra, 2016; Vistnes & Cohen, 2018).[3]

Health Insurance Spells in the CPS ASEC

The CPS ASEC is a leading source of information about health insurance, income, poverty, and other social, economic, and demographic characteristics. After more than a decade of research, the CPS ASEC completed a two-stage redesign in 2019. The first stage, implemented in 2014, introduced a redesigned questionnaire to address concerns regarding under-reporting of health insurance coverage (Pascale 2016; Klerman et. al. 2009, O'Hara 2009). The revised questionnaire first asks respondents about their current (at time of interview) health insurance status and type, and then asks whether the coverage was held in January 1 of the previous calendar year. Additional questions probe to determine whether the coverage was continuous or in which months the coverage was held. Thus, the revised questionnaire captures data on health insurance coverage by month (see U.S. Census Bureau, 2015 for additional information). The second phase of the redesign, completed in 2019, introduced an updated processing system to improve imputation procedures and methods of extracting data from the revised questionnaire (U.S. Census Bureau 2019c). Specifically, with respect to subannual coverage, the updated processing system extracts monthly coverage data and leverages this information to estimate annual health insurance coverage in the previous calendar year.

The CPS ASEC subannual data have the potential to serve as a resource for examining within-year health insurance dynamics. Although earlier evaluations showed that the CPS ASEC questionnaire redesign improved the quality of *annual* estimates of health insurance coverage (e.g., Medalia, O'Hara, &

[3] The 2018 MEPS and 2018 SIPP Wave 1 were the most recent years available for these surveys at the time of analysis. For information on confidentiality protection, sampling error, nonsampling error, and definitions in the CPS ASEC, see <www2.census.gov/programs-surveys/cps/techdocs/cpsmar19.pdf> and <www2.census.gov/programs-surveys/cps/techdocs/cpsmar18.pdf>. For information on confidentiality protections, sampling and nonsampling error and definitions in the SIPP, see <https://www.census.gov/programs-surveys/sipp/methodology/sampling.html>. More information on on MEPS is available at <meps.ahrq.gov/data_stats/download_data/pufs/h201/h201doc.shtml> and <meps.ahrq.gov/data_stats/download_data/pufs/h209/h209doc.shtml>.

Smith, 2015; Pascale, Boudreaux, & King, 2015), prior research on subannual health insurance dynamics has used panel surveys such as MEPS or SIPP. The CPS ASEC has a larger sample size than either of these surveys and is released in a more timely manner. These two features offer the potential for the CPS ASEC to be used to answer more research and policy-relevant questions than these other surveys.

In the redesigned CPS ASEC, questions about current coverage are used to anchor respondents' reports of coverage in the previous calendar year. Still, the health insurance coverage questions in the CPS ASEC are retrospective, requiring respondents to recall coverage status and the timing of any transitions in coverage 14 to 16 months prior to the interview. Thus, concerns about recall bias (Eisenhower et al., 2011) and censoring (Swartz, McBride, & Marcotte, 1993) remain. Therefore, it is possible that the quality of the subannual data in the CPS ASEC is lower than the quality of the annual estimates they are designed to produce.

Prior research on health insurance spells

Earlier research on health insurance spells necessarily relied on longitudinal or panel data sets such as the SIPP or the MEPS-HC. Both of these surveys were designed to follow the same individuals over a period of time, with panels typically ranging from 2 to 4 years.[4] Both SIPP and MEPS-HC collected monthly data on health insurance, and enabled researchers to examine health insurance dynamics. Although much of the literature on health insurance spells predates more recent changes to the health insurance landscape (such as implementation of the Patient Protection and Affordable Care Act), these studies provide some insight into the measurement of spells and spell duration.[5]

In early work on uninsured spell duration using the 1984 SIPP panel, Swartz and McBride (1990) found that 50 percent of incident uninsured spells -- that is, uninsured spells starting within the panel –

[4] MEPS uses an overlapping panel design, with a new panel being drawn from the NHIS each year and respondents in each panel followed for about two years. SIPP panels have ranged in length from 2 ½ years (2004 panel) to 4 years (2014 panel).
[5] Researchers have documented seam bias in panel surveys, including SIPP. Seam bias may result in overreports of change between survey waves and underreports of transitions within survey waves (Moore 2008; Moore and Marquis 1989).

were relatively short-lived, ending within 4 months.[6] However, among spells already in progress at the start of the panel (left-censored spells), 60 percent lasted more than 24 months. Using the 1987 and 1990 SIPP Panels, McBride (1994, 1997) also found that 75 percent of the uninsured were in spells that would last at least a year, and 62.2 percent of those with spells in progress at the beginning of a panel were insured at least 24 months. Although those experiencing transitions to coverage during a panel were uninsured for a shorter period, a substantial proportion of the uninsured population remained uninsured throughout the panel, i.e. were chronically uninsured.

Work by Cutler and Gelber (2009) revealed a higher incidence of uninsured spells and a decrease in the duration of these spells in the 2001 SIPP panel compared to the 1983 SIPP panel. They attributed their findings to declines in employer-sponsored coverage, and increased public coverage between the early 1980s and 2000s. Consistent with Cutler and Gelber (2009), additional research using SIPP panels from the early 1990s also indicated churning -- about 20 percent of people lacked insurance coverage for at least one month in a given year. (U.S. Census Bureau 1996, 1998). More recent work by Sommers, et al. (2016) based on a telephone survey in three states (AR, TX and KY) found that about 25 percent of low-income adults experienced a transition in coverage in 2015, not significantly different from rates in 2013 before the ACA was implemented. About one-half of those experiencing a transition had an uninsured spell.

Examining transitions in coverage using three MEPS panels (2011-2012, 2012-2013, and 2013-2014), Graves and Nikpay's (2017) findings suggest the probability of transitioning to coverage among the uninsured increased between 2013 and 2014, compared to the earlier panels (i.e. the likelihood of remaining uninsured declined). Further, coverage transitions were concentrated among the uninsured, with more transitions to coverage than from coverage in 2014. Although their study did not examine coverage transitions, Vistnes and Cohen (2018) also use three consecutive panels of the MEPS-HC (2012-13, 2013-14, and 2014-15) to examine uninsured spell duration for nonelderly adults before and after the

implementation of the Affordable Care Act (ACA). Their results suggest that the length of longest uninsured spells declined in the period immediately after the implementation of the ACA. Further, echoing Graves and Nikpay's (2017) findings, Vistnes and Cohen also conclude that, among those uninsured at the beginning of the panel, the percentage of people uninsured through the length of the panel declined. For example, 61.7 percent of those uninsured at the beginning of the 2012-13 panel remained uninsured for the length of the panel, compared with 42.6 percent of those uninsured at the beginning of the 2014-15 panel.

Graves and Mishra (2016) compared uninsured spells for nonelderly adults and children under 18 in both the MEPS-HC and SIPP[7]. Using Kaplan-Meier methods to examine incident spells (i.e. observed uninsured spells beginning after the start of the panel), they identified significant differences across the two surveys in both uninsured spell duration and transitions to health insurance coverage. Specifically, their results revealed longer uninsured spells in MEPS-HC than in SIPP for both children and adults, although there was no difference in incident spells across surveys among children in 2008-2011. They concluded these differences resulted from variation in attrition across the surveys, greater seam bias in the SIPP panels (even after dependent interviewing was introduced in the 2004 SIPP panel), and less regular spacing of interviews in MEPS. However, this study compared spell duration in MEPS-HC and SIPP panels prior to the implementation of the 2014 SIPP redesign. Among other aspects of the redesign, the introduction of the event history calendar in SIPP was intended to anchor respondents' reporting of monthly coverage (as well as other monthly variables, such as employment status and participation in means-tested government programs) and mitigate seam bias. To our knowledge, no studies have compared spells in the redesigned SIPP or the redesigned CPS ASEC with other surveys as is done here.

Data and Methods

[7] In their analysis, Graves and Mishra use the Panels 6 through 15 of MEPS and 2001, 2004 and 2008 SIPP panels to examine health insurance dynamics from 2001 to 2011.

In order to evaluate subannual coverage in the CPS ASEC, this analysis uses data from the 2018 CPS ASEC Bridge File and the 2019 CPS ASEC, with estimated spells from wave 1 of the 2018 Survey of Income and Program Participation (SIPP) and the 2017 and 2018 Medical Expenditure Panel Survey Household Component (MEPS).

The CPS ASEC, a survey of more than 90,000 households fielded annually between February and April, collects information about social and demographic characteristics, including the health insurance status, of respondents (U.S. Census Bureau, 2017).[8] Notably, most social and demographic characteristics, including household composition, are measured at the time of interview, whereas the reference period for the primary measure of health insurance coverage is the prior calendar year. Since the 2014 redesign of the CPS ASEC instrument, restricted use internal files include monthly health insurance status by type, which are primarily used to determine whether a person was covered at any point in the previous calendar year. An updated data processing system was developed and implemented to extract responses from the redesigned instrument and incorporate richer economic and demographic data for imputing missing data to produce these subannual coverage variables. .

MEPS is a leading source of monthly health insurance data with an overlapping panel design. Like the CPS ASEC, MEPS is a household survey representative of the U.S. civilian, noninstitutionalized population (see AHRQ, 2017). Each year, a panel of about 13,000 households is drawn from the National Health Interview Survey (NHIS) and followed for five rounds of interviews over approximately two years. The MEPS Household Component collects detailed information on access to health care, health care utilization and medical expenditures, as well health insurance coverage. Annual and subannual estimates of health insurance coverage are provided for two panels each calendar year, and coverage is measured for the survey year. This analysis uses the public-use version of the 2017 and 2018 MEPS, which includes information about monthly health insurance coverage for about 30,000 people each calendar year.

[8] Note: For information on confidentiality protection, sampling error, nonsampling error, and definitions in the Current Population Survey, see <https://www2.census.gov/programs-surveys/cps/techdocs/cpsmar19.pdf>.

Like MEPS, SIPP is also a longitudinal household survey representative of the U.S. civilian noninstitutionalized population. For the 2018 SIPP Panel, a sample of about 53,000 households was selected to be interviewed annually for four years. The SIPP contains rich detail about demographic and household information, including household composition including changes in marital status and fertility; person-level details including job loss, income dynamics, participation in government transfer programs, changes in health insurance coverage, as well as other measures of well-being. Similar to MEPS, the 2018 SIPP Panel also has an overlapping design, with a new panel beginning in each subsequent year (2018 SIPP Users Guide).[9] Annual and subannual estimates are derived from retrospective monthly reports of health insurance coverage by type. Unlike the MEPS, but like the CPS ASEC, the reference period for questions pertaining to health insurance coverage is the previous calendar year. Thus, the 2018 SIPP Panel Wave 1 provides coverage estimates for calendar year 2017.

In this paper, we restrict our analytic samples to adults ages 19 to 64 and to children under 19. We exclude older adults, as most persons 65 and older are on Medicare, and relatively few of them transition between coverage and no coverage. Missing data are imputed in all three surveys before release, and we include these imputed values in our analyses[10]. Weighted sample characteristics of adults aged 19 to 64 and children under 19 from each survey can be found in the Appendix Tables A1 and A2.

