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Running head: Marketplace coverage after enhanced subsidies
Research Paper
Take-Up of Marketplace Coverage Increased After Enhanced Premium Subsidies
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List of Abbreviations:

Affordable Care Act (ACA)

Agency for Healthcare Research and Quality (AHRQ)

American Rescue Plan Act (ARPA)

Inflation Reduction Act (IRA)

Confidence Interval (CI)

Medical Expenditure Panel Survey-Household Component (MEPS-HC)

Percentage Points (PP)

Abstract: In 2021, the American Rescue Plan Act (ARPA) in conjunction with the Inflation Reduction Act (IRA) increased premium subsidies to support the purchase of Marketplace coverage until the end of 2025. The ARPA/IRA enhanced subsidies substantially reduced the net-of-subsidy cost of Marketplace coverage. Using regression analysis of respondents to the Medical Expenditure Panel Survey (MEPS-HC) over the 2018-22 period we assessed how Marketplace coverage changed after the implementation of the ARPA/IRA enhanced subsidies and which subgroups were particularly affected. We found a 6.7 percentage point increase in the proportion of Marketplace-eligible individuals who took up coverage after ARPA/IRA. Further, the proportion who took up coverage increased by 20.7 percentage points for non-Hispanic Black individuals and by 10.1 percentage points for Hispanic enrollees. These results strongly suggest that if Congress does not reauthorize the enhanced subsidies, a decline in Marketplace enrollment, especially among some minority groups, is likely to occur.

Key words: Health insurance exchanges; ethnic and racial minorities; insurance coverage; financing, government.

Affordability of health insurance is a longstanding policy challenge in the United States. In response to this challenge, the Affordable Care Act (ACA) introduced premium tax credits to reduce the cost of health insurance by specifying percentages of income that qualifying individuals would be required to pay to enroll in a benchmark plan. In the context of the Marketplaces, the affordability of premiums has been a particular concern for middle-class families who historically were not eligible for premium subsidies. In March of 2021 the American Rescue Plan Act (ARPA) increased subsidies to purchase Marketplace health coverage. The Inflation Reduction Act (IRA) of 2022 extended the ARPA subsidies until the end of 2025. These enhanced Marketplace subsidies provide an opportunity to study how people respond to reductions in their premium costs and identify the implications of removing the enhanced subsidies, which are set to expire at the end of 2025.

Enhanced Marketplace subsidies meaningfully reduced the net-of-subsidy cost of premiums for people enrolled in Marketplace coverage. For example, prior to the enhanced subsidies, families with income equal to twice (200%) the federal poverty level (FPL) paid 6.52 percent of their income to purchase the benchmark Silver plan, but currently are required to pay only 2 percent of their income: less than a third of the previous amount. 3.4 Furthermore, the ARPA and the IRA established subsidies for individuals with family income above four times the poverty level who had previously been ineligible for subsidies. Such individuals in this income range had previously been exposed to the subsidy "cliff" wherein subsidies could be relatively large for individuals with income just under four times the poverty level, but were unavailable if their income rose above that threshold. Under the ARPA and the IRA, the cost to purchase the benchmark Silver plan for all individuals, irrespective of family income, is capped at 8.5 percent of income.

Previous research has shown that purchase of health coverage declines as insurance premiums rise⁵ and, given the magnitude and growth in premiums over time,⁶ affordability is often cited as a concern for those who are uninsured.⁷ Unsurprisingly, it is also well-known that Marketplace participation increases when premiums are lower,^{8,9} and the ARPA/IRA subsidies thus have the potential to increase enrollment, which is also supported by simulation modeling of those coverage provisions.¹⁰ The enhanced subsidies also increased the number of Marketplace enrollees who can purchase a lower-cost plan without a premium (referred to as a "zero-premium plan") because they were entitled to subsidies large enough to cover the full enrollee share of the premium. Having access to zero-premium plans may meaningfully increase coverage by reducing the transaction costs associated with enrollment.¹¹ Analysis using cross-sectional, administrative data suggested the ARPA/IRA subsidies increased coverage, but these data contain limited demographic information and do not allow researchers to track the insurance status of individuals over time.¹²

We explore how the ARPA/IRA enhanced subsidies affected the purchase of Marketplace coverage after 2020 and which subgroups were particularly responsive to the subsidies. Our study extends the previous literature by using a cohort analysis of panel data to better understand transitions into and out of Marketplace coverage and being uninsured as well as to compare coverage changes across a wider array of subgroups. We identify changes in Marketplace coverage for racial and ethnic minority groups in the United States, which can illuminate the role Marketplace coverage may be playing in long-standing disparities in insurance coverage.¹³

The ARPA/IRA enhanced subsidies are set to expire at the end of 2025.¹⁴ The results below highlight the potential impact of allowing the subsidies to expire on the affordability of Marketplace coverage and will be of broad policy relevance.

Methods

Data and outcomes. We used data from the Household Component of the Medical Expenditure Panel Survey (MEPS-HC) over the 2018-22 period. For most panels, the MEPS-HC includes five rounds of interviews over a two-year period, although, starting in 2020, panels were fielded for additional rounds.¹⁵

Our primary outcome is enrollment in private coverage in December of each calendar year that respondents identified as obtained through an ACA Marketplace (hereafter "Marketplace coverage"). Premium subsidies are only available for Marketplace coverage, and most people who purchase individual market coverage do so through the Marketplaces.¹⁶

We assigned each MEPS-HC respondent to one of five coverage categories in the following order: Medicaid, employer-sponsored insurance, Marketplace, all other public or private coverage sources ("other"), and uninsured. Individuals reporting no coverage were defined as uninsured.

In regression-adjusted analyses, we included the following independent variables: year, age (0-18; 19-49; 50-64 years), sex, race and ethnicity (non-Hispanic White, non-Hispanic Black, non-Hispanic Other, Hispanic), highest educational attainment in the family (less than high school, high school diploma, some college, bachelor's degree or more), family income (income 100-199% of poverty; income 200-399% of poverty; income 400% or more of poverty), self-reported health (good, fair, or poor; excellent or very good), work status (full-time, part-time, not working), family size (1, 2, 3, 4 or more), urban/rural residence, and fixed effects for respondents' state of residence.

These variables were chosen to highlight differential take-up of Marketplace coverage across population groups relevant to understanding the distribution effects of Marketplace subsidies.

Sample definitions. To facilitate comparability across analyses, we excluded individuals with income below the poverty line because they are not eligible for Marketplace subsidies. We also limited the sample to individuals ages 63 and younger in the first year of each two-year period, because individuals eligible for Medicare are ineligible for Marketplace subsidies.

Survey design. Survey weights were applied to obtain nationally representative estimates. Estimates of significance were adjusted for the complex sample design of the MEPS-HC, and standard errors were clustered at the state level in regression models. Statistical analyses were conducted using Stata, version 18.0 (StataCorp), and the estimates were reported if differences were significant at the 95% level or higher. Full results, including estimates for the transitional panel (2020-2021), unadjusted estimates, and regression results, are included in Tables 4-13 in the Appendix.

Statistical analysis. To comprehensively examine the role of Marketplace insurance, we conducted five analyses. Below we outline each analysis and any additional sample criteria that we applied. All comparisons of percentages used two-sample t-tests. First, to compare the stability of coverage across coverage types (Table 1), we calculated the percentage of individuals staying with or switching among the five types of coverage and compare changes in coverage status over the 2021-22 period with changes before ARPA (2018-2020). By comparing these percentages, we assess how the introduction of the APRA/IRA subsidies in the Marketplaces may have changed the percentage of individuals switching into or out of Marketplace coverage, which can help illustrate patterns related to continuity of coverage and churn relative to other types of coverage. Second, for each two-year period between 2018-22 we compare changes in the number of individuals who: a) switched into Marketplace coverage, b) remained in Marketplace coverage, or c) exited

Marketplace coverage (Figure 1). For this analysis, we compared results for each two-year panel with the first pre-APRA/IRA panel (2018-19) and included all MEPS-HC respondents who had Marketplace coverage in either the first or second years of each two-year panel.