Analytic Strategy

In order to evaluate subannual estimates of health insurance coverage in the redesigned CPS ASEC, this paper focuses on broad summary measures of health insurance dynamics. Therefore, we focus on descriptive comparisons of the uninsured rate, subannual coverage rates, duration of insured and uninsured spells, and transitions to and from coverage in the CPS ASEC, SIPP and MEPS.

[9] The overlapping panel design does not impact this analysis, as we use only Wave 1 of the 2018 SIPP, comprising only the 2018 sample.
[10] Results from analyses excluding imputed cases are not substantively different from those reported here.

Several challenges arise in analyzing spells and transitions in insurance coverage in household surveys. First, the length of a spell in progress at the beginning of the reference period cannot usually be determined, i.e. spells are left-censored. Further, not every person experiences a transition in coverage within a year, or individuals may attrite before the end of the study period, that is observations may be right-censored. This study focuses on a one-year time period, examines spell length over the course of a given year (0-12 months), and describes incident spells, that is transitions to being uninsured that begin within that year to address left-censoring.

Seam bias in panel surveys poses an additional challenge to spell and transition analysis in panel surveys. Seam bias occurs when reports of transition cluster between survey waves or interviews. Thus, a respondent reporting an uninsured spell at an April interview may report the start of that spell as the first reference month (January), when the spell actually began later (February). In this study, seam bias is most likely to impact estimates of transition in MEPS as respondents are interviewed multiple times a year, rather than once as with SIPP[11] and CPS ASEC, although MEPS uses dependent interviewing to mitigate this source of bias.

This paper describes health insurance dynamics for adults ages 19 to 64 and for children under 19 across the surveys. We compare the percentage of people who are uninsured for part of the year (1-11 months) and for the full year (all 12 months) across surveys.

We further examine the percentage of people who experienced any transitions to or from insurance coverage over the course of the year across surveys. To do so, we define a transition as any change in coverage between consecutive months. Thus, if an individual was insured in month *t,* but uninsured in month $t+1$, they would be defined as having experienced a transition to uninsured status or having lost coverage. If an individual was uninsured in month *t* but held health insurance coverage in month $t+1$, they would be defined as having experienced a transition to insured status or having gained coverage. As the focus of this analysis is on incident spells, we further explore transitions to uninsured

[11] Although SIPP is also a panel study, seam bias in SIPP would be more likely to impact latter waves, and this analysis uses the first wave of the 2018 SIPP Panel.

status among those insured in January of a given year and transitions to insured status among those who held no coverage in January of a given year.

In addition, among those without health insurance coverage in at least one month, we report the mean length of an individual's longest uninsured spell in each survey year.

Finally, following Graves and Mishra (2016), we explore incident transitions to uninsured status and transitions to insured status using Kaplan-Meier survival methods, and test for the equality of the cumulative survival functions across the surveys using a log-rank test. Consistent with this prior study, our primary models focus on incident spells; that is, insured or uninsured spells that begin *during* the calendar year. Analyses of transitions to uninsured status are, therefore, limited to individuals who had health insurance coverage in January of the reference year, and primary analyses of transitions to insured status are limited to individuals without coverage at the start of the year. Although this restriction reduces sample size, it does not require strong parametric assumptions about data generating processes. Focusing on incident spells also reduces concerns about left censoring since not all of the surveys include information to determine when coverage (or an uninsured spell) reported in January of the calendar year began. Ignoring this left censoring could upwardly bias estimates of transitions and downwardly bias estimates of spell duration.

Results

To benchmark CPS ASEC estimates of health insurance coverage, we compare them with estimates obtained from two other federal surveys (MEPS and SIPP) for 2017 and 2018.

Summary Estimates of Subannual Coverage

Estimates of the percentage of the population ages 19 to 64 without *any* health coverage for the entire calendar year were higher in the CPS ASEC than in MEPS (Table 1). As measured by the CPS ASEC, in 2018, 11.7 percent of adults under 65 were uninsured the entire calendar year compared with 9.7 percent in MEPS. In 2017, the uninsured rate for working-age adults in the CPS ASEC (11.0 percent)

was higher than in MEPS (9.9 percent); the SIPP estimate of the uninsured rate (12.9 percent) was higher than both the CPS ASEC and MEPS.

The proportion of adults ages 19 to 64 who were uninsured for part of the year (1 to 11 months) was lower in the CPS ASEC than in MEPS in both 2017 and 2018. Table 1 shows that 3.4 percent of adults were uninsured for part of 2018 in the CPS ASEC, compared with 10.4 percent in MEPS; in 2017, 3.6 percent of working-age adults were uninsured 1 to 11 months in the CPS ASEC, compared with 11.7 in MEPS. The difference in the percentage of adults who were uninsured for part of the year (1 to 11 months) between the CPS ASEC and SIPP (3.7 percent) was not statistically significant.

Table 1 also reports the percentage of adults 19 to 64 experiencing a transition in health insurance coverage. The proportion of adults under 65 gaining health coverage (transitions to insured status) and the proportion of adults under 65 losing health coverage (transition to uninsured status) were lower in the CPS ASEC than in MEPS in 2017 and 2018. For example, 1.7 percent of adults under 65 (3.3 million) lost health coverage during calendar year 2018 according to the CPS ASEC, compared with 5.9 percent (11.3 million) in MEPS. With respect to transitions to insured status, 2.3 percent of adults ages 19 to 64 (4.4 million) gained health insurance during 2018 according to the CPS ASEC, compared with 7.1 percent (13.6 million) in MEPS. For 2017, transitions to insured status were also lower in the CPS ASEC (2.4 percent) than in MEPS (8.2 percent) or in SIPP (2.7 percent). However, there was no significant difference in the percentage of adults experiencing a loss of health coverage in the CPS ASEC and SIPP in 2017. For the CPS ASEC and MEPS, transitions to insured status were more prevalent than transitions out of coverage (to uninsured status) among adults aged 19 to 64, consistent with findings in Graves and Nikpays (2017).

Table 1 also reports summary statistics of incident transitions (that is, transitions to or from coverage that began after January 1 of the calendar year). Since there is no way to ascertain when coverage, or an uninsured spell reported in January of the reference calendar year began, this analysis captures transitions occurring *within* the calendar year. As shown in Table 1, a slightly higher percentage of adults reported coverage in January in the CPS ASEC than in MEPS or SIPP.

Of those reporting health coverage in January, more than 90 percent experienced no transitions in coverage during the calendar year in any of the surveys examined here. Reported incident transitions to uninsured status were lower in the CPS ASEC than in MEPS in 2017 and 2018. About 1.8 percent of those insured in January 2018 reported losing coverage during the calendar year in the CPS ASEC compared with 6.3 percent in MEPS (2017: 1.9 percent in the CPS ASEC and 6.8 percent in MEPS). The percentage of adults 19 to 64 who were insured in January 2017 but lost coverage during the calendar year was also significantly lower in SIPP (1.5 percent) than in the CPS ASEC (or MEPS).

Among those uninsured in January, incident transitions to insured status were also less prevalent in the CPS ASEC (13.5 percent) than in MEPS (34.0 percent) in 2018 and in 2017 (CPS ASEC: 14.8 percent. MEPS: 37.7 percent). Although a lower proportion of adults ages 19 to 64 were uninsured in January 2017 in the CPS ASEC compared with SIPP, the proportion of adults experiencing an incident transition to insured status did not statistically differ in the CPS ASEC (14.8 percent) and SIPP (14.6 percent).

Table 2 compares subannual estimates of health insurance coverage and incident spell transitions for children under 19 in the CPS ASEC, MEPS and SIPP. Consistent with results for adults, the percentage of children under 19 who were uninsured for the entire calendar year was higher in the CPS ASEC than MEPS in both 2018 and 2017. Children under 19 also experienced fewer transitions in coverage in the CPS ASEC compared with MEPS. According to MEPS, 6.8 percent and 8.5 percent of children experienced any transitions in coverage in 2018 and 2017 respectively, while 5.1 percent of children under 19 experienced transitions in coverage in the CPS ASEC. The CPS ASEC captured more transitions in coverage among children than SIPP in 2017 (5.1 percent in CPS ASEC; 2.9 percent in SIPP).

More children under 19 transitioned to insured status than lost coverage in both 2017 and 2018 in most of the surveys examined.[12] For example, according to the CPS ASEC, an estimated 4.5 percent of

[12] There was no statistical difference between the percentage of children gaining coverage or the percentage of children losing coverage in the 2018 MEPS.

children gained health insurance coverage during 2018, while 1.2 percent of children lost coverage. Differences in children's transitions between CPS ASEC and SIPP were not substantively different in 2017. Although CPS ASEC reported a lower percentage of children losing coverage than MEPS, there was no statistical difference in the percentage of children transitioning to uninsured status between CPS ASEC and SIPP.

Consistent with results for adults, at least 90 percent of children who held health coverage in January remained insured for the entire calendar year. The CPS ASEC captured fewer *incident* transitions to uninsured status than MEPS in both 2017 and 2018. About 1.2 percent of children insured in January 2018 and in January 2017 experienced a loss of coverage during the calendar year in the CPS ASEC compared with 4.1 percent in 2018 and 4.5 percent in 2017 in MEPS. The percentage of children under 19 who were insured in January 2017 but lost coverage during the calendar year did not statistically differ in the CPS ASEC and SIPP.

As seen in Table 2, among children who were uninsured in January, incident transitions to insured status were less prevalent in the CPS ASEC (42.3 percent) than in MEPS (52.9 percent in 2018 and in 2017 (CPS ASEC: 44.7 percent; MEPS: 63.7 percent). However, incident transitions to coverage in 2017 were higher in the CPS ASEC than in SIPP (25.9 percent) in 2017 for children under 19. Consistent with results for adults, children under 19 in the CPS ASEC are reported to be more stably uninsured than in MEPS.

Insured and Uninsured Spell Duration

Table 3 presents summary measures of insured and uninsured spell lengths that reveal additional similarities and differences between the surveys. In 2018, the mean duration of an insured spell among adults ages 19 to 64 was slightly longer in the CPS ASEC (10.4 months) than in MEPS (10.3 months). In 2017, mean insured spell length was 10.5 months in the CPS ASEC, compared with 10.2 months in the SIPP and 10.1 month in MEPS. Among all adults ages 19 to 64, the mean length of an uninsured spell was shorter than insured spell length in all three surveys. This is not surprising as less than one-quarter of adults were uninsured at any point in the calendar year in all three surveys. In 2018, uninsured spells

averaged 1.6 months in the CPS ASEC and MEPS; in 2017, spell length was slightly longer (1.5 months) in SIPP and MEPS) than in the CPS ASEC.[13] Although statistically significant, these slight differences in mean insured and uninsured spell length between the surveys are not substantively meaningful.