Third, to focus on the dynamic between being uninsured and purchasing Marketplace coverage in the second year of each two-year period, we used ordinary least squares regression analyses to calculate the regression-adjusted proportion of those enrolled in Marketplace coverage as a share of those enrolled in the Marketplace or who were uninsured, which we refer to as the "take-up rate." (Figure 2). By defining two-year cohorts for the regression analyses, control variables were defined as of the first year of each two-year period and thus plausibly exogenous to the take-up decision in the second year. Marketplace coverage is often a last resort for individuals who are not eligible for public programs and who do not have access to an offer of coverage from an employer. For these individuals, if they do not purchase Marketplace coverage, they will be uninsured. We defined the Marketplace take-up rate to capture the interplay of these two coverage statuses.

Fourth, for individuals with each of the five coverage sources in the first year, we used ordinary least squares regressions including the aforementioned independent variables to assess whether the person had Marketplace coverage in the second year of each two-year period (Table 2). We tested whether the ARPA/IRA enhanced subsidies affected the probability of Marketplace coverage using an indicator variable for the purchase of Marketplace coverage in 2022, which we refer to as the "post" period. 2020-21 data were included in the regressions but may have been affected by unusual circumstances, including the COVID-19 pandemic and the extended window for obtaining Marketplace coverage with enhanced subsidies during the special enrollment period for 2021 coverage, which lengthened the

open-enrollment period for individuals in states using the federally facilitated Marketplace until August of 2021. As a result, we refer to the 2020-21 results as "transitional."

Finally, to understand variation in Marketplace take-up, we examined the potential impact of ARPA/IRA enhanced subsidies on the likelihood that various subgroups purchased Marketplace coverage in the second year of each two-year period (Table 3). To identify whether sub-groups differed in their likelihood of taking up Marketplace coverage after the ARPA/IRA subsidies, we report predicted probabilities of Marketplace coverage from a model that included interaction terms between the 2022 post-period indicator and indicators for key socio-demographic sub-groups as defined above as well as residence in a Medicaid expansion state. We created identifiers for whether a state had adopted the ACA Medicaid expansion as of 2018 to construct a sample that was consistent across our study period. (Individuals with income between 100-138% of the FPL might have changed coverage because of a state expansion and some Medicaid recipients may misreport having obtained Marketplace coverage, which might otherwise be spuriously associated with the post-ARPA/IRA coefficients.) For this regression, our sample included individuals in the first year of each two-year panel who either had Marketplace coverage or who were uninsured and excluded individuals residing in Idaho, Maine, Nebraska, Utah, or Virginia, which expanded Medicaid between 2018 and 2022.

Results

Table 1 shows that more individuals retained Marketplace coverage over the 2021-22 period (82.5%, 95% Confidence Interval [CI]: 76.4-88.6%) compared with the earlier 2018-20 periods (68.5%, 95%CI=62.5-74.5%; p-value for difference < .05).

Table 1.

HEALTH INSURANCE STATUS OF NON-ELDERLY INDIVIDUALS (IN PERCENT) BY HEALTH INSURANCE STATUS IN A PREVIOUS YEAR, BY PANEL^a