Restricting comparisons to those who were uninsured part of the year tells a more nuanced story. According to the CPS ASEC, the percentage of adults who were uninsured at least one month held health insurance coverage for only 1.3 months in 2018. This duration was appreciably larger in MEPS, at 3.3 months. Results for 2017 were substantively consistent with those for 2018. In other words, adults ages 19 to 64 without health insurance for at least part of the year tended to be more stably uninsured in the CPS ASEC (and in SIPP) than in MEPS.[14]

Table 4 reports results for uninsured and insured spell duration for children under 19 across the three surveys. In contrast to results for adults, shorter insured spells for children were reported in the CPS ASEC than in MEPS and SIPP in both years. Yet, despite being statistically different, the difference was slight -- uninsured spell lengths averaged 11.1 months in the CPS ASEC and 11.2 months in MEPS and SIPP.[15]

Consistent with results for adults, examining spell durations for those who were uninsured for at least one month reveals additional differences between surveys. Among children who were uninsured at any point during the year, the duration of an insured spell averaged 3.0 months in the CPS ASEC compared to about 5.0 months in MEPS in both years, and 2.2 months in SIPP. Children who were uninsured for part of the year were uninsured for longer periods in the CPS ASEC (and SIPP) than in MEPS.

Figure 1a illustrates what these differences in averages mean for the distribution of the longest uninsured spell duration among the working age adult population that lacked health coverage for at least

[13] There was no statistical difference in the mean length of uninsured spells between SIPP and MEPS in 2017.
[14] There was no statistical difference in the insured spell duration between the CPS ASEC and SIPP among working-age adults who were uninsured for at least one month in 2017.
[15] There was no difference in the duration of children's uninsured spells in 2017 between MEPS and SIPP.

one month in 2017 or 2018; Figure 1b reports the distribution of longest uninsured spell length for children under 19.

A smaller percentage of adults without health insurance coverage for all or part of the year falls into each of the bottom three categories (longest uninsured spell duration of 1-2 months, 3-6 months, or 7-11 months) in the CPS ASEC compared with MEPS in both 2017 and in 2018 (Figure 1a). Further, among those adults who were uninsured at least one month of the calendar year, the percentage of adults uninsured for all 12 months in the CPS ASEC is nearly 30 percentage points higher than in MEPS in both years. However, there were fewer differences in the longest uninsured spell duration between the CPS ASEC and SIPP among those without health insurance coverage for all or part of the year in 2017. Specifically, although there was no statistical difference in the proportion of uninsured adults with longest uninsured spell durations of 1-2 and 7-11 months, the proportion of adults aged 19 to 64 without health coverage for the full calendar year was slightly higher in the SIPP (77.8 percent) than in the CPS ASEC (75.4 percent).[16]

Consistent with these results, the percentage of children uninsured for the full calendar year was more than 20 percentage points higher in CPS ASEC than in MEPS in both 2018 and 2017 (Figure 1b). According to MEPS, about 58 percent of children under 19 who experienced an uninsured spell lacked health coverage for 6 months or less, compared with about 30 percent of children in the CPS ASEC in both 2017 and 2018. In SIPP, about two-thirds of children (65.0 percent) experiencing an uninsured spell were without coverage the entire calendar year, considerably higher than results for the CPS ASEC (49.4 percent) or MEPS (22.2 percent).

Incident Transitions in and out of Insurance Coverage

The previous estimates provide a broad overview of monthly dynamics and suggest that estimates of transition risk are lower in the CPS ASEC (and in SIPP) compared with MEPS. To assess whether this

[16] A higher proportion of adults aged 19 to 64 had a maximum uninsured duration of 3 to 6 months in 2017 in the CPS ASEC compared with SIPP.

is indeed the case, we employ nonparametric survival analysis of incident transitions in coverage by plotting Kaplan-Meier curves for the surveys.

Figures 2a and 2b show the cumulative risk of experiencing an incident uninsured spell for adults aged 19 to 64 who were covered in the first month of 2018 (CPS ASEC and MEPS) and 2017 (CPS ASEC, MEPS and SIPP), respectively. Figures 2c and 2d show the cumulative risk of experiencing an incident transition to insured status for adults aged 19 to 64 who were uninsured in January 2018 (CPS ASEC and MEPS), and 2017 (CPS ASEC, MEPS and SIPP). Figures 3a through 3d repeat these analyses for children under 19.

As noted in Table 1, there are some differences between the starting populations given the differences in the percentage of adults ages 19 to 64 without coverage in the reference year. A higher percentage of the CPS ASEC sample had coverage in January of each year than in MEPS (86.5 percent versus 85.3 percent in 2018; 87.1 percent in CPS ASEC versus 84.2 percent in MEPS, in 2017). Insured rates in January 2017 were also higher in the CPS ASEC than in SIPP (84.8 percent).[17]

Figure 2a shows the cumulative probability of transitioning to uninsured status during 2018 among adults under 65 who started the year with health insurance coverage. As suggested by estimates in Table 1, there were relatively few transitions to uninsured status among those that started calendar year 2018 with health insurance coverage (1.8 percent in the CPS ASEC, representing 3.0 million adults; 6.3 percent, representing 10.3 million adults in MEPS). Yet, the cumulative probability of losing coverage differs between the two surveys ($p<0.000$).

Figure 2b shows the cumulative probability of losing coverage among working-age adults who were insured in January 2017. As seen in Figure 2b, the cumulative probability of losing coverage is lower in the CPS ASEC than in MEPS ($p<.000$), as evidenced by a lower survival curve for MEPS. Although the probability of losing coverage was slightly higher in the CPS ASEC than in SIPP ($p<0.0002$), the Kaplan-Meier curves for the two surveys appear indistinguishable. Thus, it cannot be

[17] The proportion of adults ages 19 to 64 with health coverage in January 2017 was not significantly different in MEPS and SIPP.

determined whether the curves for the CPS ASEC and SIPP cross, violating the proportional hazards assumption. The Wilcoxon (and other log rank tests) are not as reliable if the proportional hazard assumption is violated.

In Figure 2c and 2d, the cumulative probability of transitioning to insured status for adults uninsured at the beginning of the calendar year was again higher in MEPS than in the CPS ASEC in both 2018 and 2017, as shown by the steeper Kaplan-Meier survival curve for MEPS ($p<0.000$ for both years). However, the cumulative probability of gaining coverage was not statistically different between the CPS ASEC and SIPP ($p<0.236$).

Consistent with results for working-age adults, the cumulative probability of transitioning to uninsured status among children under 19 who were covered by health insurance in January was lower in the CPS ASEC than in MEPS ($p<0.000$ in both years) (Figures 3a and 3b). However, there was no statistically significant difference between the cumulative probability of children under 19 losing coverage in 2017 in the CPS ASEC and SIPP ($p<0.594$).

Figures 3c and 3d show the cumulative probability of gaining coverage among children under 19 who were uninsured at the beginning of the calendar year. As shown, the steeper survival curve for MEPS suggests a higher probability of transitioning to insured status for children than in the CPS ASEC in 2018 (Figure 3c) and in 2017 (Figure 3d). For children under 19, the probability of gaining health insurance coverage during the calendar year was also somewhat higher in the CPS ASEC than in SIPP ($p<0.031$), although the crossing of the curves suggests the results of the log-rank test are less reliable. Still the cumulative probability of losing coverage at month 12 is higher in the CPS ASEC than MEPS (0.4142, s.e.0.0075 in CPS ASEC; 0.3571 (0.0133) in MEPS).

Taken together, results from Figures 2a through 2d and 3a through 3d suggest that a larger proportion of adults and children who were uninsured at the beginning of the year remained uninsured throughout the year in the CPS ASEC than in MEPS. Similarly, a larger proportion of those insured at the beginning of the year were consistently insured during the year in the CPS ASEC compared with MEPS. Although the cumulative probability of working age adults losing coverage in 2017 was significantly

different between the CPS ASEC and the SIPP, the Kaplan-Meier survival curves presented here suggest that this slight difference was not substantively meaningful. These results suggest that health coverage status is more stable in the CPS ASEC (and SIPP) relative to MEPS. Despite some differences between the surveys, the CPS ASEC and SIPP both capture relatively few transitions in coverage.

Discussion

The recent redesign of the CPS ASEC questionnaire, together with an updated processing system that enable researchers to leverage the monthly level health coverage data collected by the redesigned questionnaire offer the potential for an additional source of data to examine health insurance dynamics. In this paper, we evaluate how subannual coverage estimates in the 2018 and 2019 CPS ASEC compare with these measures in SIPP and MEPS, the two leading sources of monthly health insurance data. Our results suggest that there are significant differences in estimates of health insurance dynamics between the surveys. In general, there were longer uninsured spells and fewer transitions between coverage states during 2017 and 2018 in the CPS ASEC (and in SIPP) compared with MEPS.[18] Although there were some significant differences between the CPS ASEC and SIPP in terms of transitions in health coverage and spell characteristics, in general SIPP, like CPS ASEC, was marked by relatively few transitions to or from coverage over the course of 12 months.

Research suggests that there has been more stability in insurance coverage and less Medicaid churning since the implementation of the ACA (Vistnes and Cohen 2018; Goldman and Sommers 2020). Yet, there are differences across the surveys in health insurance dynamics. Differences in survey design likely contribute to the results presented here. The CPS ASEC is a cross-sectional supplement, whereas MEPS and SIPP are both panel studies designed to follow individuals over a longer time period. MEPS respondents are interviewed 5 times over approximately two years, reporting on coverage in the roughly 3 to 7 months prior to each interview, while respondents to the CPS ASEC are interviewed in February

[18] Notably, results on uninsured spells for MEPS reported here were consistent with those reported in Vistnes and Cohen (2018).

through April, and asked to report their coverage in the previous calendar year, extending the recall period to 14-16 months prior to the interview. With a longer recall period, it is not surprising that the CPS ASEC show more stability in coverage (or uninsured status) than MEPS.

Although SIPP is also a panel survey, in the 2018 panel respondents are also asked about health insurance coverage in each month of the previous calendar year. The 2018 SIPP Wave 1 interviews occurred between January and June 2018 requiring respondents to recall coverage 12-18 months prior to the interview. Thus, in some respects, despite being a longitudinal survey, the SIPP recall period mimics the CPS ASEC recall period for subannual coverage.[19] This longer recall period likely results in the report of fewer transitions in both SIPP and the CPS ASEC surveys, all else equal, although more research is needed. As a result, several summary estimates reported in Tables 1 and 2 were not significantly different for CPS ASEC and SIPP. Although analyses revealed some significant differences between these two surveys in the cumulative risk of experiencing a transition to uninsured status, results were not substantively different between the surveys, compared with MEPS.

Second, differences in the sampling and oversampling strategies between the surveys (e.g., with respect to race/ethnicity) suggests that the MEPS sample population has a profile that is more likely to experience a transition (e.g., Kirby & Kaneda, 2010). Although weighting may reduce (or eliminate) differences with respect to certain characteristics, it might not address all differences, particularly for characteristics not explicitly included in weight construction.