	Transitions o	f the 2018-20	019 and 2019-	2020 panels		
Health insurance status in the second year						
Health insurance status in the first year	Employer- sponsored	Medicaid	Marketplace coverage	Uninsured	Other	N
Employer-sponsored	94.3%	1.5%	0.6%	2.9%	0.8%	12,340
	(0.3%)	(0.1%)	(0.2%)	(0.3%)	(0.1%)	
Medicaid	4.8%	86.3%	1.5%	5.7%	1.8%	3,811
	(0.5%)	(0.8%)	(0.3%)	(0.6%)	(0.3%)	
Marketplace coverage	9.1%	9.0%	68.5%	8.3%	5.2%	745
	(1.3%)	(2.1%)	(3.0%)	(2.0%)	(1.4%)	
Uninsured	15.9%	10.3%	3.7%	66.5%	3.7%	2,390
	(1.2%)	(0.9%)	(0.6%)	(1.6%)	(0.5%)	
Other	8.9%	5.9%	1.4% b	5.1%	78.7%	1,215
	(1.3%)	(0.8%)	(0.4%)	(0.9%)	(1.7%)	
	Tran	sitions of the	2021-2022 pa	anel		
	Health insurance status in the second year					
Health insurance status in the first year	Employer- sponsored	Medicaid	Marketplace coverage	Uninsured	Other	N
Employer sponsored	94.9%	1.3%	0.6%	2.7%	0.5%	4,301
	(0.5%)	(0.3%)	(0.2%)	(0.4%)	(0.1%)	
ledicaid 5.8% 89.7	89.7% *	1.0% b	2.6% **	1.0% *	1,402	
	(1.3%)	(1.5%)	(0.4%)	(0.8%)	(0.3%)	
Marketplace coverage	7.5%	3.8% b	82.5% **	4.1%	С	309
	(2.2%)	(1.6%)	(3.1%)	(1.2%)		
Uninsured	12.5%	9.4%	9.4% 2.4% ^b 73.1% * 2.6% ^b 747			
	(1.7%)	(1.6%)	(0.8%)	(2.4%)	(1.0%)	
Other	10.1%	5.3%	С	4.4% b	77.4%	379

	(2.4%)	(1.4%)	(2.1%)	(3.6%)
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Notes

^aThe sample is individuals ages 63 or less in the first year whose family income is above federal poverty level.

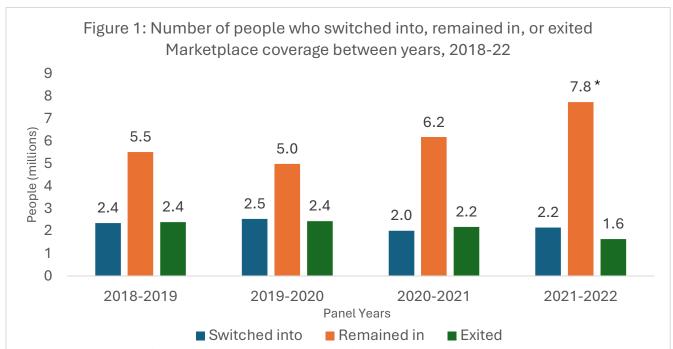
Source: Authors' analysis of data for 2018-22 from the Medical Expenditure Panel Survey-Household Component (MEPS-HC).

Figure 1 shows that, over the 2021-22 period, 7.8 million people (95%CI=5.9-9.6 million) remained enrolled in Marketplace coverage, or 41.8% more than the 5.5 million (95%CI=4.2 to 6.8 million) who were continually enrolled over the 2018-19 period. As shown in Figure 2, predicted take-up in the Marketplaces was 31.2% in 2022 (95%CI=27.0-35.4%) compared with 24.5% in 2019 (95%CI=22.2-26.7%), an increase of 6.7 percentage points (95%CI=0.9-12.5 percentage points (PP); p < .05).

^b Unreliable estimate (relative standard error is greater than 0.30).

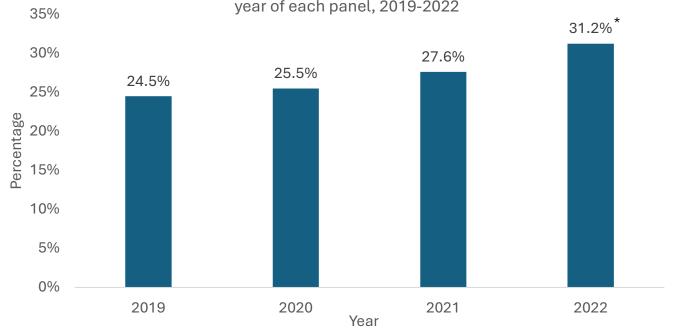
 $^{^{\}circ}$ Not reported due to relative standard error greater than 0.50.

^{*}p < .05 **p < .01 indicate percent from the 2021-22 panel different than for the 2018-2019 and 2019-2020 panels.



Source: Authors' analysis of data for 2018-22 from the Medical Expenditure Panel Survey-Household Component (MEPS). Notes: Sample excludes MEPS respondents with income below the poverty line. Sample includes respondents ages 63 and younger in the first year of each two-year period and those who had Marketplace coverage in either year. * p < 0.05 compared with the 2018-19 panel.

Figure 2: Regression-adjusted percentage of people enrolled in Marketplace coverage among those in Marketplace or uninsured in prior year, by second year of each panel, 2019-2022



Source: Authors' analysis of data for 2018-22 from the Medical Expenditure Panel Survey-Household Component (MEPS). N=5,848. Notes: Sample excludes MEPS respondents with income below the poverty line. Sample includes respondents ages 63 and younger in the first year of each two-year period who were enrolled in Marketplace coverage or who were uninsured in the second year of each two-year panel. The percentages of Marketplace coverage as of the second year adjusted for demographic and socioeconomic characteristics, and state fixed effects. Additional details in the text. * p < 0.05 compared with 2019.

Percentage of coverage	people enrol	ed in Market	place
2019	2020	2021	2022
24.5%	25.5%	27.6%	31.2%
(1.1%)	(1.3%)	(1.2%)	(2.1%)

Table 2 shows the predicted percentage of individuals who enrolled in Marketplace coverage in the second year of each two-year period depending on their coverage status in the first year. Among those with first-year Marketplace coverage, second-year Marketplace coverage increased by 15.4 percentage points (95%CI=7.9-22.9 PP) from 2018-20 to 2021-22, and among those who had Marketplace coverage or were uninsured in the first year, Marketplace coverage increased by 7.4 percentage points (95%CI=1.7-13.1 PP) from the 2018-20 period to 2021-22. There were no statistically significant changes for other types of first-year coverage.

Table 2.

PREDICTED PERCENTAGE OF PEOPLE ENROLLED IN MARKETPLACE COVERAGE, BY HEALTH INSURANCE STATUS IN THE FIRST YEAR, 2018-2022^a

	Enrolled in Marke in the second ye	Difference (percentage	
Health insurance status in the first year	2018-19 & 2019-20 panels	2021-22 panel	points)
Employer-sponsored	0.6%	0.6%	0.0
Medicaid	1.5%	0.9%	-0.6
Marketplace coverage	68.4%	83.8%	15.4**
Uninsured	3.6%	2.7%	-0.9
Other	1.3%	3.2%	2.0
Marketplace coverage or uninsured	19.7%	27.2%	7.4*

<u>Notes</u>

^aSample excludes MEPS-HC respondents with income below the poverty line. Samples included individuals ages 63 and younger in the first year of each two-year panel whose health insurance status in the first year is indicated in the first column. Predicted probability of Marketplace coverage defined as of the second year of each two-year panel and derived from a linear regression including demographic and socioeconomic characteristics as control variables and an identifier for the 2020-21 and 2021-22 panels, respectively. Additional details in the text.

*p < .05, **p < .01 indicate the predicted probability for the 2018-19 and 2019-20 panels was different than for the 2021-22 panel.

Source: Authors' analysis of data for 2018-22 from the Medical Expenditure Panel Survey-Household Component (MEPS-HC).

Table 3 shows the predicted percentage of people enrolled in Marketplace coverage by socioeconomic characteristics and panels.

The predicted percentage of children ages 0 to 18 who were enrolled in Marketplace coverage increased from 18.0% (95%CI=13.5-22.6%)