In addition, attrition is an issue with longitudinal surveys and, may have a greater impact on MEPS than on SIPP in this study. Although SIPP is also a longitudinal survey, we use the first wave of the 2018 SIPP, and therefore respondents have not had an opportunity to attrite. In contrast, because they may be interviewed more than once a year, MEPS respondents may attrite during the reference year. If respondents who attrite from the MEPS sample are more likely to be disadvantaged or more stably

[19] The SIPP redesign may have contributed to fewer reported transitions in later SIPP panels, consistent with results for CPS ASEC. Earlier SIPP panels (before 2014) interviewed respondents every four months over a period of about three years. As such, these earlier SIPP panels resembled the design of MEPS with more frequent interviews and shorter recall period. In their comparison of uninsured spells in the 2001, 2004 and 2008 SIPP panels and MEPS, Graves and Mishra (2016) found uninsured spell duration was shorter in SIPP than in MEPS and attributed these differences in part to seam bias in the SIPP.

uninsured, then we would expect shorter uninsured spells or more transitions in MEPS than in the CPS ASEC or SIPP.

Seam bias may also contribute to more frequent transitions in MEPS-HC, although dependent interviewing attempts to mitigate this source of bias. Although beyond the scope of this paper to evaluate potential seam bias, an examination of reported spell beginnings in Appendix Figures A1 and A2 suggest a higher proportion of uninsured spells in MEPS beginning in March and April (at the beginning of a reference period for interviews 2 and 4), and in September and October (early in the reference period for interviews 3 and 5).

Notably, this analysis is limited to examining subannual coverage and transitions in coverage *within* a year. Most studies of health insurance dynamics using SIPP and MEPS have leveraged the length of a panel to examine transitions in coverage over a longer period of time. Thus, we may not expect to capture as many transitions within the course of a year as one would over a 24 or 48 month period. Further, this paper evaluates transitions to and from coverage. Yet individuals may transition from one type of coverage to another. Future research will evaluate such transitions between coverage types.

Although it is beyond the scope of this paper to examine whether transitions in health insurance coverage are reliably reported across the surveys, researchers should use caution in interpreting subannual coverage and health insurance transitions in the CPS ASEC. Despite its larger sample size and rich demographic detail of the CPS ASEC, the infrequency of incident spells and stability in coverage retrospectively reported in the cross-sectional CPS ASEC may pose challenges for subgroup analysis or analyses of transitions between subtypes of coverage.

In addition to examining health insurance dynamics by coverage type and for broad subgroups, future evaluation of subannual coverage in the CPS ASEC will further explore explanations for differences in insurance spells and transitions by examining whether the imputation of missing data contributes to differences in health insurance dynamics between surveys. In addition, we plan to compare transitions in Medicaid coverage reported in Census households with administrative records (e.g. Medicaid enrollment data) to further evaluate subannual coverage in the CPS ASEC and SIPP.

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Table 1. Estimates of Health Insurance Coverage and Transitions in Health Insurance Coverage for Adults Ages 19 to 64, CPS ASEC, SIPP (2017) and MEPS, 2017 and 2018

	2018				2017					
	CPS ASEC		MEPS		CPS ASEC		SIPP		MEPS	
Sample Size	103,945		16,619		104,088		36,995		17,832	
Weighted Universe	193,547,810		192,288,918		193,937,120		193,245,361		192,527,644	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Uninsured during calendar year	15.13	0.18	*20.05	0.56	14.52	0.16	*16.55	0.24	*21.54	0.5
Uninsured all 12 months	11.72	0.16	*9.69	0.45	10.96	0.14	*12.87	0.21	*9.84	0.35
Uninsured 1 to 11 months	3.40	0.07	*10.36	0.32	3.57	0.08	3.68	0.12	*11.70	0.33
Insured all 12 months of year	84.87	0.18	*79.95	0.56	85.48	0.16	*83.45	0.24	*78.46	0.5
Experienced any coverage transition	3.40	0.07	*10.36	0.32	3.57	0.08	3.68	0.12	*11.70	0.33
Transition to uninsurance	1.71	0.05	*5.87	0.24	1.82	0.06	1.43	0.74	*6.30	0.25
Transition to insurance	2.28	0.06	*7.05	0.26	2.41	0.07	*2.72	0.11	*8.20	0.26
Insured in January	86.45	0.17	*85.31	0.51	87.14	0.15	*84.76	0.23	*84.20	0.43
Experienced transition to uninsurance	1.82	0.06	*6.29	0.27	1.90	0.07	*1.55	0.087	*6.81	0.29
Did not experience transition in coverage	98.17	0.06	*93.71	0.27	98.1	0.07	*98.45	0.09	*93.19	0.29
Uninsured in January	13.55	0.17	*14.69	0.51	12.86	0.15	*15.24	0.23	*15.80	0.43
Experienced transition to insurance	13.51	0.42	*34.03	0.82	14.83	0.46	14.55	0.63	*37.73	0.51
Did not experience transition in coverage	86.49	0.42	*65.97	0.82	85.17	0.46	85.45	0.63	*62.27	0.51

* Difference between CPS ASEC and MEPS or CPS ASEC and MEPS is statistically significant ($p < 0.05$)

Sources: U.S. Census Bureau, 2019 Current Population Survey Annual Social and Economic Supplement (CPS ASEC) ; 2018 Current Population Survey Annual Social and Economic Supplement (CPS ASEC) Bridge file; U.S. Census Bureau 2018 Survey of Income and Program Participation, Wave 1; Agency for Healthcare Research and Quality, 2018 Medical Expenditure Panel Survey Household Component (MEPS-HC); 2017 Medical Expenditure Panel Survey Household Component (MEPS-HC).

Table 2. Estimates of Health Insurance Coverage and Transitions in Health Insurance Coverage for Children Under 19, CPS ASEC, SIPP (2017) and MEPS, 2017 and 2018

	2018				2017					
	CPS ASEC		MEPS		CPS ASEC		SIPP		MEPS	
Sample Size	49,530		7,444		50,274		14,438		8,154	
Weighted Universe	77,332,794		74,334,946		77,487,103		72,841,108		74,107,228	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Uninsured during calendar year	10.66	0.25	9.42	0.60	10.06	0.22	*8.16	0.31	10.94	0.63
Uninsured all 12 months	5.54	0.18	*2.64	0.31	4.98	0.18	5.30	0.26	*2.43	0.30
Uninsured 1 to 11 months	5.12	0.15	*6.79	0.48	5.09	0.14	*2.86	0.20	*8.51	0.54
Insured all 12 months of year	89.34	0.24	90.58	0.60	89.94	0.22	*91.84	0.31	89.06	0.63
Experienced any coverage transition	5.12	0.15	*6.79	0.48	5.09	0.14	*2.86	0.20	*8.51	0.54
Transition to uninsurance	1.20	0.09	*3.97	0.35	1.20	0.07	1.15	0.12	*4.54	0.40
Transition to insurance	4.45	0.13	4.48	0.44	4.28	0.12	*2.24	0.18	*6.54	0.50
Insured in January	90.42	0.21	*94.40	0.51	91.00	0.21	*92.84	0.30	*93.50	0.53
Experienced transition to uninsurance	1.19	0.09	*4.05	0.37	1.17	0.08	1.09	0.13	*4.55	0.42
Did not experience transition in coverage	98.81	0.09	*95.95	0.37	98.83	0.08	98.91	0.13	*95.45	0.42
Uninsured in January	9.58	0.21	*5.60	0.51	9.00	0.21	*7.16	0.30	*6.70	0.53
Experienced transition to insurance	42.25	1.04	*52.88	3.32	44.71	1.21	*25.88	1.99	*63.69	3.77
Did not experience transition in coverage	57.76	1.04	*47.12	3.32	55.29	1.21	*74.12	1.99	*36.31	3.77

* Difference between CPS ASEC and MEPS or CPS ASEC and MEPS is statistically significant ($p < 0.05$)

Sources: U.S. Census Bureau, 2019 Current Population Survey Annual Social and Economic Supplement (CPS ASEC) ; 2018 Current Population Survey Annual Social and Economic Supplement (CPS ASEC) Bridge file; U.S. Census Bureau 2018 Survey of Income and Program Participation, Wave 1; Agency for Healthcare Research and Quality, 2018 Medical Expenditure Panel Survey Household Component (MEPS-HC); 2017 Medical Expenditure Panel Survey Household Component (MEPS-HC).

Table 3. Mean Insured and Uninsured Spell Duration in Months for Adults Ages 19 to 64, CPS ASEC, SIPP (2017) and MEPS, 2017 and 2018

	2018				2017					
	CPS ASEC		MEPS		CPS ASEC		SIPP		MEPS	
Sample Size	103,945		16,619		104,088		36,995		17,832	
Weighted Universe	193,547,810		192,288,918		193,937,120		193,245,361		192,527,644	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Mean length of insured spell	10.39	0.02	10.26	0.06	10.47	0.02	*10.24	0.03	*10.14	0.01
Mean length of insured spell (Uninsured at least one month)	1.33	0.03	*3.33	0.10	1.44	0.03	1.36	0.09	*3.37	0.01
Mean length of uninsured spell	1.59	0.02	1.62	0.02	1.50	0.02	*1.73	0.03	*1.73	0.02
Mean length of uninsured spell (Insured at least one month)	0.21	0.01	*0.51	0.02	0.21	0.01	0.22	0.01	*0.61	0.02
Insured in January										
Mean length of insured spell	11.90	0.01	*11.60	0.02	11.88	0.01	*11.91	0.01	*11.58	0.03
Mean length of insured spell (with any incident transition to uninsured spell)	6.27	0.10	*5.68	0.13	5.95	0.11	6.23	0.14	5.77	0.9
Mean length of uninsured spell (with any incident transition to uninsured spell)	4.4	0.11	4.57	0.12	4.66	0.11	4.43	0.17	*4.37	0.07
Uninsured in January										
Mean length of uninsured spell	11.21	0.08	*9.38	0.05	11.10	0.03	11.03	0.05	*9.37	0.02
Mean length of uninsured spell (with any incident transition to insured spell)	6.13	0.10	*4.30	0.15	5.90	0.09	5.76	0.13	*5.02	0.15
Mean length of insured spell (with any incident transition to insured spell)	5.56	0.10	*7.29	0.15	5.76	0.09	6.02	0.13	*6.61	0.23

* Difference between CPS ASEC and MEPS or CPS ASEC and MEPS is statistically significant ($p < 0.05$)

Sources: U.S. Census Bureau, 2019 Current Population Survey Annual Social and Economic Supplement (CPS ASEC) ; 2018 Current Population Survey Annual Social and Economic Supplement (CPS ASEC) Bridge file; U.S. Census Bureau 2018 Survey of Income and Program Participation, Wave 1; Agency for Healthcare Research and Quality, 2018 Medical Expenditure Panel Survey Household Component (MEPS-HC); 2017 Medical Expenditure Panel Survey Household Component (MEPS-HC). All CPS ASEC estimates rounded for disclosure avoidance.