in the pre-ARPA/IRA period to 35.8% in the 2021-2022 period (95%CI=23.0-48.6%; p < .05, Table 3). Non-Hispanic Black and Hispanic individuals were also substantially more likely to enroll in Marketplace coverage over the 2021-22 period (Non-Hispanic Black enrollment: 31.0%; 95%CI=22.2-39.8%; Hispanic enrollment: 23.4%, 95%CI=14.4-32.3%) than prior to the passage of ARPA/IRA (Non-Hispanic Black enrollment: 10.3%; 95%CI=4.0-16.6%; p < .01; Hispanic enrollment: 13.3%; 95%CI=8.9-17.6%; p < .05). Before the passage of ARPA/IRA, the predicted percentage of non-Hispanic White individuals (27.0%; 95%CI=20.8-33.1%) enrolled in Marketplace coverage was higher than for non-Hispanic Black individuals (10.3%; 95%CI=4.0-16.6%; p < .001) and Hispanic individuals (13.3%; 95%CI=8.9-17.6%; p < .01). However, after ARPA/IRA, the percentages were not statistically different across non-Hispanic White individuals (25.1%; 95%CI=15.7-34.4%), non-Hispanic Black individuals (31.0%; 95%CI=22.2-39.8%; p = .38), and Hispanic individuals (23.4%; 95%CI=14.4-32.3%; p = .78). The percentage of individuals with family income above 400% of the poverty line who took up Marketplace coverage increased by 17.6 percentage points (95%CI=3.4 to 31.7 PP; p < .05) from the 2018-20 periods to after the passage of ARPA/IRA. Individuals reporting excellent or very good health status also had higher rates of Marketplace coverage after ARPA/IRA (25.7%; 95%CI=21.4-30.0%) than before (18.5%; 95%CI=14.9-22.1%; p < .01). However, the increase in take-up rate for individuals with excellent or very good health status was not significantly different from that for those reporting good/fair/poor health (p > .10).

Table 3.

PREDICTED PERCENTAGE OF PEOPLE ENROLLED IN MARKETPLACE COVERAGE AMONG THOSE IN MARKETPLACE COVERAGE OR UNINSURED, BY CHARACTERISTIC AND PANEL, 2018-2022^a

	Enrolled in coverage (Difference between 2018- 19 & 2019-20	
Characteristic	2018-19 & 2019-20 panels	2021-22 panel	panels and 2021-22 panel (percentage points)
Children, aged 0-18	18.0%	35.8%	17.8*
Adults, aged 19-49	15.5%	18.6%	3.1
Adults, aged 50-63	31.1%	41.8%	10.7
White, non-Hispanic	27.0%	25.1%	-1.9
Black, non-Hispanic	10.3%	31.0%	20.7**
Other, non-Hispanic	23.8%	36.1%	12.3
Hispanic	13.3%	23.4%	10.1*
Income less than 200% FPL Income 200% FPL to less than 400%	18.5%	21.6%	3.1
FPL	21.7%	23.0%	1.3
Income 400% FPL or more	17.7%	35.3%	17.6*
Excellent/very good reported health	18.5%	25.7%	7.2*
Good/fair/poor reported health	21.4%	26.8%	5.4
Full-time worker	20.2%	28.3%	8.1
Part-time worker	20.2%	34.5%	14.3
Non-worker	18.3%	19.9%	1.6
Urban residence	20.5%	26.2%	5.7
Rural residence	12.6%	25.6%	13.0
Expansion states	15.6%	26.4%	10.8**
Non-expansion states	21.8%	28.4%	6.6

Notes

^aSample excluded MEPS-HC respondents with income below the poverty line. Sample included individuals in the first year of each two-year panel who either had Marketplace coverage or who were uninsured, and excluded individuals residing in states that expanded Medicaid between 2018 and 2022. Predicted probability of Marketplace coverage defined as of the second year of each two-year panel and derived from a linear regression including demographic and socioeconomic characteristics as control variables and interaction terms between the characteristics and an identifier for the 2020-21 and 2021-22 panels. Additional details in the text.

*p < .05, **p < .01 indicate the predicted probability for the 2018-19 and 2019-20 panels was different than for the 2021-22 panels.

Source: Authors' analysis of data for 2018-22 from the Medical Expenditure Panel Survey-Household Component (MEPS-HC).

Discussion

The affordability of health insurance premiums has been a perennial concern in the ACA Marketplaces, and particularly for middle-class families who historically were not eligible for premium subsidies.³ The enhanced subsidies first implemented under the ARPA and extended through the IRA substantially lowered premiums for Marketplace enrollees and, depending on a person's income, reduced the cost of some plans to zero. In this cohort study, we found that estimated Marketplace enrollment increased during a period of greater premium subsidies. The observed coverage gains stemmed mainly from the estimated 7.8 million individuals who remained enrolled in Marketplace coverage between 2021-22— an increase of 41.8% relative to the estimated 5.5 million who retained coverage over the 2018-19 period. Our finding of increased stability of Marketplace coverage across years is important in light of research showing disruptions in

and reduced access to care because of churning^{17,18} and highlights a strength of our study compared with previous ones relying on cross-sectional data.¹²

The ARPA/IRA newly allowed families with income above four times the federal poverty level to obtain Marketplace subsidies. For this group — who tend to be older and face greater burdens of disease, and who have higher age-adjusted premiums — we found a 17.6 percentage point (95%CI=3.4-31.7%; p < .05) increase in the percentage of individuals who enrolled in Marketplace coverage rather than remaining uninsured. These increases in Marketplace coverage occurred shortly after the economy pulled out of the COVID-19 recession when losses in employer-based coverage threatened to increase the ranks of the uninsured. 19,20 Importantly, after the ARPA/IRA, increases in Marketplace coverage were particularly large among non-Hispanic Black individuals compared with non-Hispanic White individuals. Differences in the take-up of Marketplace coverage across racial and ethnic groups that were present prior to the passage of ARPA/IRA became statistically insignificant after ARPA/IRA passage. Long-standing disparities in insurance coverage for racial and ethnic minority groups in the United States underscore the importance of these findings, ¹³ particularly as research indicates insurance coverage helps to improve access to care,²¹ and reductions in out-of-pocket medical spending and premiums have been associated with the ACA coverage expansions.²² After controlling for income differences across our sample, underserved groups were particularly responsive to enhanced subsidies, which suggests that other unmeasured attributes related to affordability — such as financial wealth and after- versus pre-tax income — may be related to their previously lower rates of coverage.

We found an increase in Marketplace take-up for individuals reporting excellent or very good health status. That finding, in isolation, might be interpreted as an association between the APRA/IRA subsidies and favorable selection of healthier individuals into the

Marketplace risk pools. However, the difference in take-up after APRA/IRA for healthier individuals compared with less healthy individuals was not statistically or economically meaningful. Thus, our more salient finding for policy is a null finding: we find broad increases in Marketplace take-up irrespective of health status, suggesting that the enhanced ARPA/IRA subsidies may not have worsened any pre-existing adverse selection in the Marketplaces.

As health care costs continue to grow more quickly than wages,⁶ policymakers will likely face continued pressure to make coverage more affordable. Our analysis suggests that increasing the generosity of Marketplace subsidies can help in this regard.

Limitations. Because the ARPA/IRA enhanced subsidies became available in April 2021 across all geographic areas and affected nearly all Marketplace enrollees, we relied on comparisons of coverage for cohorts before and after ARPA/IRA controlling for observable demographics. Thus, our estimates should be interpreted as an association between the implementation of the ARPA/IRA enhanced subsidies and changes in coverage. Other changes that occurred after 2020, including the recession sparked by the onset of the COVID-19 pandemic, also would have affected our estimates. Given the impact of the recession on employment, we tested whether transitions from employer-sponsored coverage to Marketplace coverage changed meaningfully after 2020 and found no evidence in that regard. Thus, we focused our analysis on changes in Marketplace coverage over the 2021-22 period compared with the pre-period (2018-20).

Medical Expenditure Panel Survey-Household Component respondents may misreport their source of health insurance coverage. Household surveys often undercount coverage compared with administrative totals of enrollment. Our results were consistent with a broader definition of individual market coverage where we also included respondents who answered that they had "non-group" coverage purchased outside of a Marketplace (Appendix Tables 1-3 and Appendix Figures 1-2). Moreover, our estimate of 12.9 million enrolled in

non-group coverage in 2022 (Appendix Figure 1) roughly approximates total monthly enrollment from administrative records for that year of 13.4 million.²³

Conclusion. Our methodology does not allow us to conclude that the ARPA/IRA subsidies were the only cause for the changes we documented. Nevertheless, the timing and direction of the estimates does suggest an association with the enhanced ARPA/IRA subsidies. If Congress does not reauthorize the enhanced subsidies, which are set to expire at the end of 2025, net-of-subsidy premiums for Marketplace enrollment will rise. Based on the analysis above, Marketplace enrollment will likely decline, especially among racial and ethnic minority groups, those reporting better health status, those with income above four times the poverty line, and children.

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