Table 4. Mean Insured and Uninsured Spell Duration in Months, for Children Under 19, CPS ASEC, SIPP (2017) and MEPS, 2017 and 2018

	2018				2017					
	CPS ASEC		MEPS		CPS ASEC		SIPP		MEPS	
Sample Size	49,530		7,444		50,274		14,438		8,154	
Weighted Universe	77,332,794		74,334,946		77,487,103		72,841,108		74,107,228	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Mean length of insured spell	11.04	0.02	*11.35	0.05	11.10	0.02	*11.20	0.03	*11.24	0.04
Mean length of insured spell (Uninsured at least one month)	2.95	0.08	*5.08	0.26	3.04	0.08	*2.15	0.14	*5.04	0.21
Mean length of uninsured spell	0.94	0.02	*0.58	0.04	0.88	0.02	*0.78	0.03	*0.64	0.03
Mean length of uninsured spell (Insured at least one month)	0.29	0.01	0.27	0.03	0.30	0.01	*0.15	0.01	*0.36	0.03
Insured in January										
Mean length of insured spell	11.93	0.01	*11.77	0.02	11.93	0.01	11.93	0.01	*11.71	0.03
Mean length of insured spell (with any transition to uninsured spell)	6.03	0.22	6.30	0.32	5.99	0.24	6.01	0.31	5.68	0.21
Mean length of uninsured spell (with any transition to uninsured spell)	4.33	0.21	3.95	0.09	4.86	0.26	*4.00	0.33	*3.79	0.11
Uninsured in January										
Mean length of uninsured spell	9.34	0.08	*7.66	0.48	9.25	0.09	*10.31	0.15	*7.20	0.3
Mean length of uninsured spell (with any transition to insured spell)	5.72	0.09	*3.79	0.41	5.86	0.11	5.48	0.30	*4.46	0.23
Mean length of insured spell (with any transition to insured spell)	6.18	0.09	*8.04	0.43	6.01	0.11	*6.23	0.29	*7.28	0.26

* Difference between CPS ASEC and MEPS or CPS ASEC and MEPS is statistically significant ($p < 0.05$)

Sources: U.S. Census Bureau, 2019 Current Population Survey Annual Social and Economic Supplement (CPS ASEC) ; 2018 Current Population Survey Annual Social and Economic Supplement (CPS ASEC) Bridge file; U.S. Census Bureau 2018 Survey of Income and Program Participation, Wave 1; Agency for Healthcare Research and Quality, 2018 Medical Expenditure Panel Survey Household Component (MEPS-HC); 2017 Medical Expenditure Panel Survey Household Component (MEPS-HC). All CPS ASEC estimates rounded for disclosure avoidance.

Figure 1a.
Percentage Distribution of Longest Uninsured Spell Length for Adults Aged 19 to 64 Who Were Uninsured At Least One Month, CPS ASEC and MEPS: 2018 and 2017

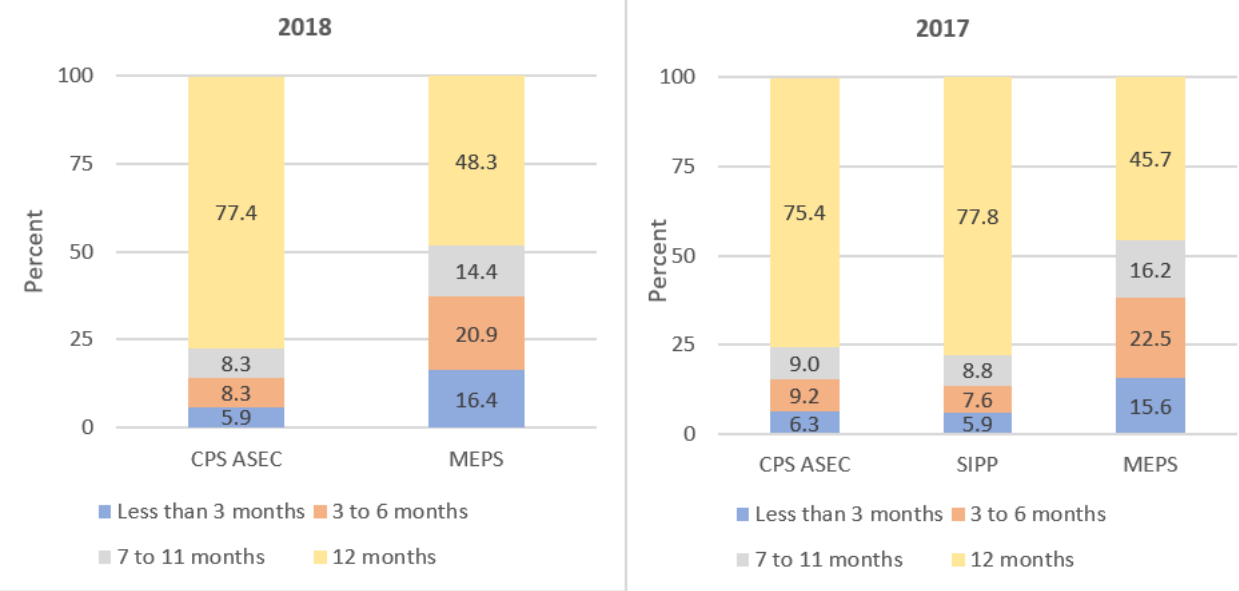
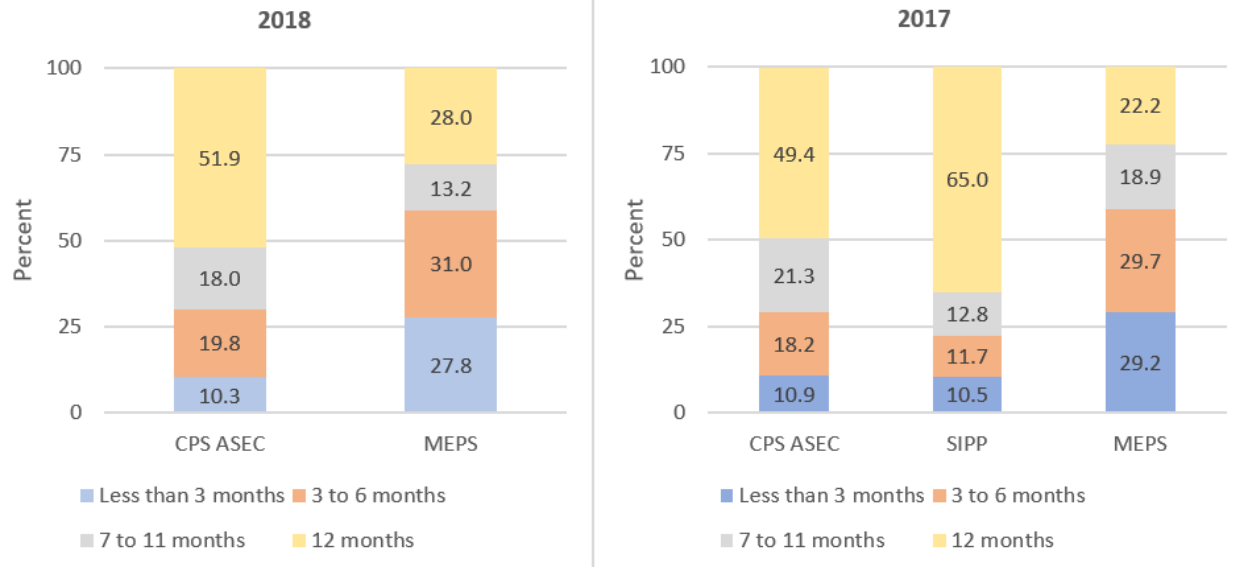


Figure 1b.
Percentage Distribution of Longest Uninsured Spell Length for Children Under 19 Who Were Uninsured At Least One Month, CPS ASEC, SIPP and MEPS: 2018 and 2017



Note: Estimates depict the distribution of people who were uninsured for at least one month, by length of their longest uninsured spell during the calendar year, by survey.

Sources: U.S. Census Bureau, 2019 Current Population Survey Annual Social and Economic Supplement (CPS ASEC); 2018 Current Population Survey Annual Social and Economic Supplement (CPS ASEC) Bridge file; U.S. Census Bureau 2018 Survey of Income and Program Participation, Wave 1; Agency for Healthcare Research and Quality, 2017 and 2018 Medical Expenditure Panel Survey Household Component (MEPS-HC)

Figure 2(a). Kaplan-Meier Curves for Incident Health Insurance Coverage Transitions to Uninsured Status for Adults Aged 19 to 64 in 2018, by Survey

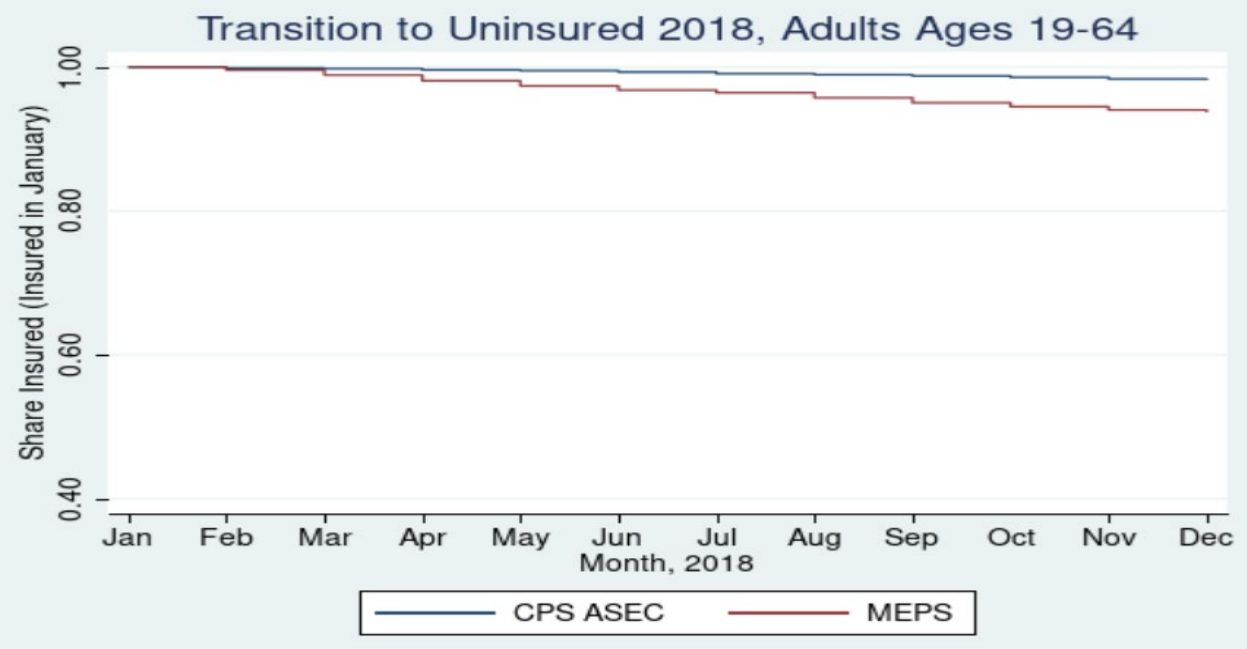
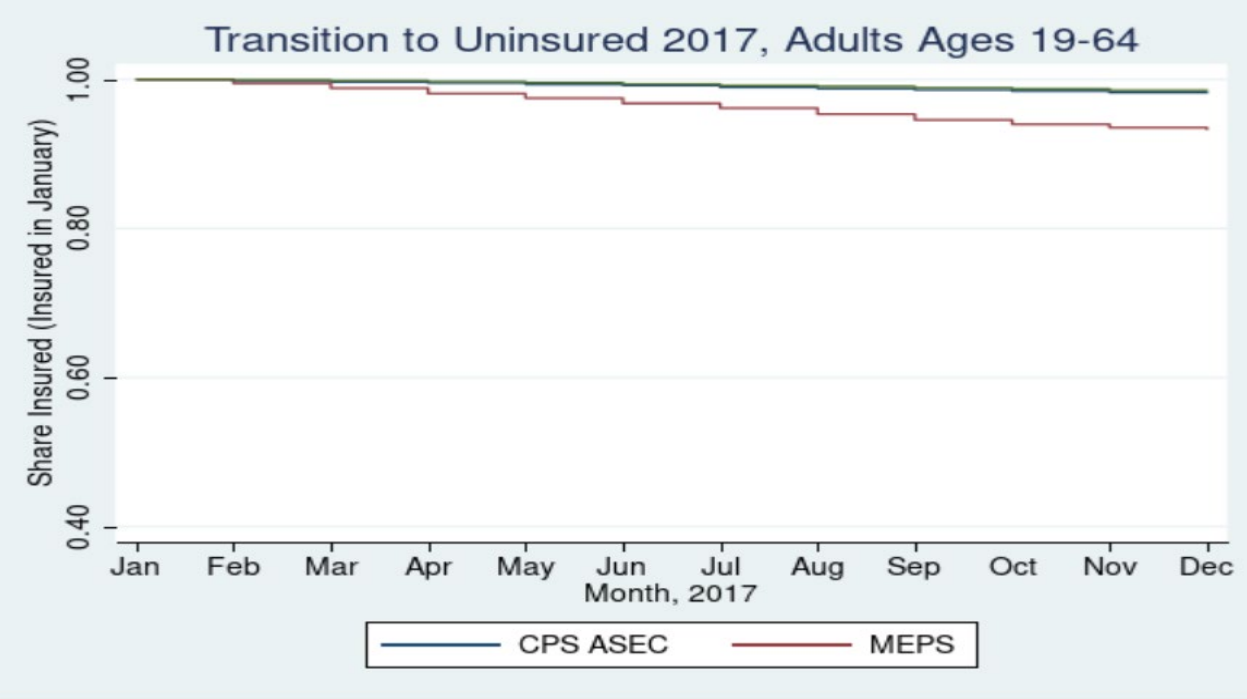


Figure 2(b). Kaplan-Meier Curves for Incident Health Insurance Coverage Transitions to Uninsured Status for Adults Aged 19 to 64 in 2017, by Survey



Sources: U.S. Census Bureau, 2019 Current Population Survey Annual Social and Economic Supplement (CPS ASEC); 2018 Current Population Survey Annual Social and Economic Supplement (CPS ASEC) Bridge file; U.S. Census Bureau 2018 Survey of Income and Program Participation, Wave 1; Agency for Healthcare Research and Quality, 2017 and 2018 Medical Expenditure Panel Survey Household Component (MEPS-HC)

Figure 2(c). Kaplan-Meier Curves for Incident Health Insurance Coverage Transitions to Insured Status for Adults Aged 19 to 64 in 2018, by Survey

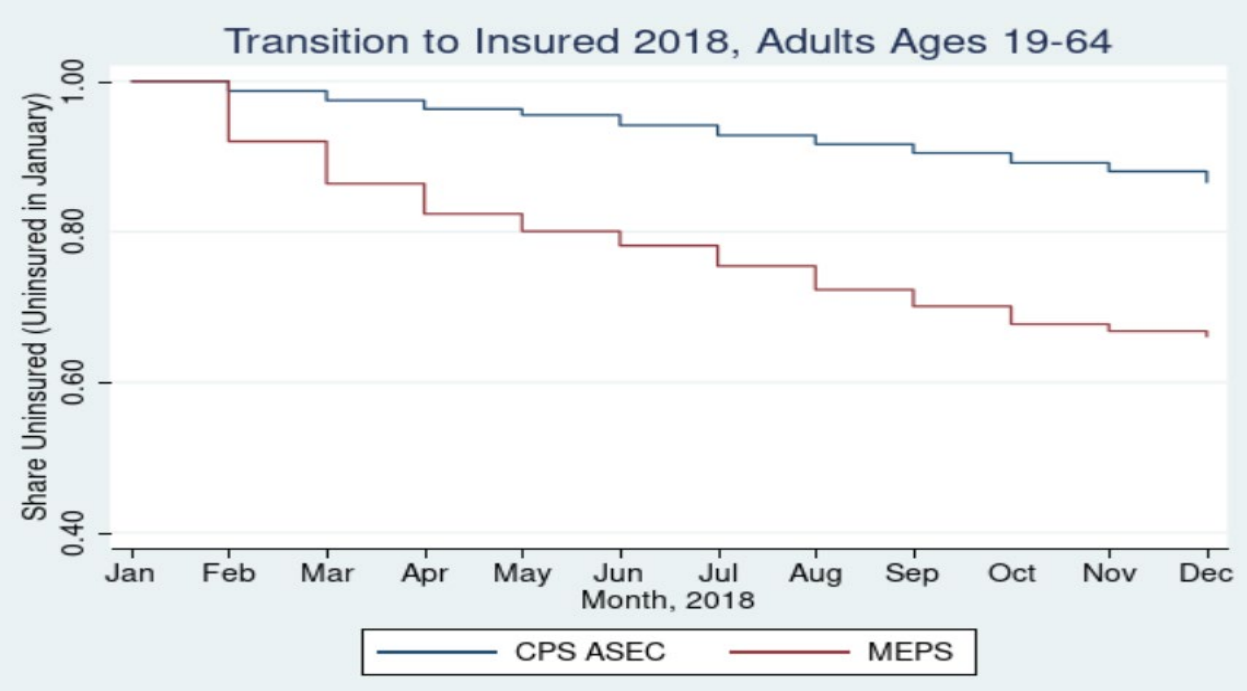
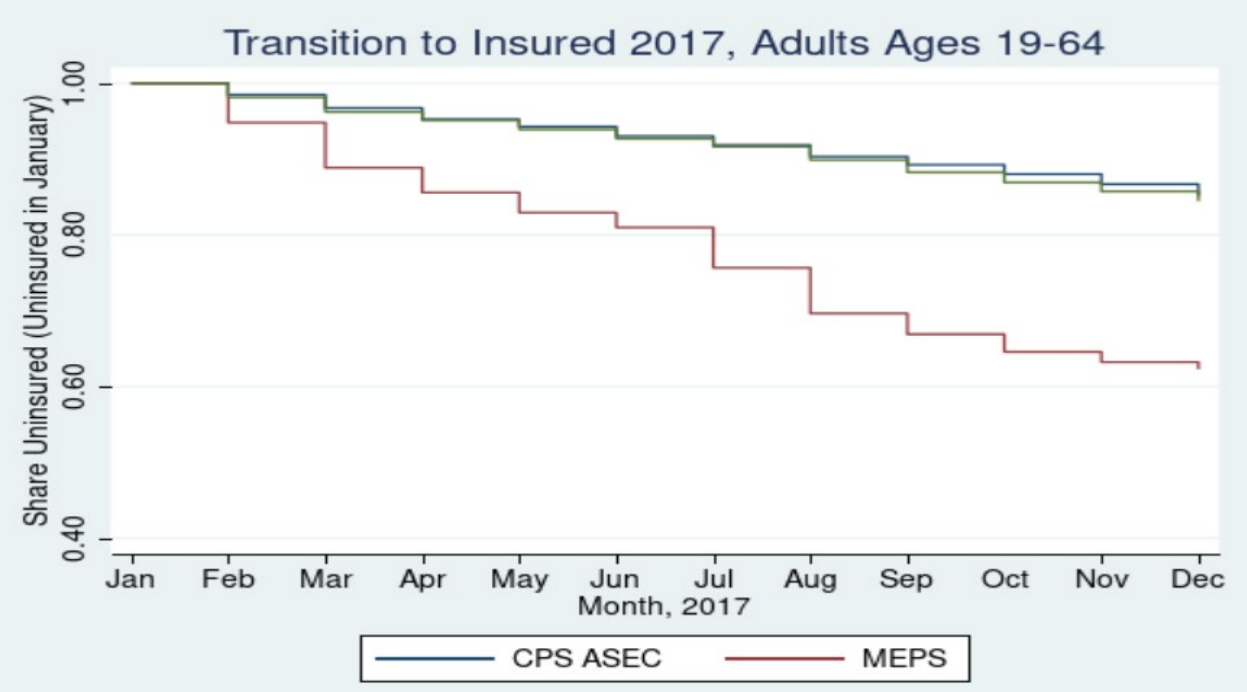


Figure 2(d). Kaplan-Meier Curves for Incident Health Insurance Coverage Transitions to Insured Status for Adults Aged 19 to 64 in 2017, by Survey



Sources: U.S. Census Bureau, 2019 Current Population Survey Annual Social and Economic Supplement (CPS ASEC); 2018 Current Population Survey Annual Social and Economic Supplement (CPS ASEC) Bridge file; U.S. Census Bureau 2018 Survey of Income and Program Participation, Wave 1; Agency for Healthcare Research and Quality, 2017 and 2018 Medical Expenditure Panel Survey Household Component (MEPS-HC)

Figure 3(a). Kaplan-Meier Curves for Incident Health Insurance Coverage Transitions to Uninsured Status for Children Under 19 in 2018, by Survey

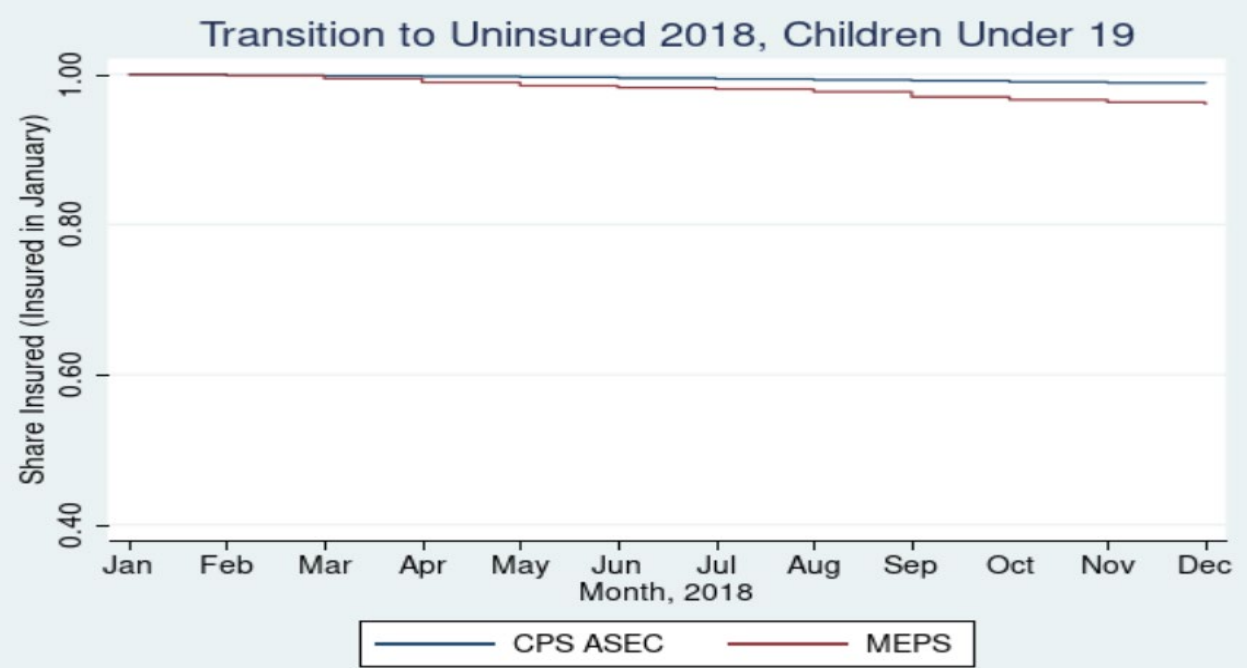
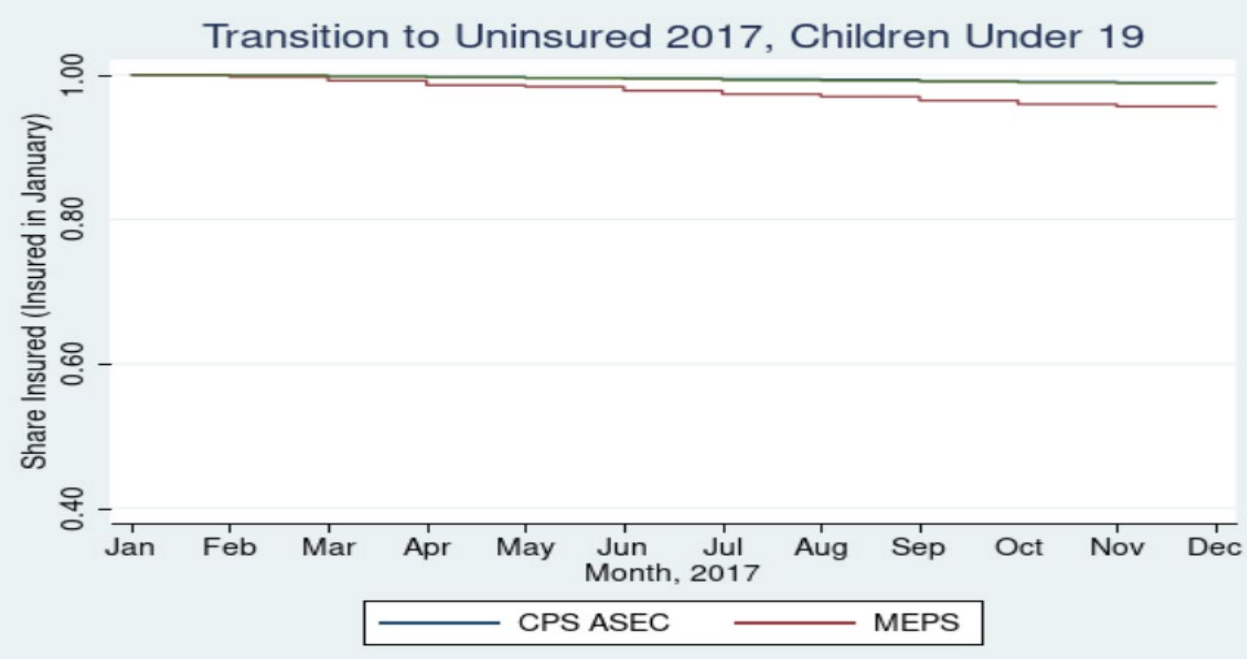


Figure 3(b). Kaplan-Meier Curves for Incident Health Insurance Coverage Transitions to Uninsured Status for Children Under 19 in 2017, by Survey



Sources: U.S. Census Bureau, 2019 Current Population Survey Annual Social and Economic Supplement (CPS ASEC); 2018 Current Population Survey Annual Social and Economic Supplement (CPS ASEC) Bridge file; U.S. Census Bureau 2018 Survey of Income and Program Participation, Wave 1; Agency for Healthcare Research and Quality, 2017 and 2018 Medical Expenditure Panel Survey Household Component (MEPS-HC)

Figure 3(c). Kaplan-Meier Curves for Incident Health Insurance Coverage Transitions to Insured Status for Children Under 19 in 2018, by Survey

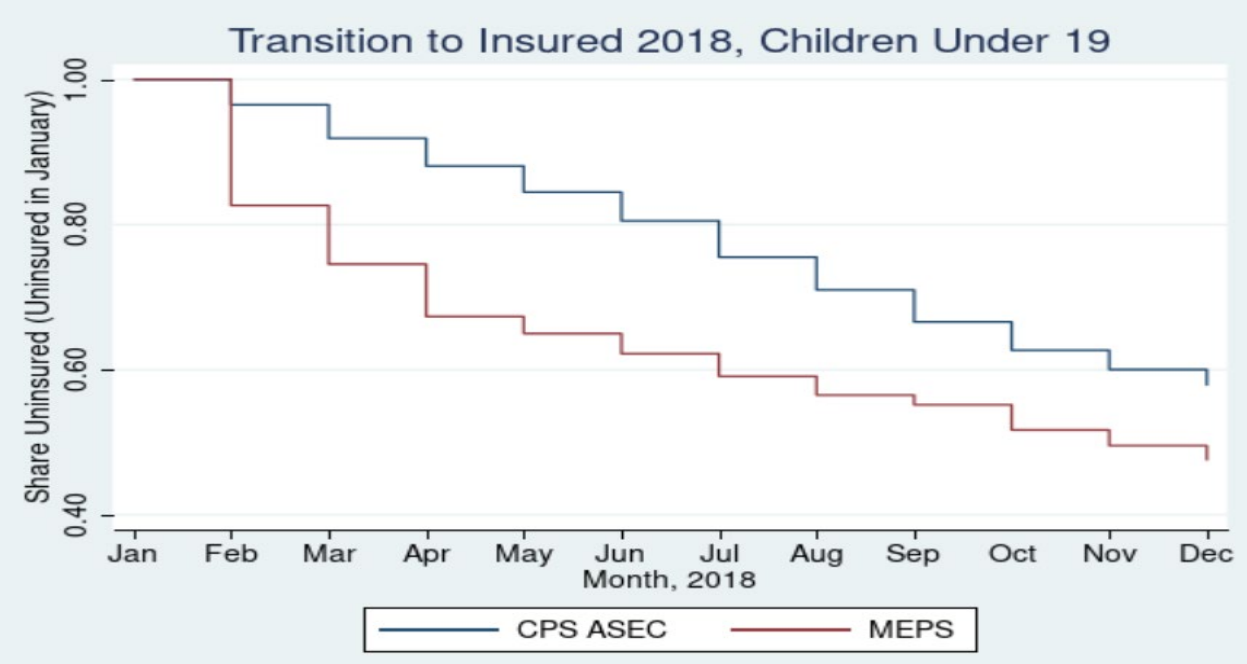
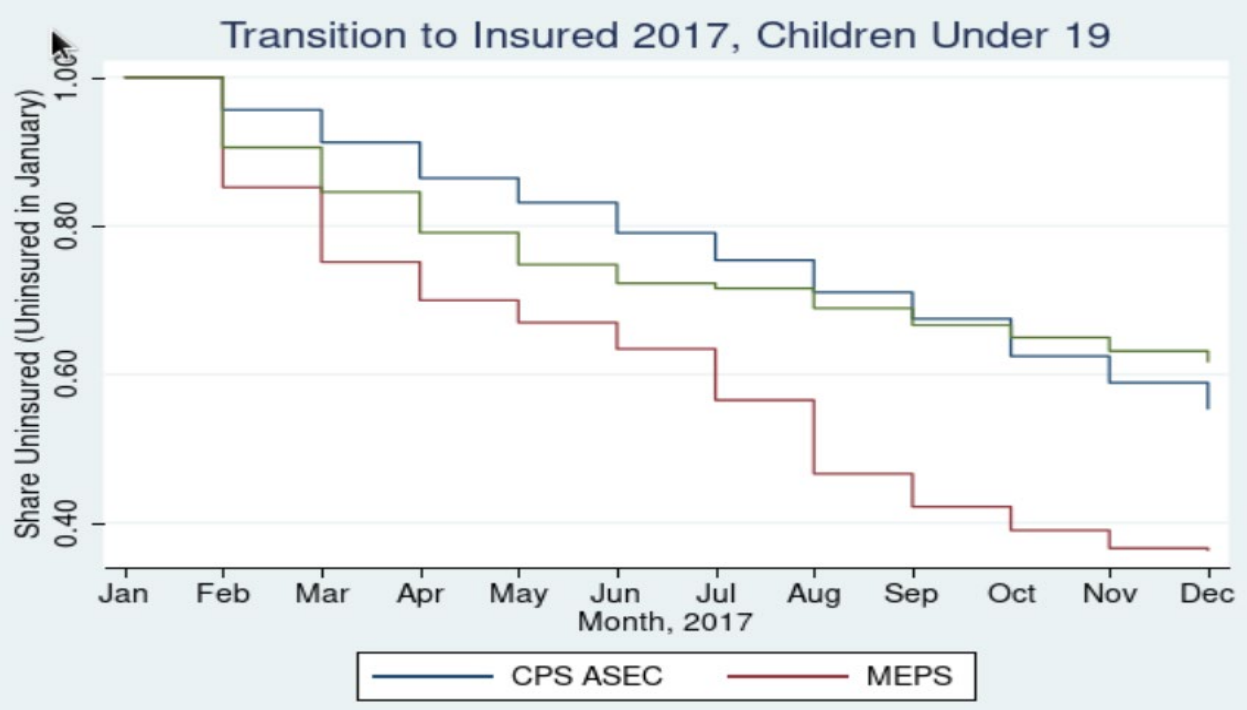


Figure 3(d). Kaplan-Meier Curves for Incident Health Insurance Coverage Transitions to Insured Status for Children Under 19 in 2017, by Survey



Sources: U.S. Census Bureau, 2019 Current Population Survey Annual Social and Economic Supplement (CPS ASEC); 2018 Current Population Survey Annual Social and Economic Supplement (CPS ASEC) Bridge file; U.S. Census Bureau 2018 Survey of Income and Program Participation, Wave 1; Agency for Healthcare Research and Quality, 2017 and 2018 Medical Expenditure Panel Survey Household Component (MEPS-HC)

APPENDIX

Table A1.
Weighted Descriptive Characteristics for Adults Aged 19 to 64. CPS ASEC, SIPP and MEPS, 2017 and 2018

	CPS 2019 (CY 2018)		MEPS 2018		CPS 2018 (CY 2017)		SIPP 2018 (CY 2017)		MEPS 2017	
Age	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
19-25	12.84	0.04	12.42	0.37	12.98	0.05	13.01	0.08	12.92	0.36
26-34	23.36	0.03	23.59	0.48	23.13	0.02	*22.80	0.08	23.00	0.51
35-44	21.20	0.02	21.16	0.50	20.97	0.02	21.06	0.07	20.92	0.45
45-54	21.03	0.02	21.12	0.49	21.41	0.02	*21.25	0.07	21.53	0.46
55-64	21.57	0.07	21.71	0.47	21.51	0.05	*21.89	0.06	21.62	0.45
Female	50.78	0.05	50.98	0.38	50.73	0.04	*50.93	0.04	50.90	0.35
Race and Hispanic origin										
White, non-Hispanic	59.78	0.06	59.14	1.05	60.22	0.05	*60.48	0.11	59.71	0.89
Black, non-Hispanic	12.53	0.05	12.54	0.61	12.60	0.04	12.46	0.07	12.60	0.56
Other, non-Hispanic	9.25	0.06	9.86	0.49	9.05	0.05	9.10	0.07	9.56	0.43
Hispanic, any race	18.44	0.03	18.46	0.91	18.14	0.02	*17.97	0.06	18.14	0.68
Region										
Northeast	17.31	0.07	17.36	0.99	17.57	0.10	17.55	0.07	17.63	0.62
Midwest	20.68	0.11	20.70	0.75	20.60	0.11	20.78	0.07	20.63	0.64
South	37.87	0.12	37.83	1.07	37.72	0.12	37.68	0.07	37.66	0.75
West	24.15	0.10	24.12	1.13	24.11	0.09	23.99	0.07	24.08	0.73
Poverty										
Income below poverty	10.59	0.15	10.54	0.30	10.97	0.17	*13.14	0.22	11.10	0.36
Income 100-399% of poverty	43.45	0.28	43.52	0.78	43.70	0.27	*42.19	0.35	43.62	0.67
Income 400%+ of poverty	45.96	0.29	45.94	0.92	45.33	0.31	44.66	0.36	45.27	0.74

* Difference between CPS ASEC and MEPS or CPS ASEC and MEPS is statistically significant ($p < 0.05$)
Sources: U.S. Census Bureau, 2019 Current Population Survey Annual Social and Economic Supplement (CPS ASEC); 2018 Current Population Survey Annual Social and Economic Supplement (CPS ASEC) Bridge file; U.S. Census Bureau 2018 Survey of Income and Program Participation, Wave 1; Agency for Healthcare Research and Quality, 2017 and 2018 Medical Expenditure Panel Survey Household Component (MEPS-HC)

Table A2.
Weighted Descriptive Characteristics for Children Under 19, the CPS ASEC, SIPP and MEPS, 2017 and 2018

	CPS 2019 (CY 2018)		MEPS 2018		CPS 2018 (CY 2017)		SIPP 2018 (CY 2017)		MEPS 2017	
Age	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Less than 6 years	29.80	0.07	*27.14	0.69	30.03	0.08	*26.34	0.14	*27.56	0.62
6 to 12 years	37.19	0.11	38.60	0.74	37.24	0.10	*38.92	0.22	38.18	1.26
13 to 18 years	33.01	0.11	34.26	0.83	32.74	0.11	*34.73	0.21	34.26	1.68
Female	48.91	0.06	48.87	0.73	49.06	0.06	48.94	0.11	48.98	0.70
Race and Hispanic origin										
White, non-Hispanic	50.13	0.08	49.94	1.36	50.68	0.08	50.39	0.26	49.79	1.24
Black, non-Hispanic	13.77	0.98	13.89	0.87	13.68	0.09	13.39	0.17	13.74	0.93
Other, non-Hispanic	10.65	0.08	10.67	0.66	10.42	0.08	10.79	0.18	11.16	0.63
Hispanic, any race	25.46	0.05	25.50	1.37	25.21	0.05	25.32	0.17	25.32	1.05
Region										
Northeast	15.85	0.09	15.87	1.13	16.05	0.09	16.04	0.19	16.03	0.88
Midwest	21.15	0.10	20.90	1.14	21.22	0.10	20.96	0.20	21.25	0.93
South	38.70	0.12	38.88	1.37	38.53	0.12	38.48	0.22	38.40	1.14
West	24.31	0.10	24.36	1.48	24.20	0.10	24.52	0.19	24.31	1.16
Poverty										
Income below poverty	16.69	0.34	15.99	0.75	17.87	0.33	*19.83	0.56	16.27	0.79
Income 100-399% of poverty	50.60	0.46	52.70	1.15	49.83	0.40	*46.60	0.72	50.56	1.06
Income 400%+ of poverty	32.71	0.35	31.31	1.23	32.99	0.35	33.58	0.59	32.17	1.06

Sources: U.S. Census Bureau, 2019 Current Population Survey Annual Social and Economic Supplement (CPS ASEC) ; 2018 Current Population Survey Annual Social and Economic Supplement (CPS ASEC) Bridge file; U.S. Census Bureau 2018 Survey of Income and Program Participation, Wave 1; Agency for Healthcare Research and Quality, 2018 Medical Expenditure Panel Survey Household Component (MEPS-HC); 2017 Medical Expenditure Panel Survey Household Component (MEPS-HC). All CPS ASEC estimates rounded for disclosure avoidance.

Figure A1
Month Incident Uninsured Spell Began Adults Aged 19 to 64, CPS ASEC, SIPP and MEPS: 2017 and 2018

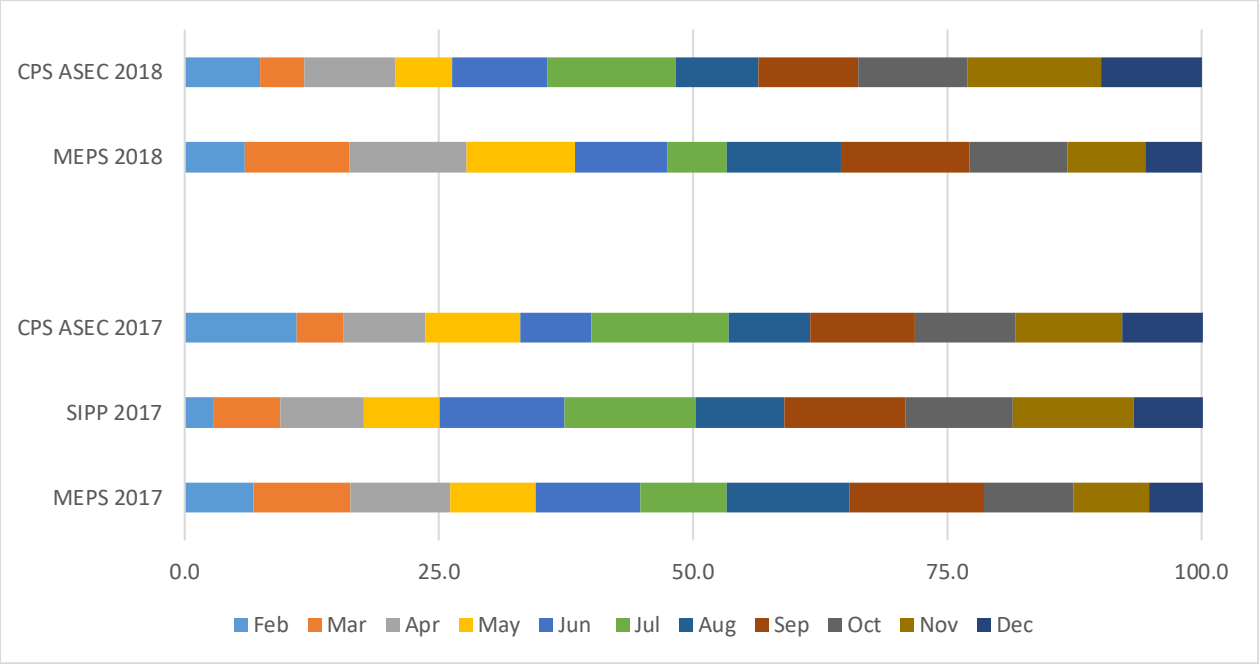
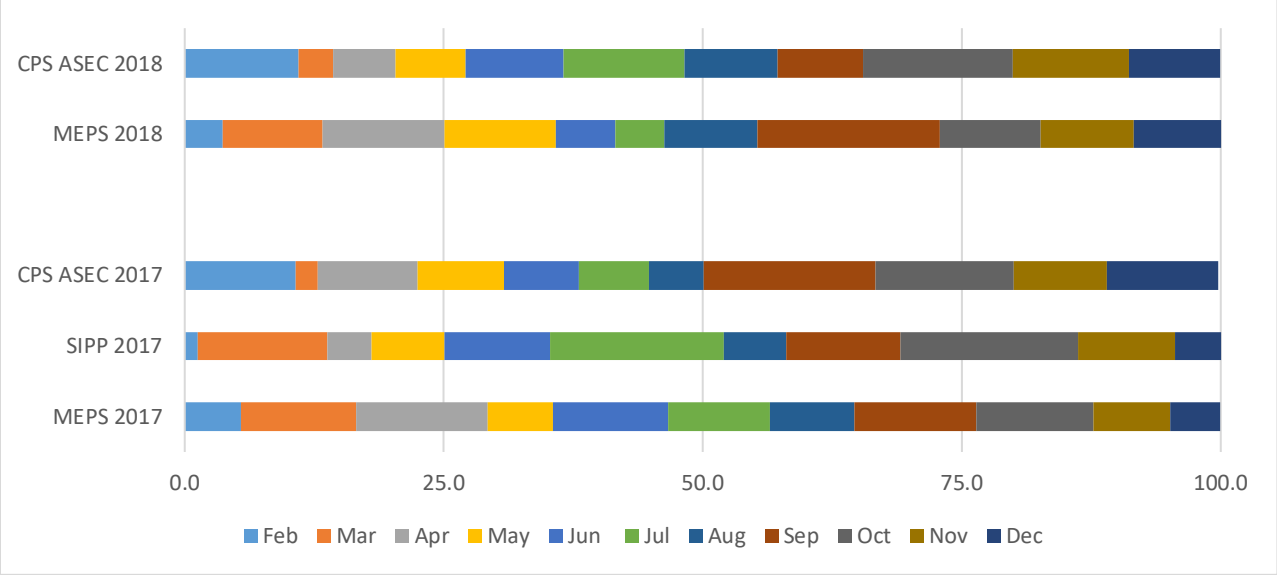


Figure A2
Month Incident Uninsured Spell Began Children Under 19, CPS ASEC, SIPP and MEPS: 2017 and 2018



Sources: U.S. Census Bureau, 2019 Current Population Survey Annual Social and Economic Supplement (CPS ASEC) ; 2018 Current Population Survey Annual Social and Economic Supplement (CPS ASEC) Bridge file; U.S. Census Bureau 2018 Survey of Income and Program Participation, Wave 1; Agency for Healthcare Research and Quality, 2018 Medical Expenditure Panel Survey Household Component (MEPS-HC); 2017 Medical Expenditure Panel Survey Household Component (MEPS-HC). All CPS ASEC estimates rounded for disclosure avoidance.