The Effects of Iowa's Proposed Stopgap Measure on Health Insurance Costs and Coverage

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Preface

Under Section 1332 of the Affordable Care Act (ACA), states may request to waive provisions of the law and implement alternative reforms, as long as:

- 1. coverage under the proposed approach is at least as comprehensive as it would have been under the ACA
- 2. coverage under the proposed approach is at least as affordable as it would have been under the ACA
- 3. a comparable number of people would be insured under the waiver as would be under the ACA
- 4. the waiver does not increase the federal deficit.

In this report, the authors use RAND's COMPARE microsimulation model to estimate the effects of a 1332 waiver application submitted to the Trump Administration by the state of Iowa.

The study was supported by the RAND Ventures Program. Follow-up questions about the work can be directed to Sarah Nowak (snowak@rand.org) or Christine Eibner (eibner@rand.org). For more information on RAND Health, visit www.rand.org/health.

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This venture was supported by the Paul O'Neill Alcoa Chair in Policy Analysis. As holder of the O'Neill Alcoa Chair, Christine Eibner receives support to extend the impact of her research and analysis, stay ahead of the curve on emerging policy issues, and mentor the next generation of policy researchers. The O'Neill Alcoa Chair was established in 2000 by the Alcoa Foundation to honor former RAND trustee Paul O'Neill, then—chairman and chief executive officer of Alcoa and, later, U.S. Secretary of the Treasury.

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Summary

On August 21, 2017, Iowa submitted a 1332 State Innovation Waiver application, known as the Iowa Stopgap Measure (ISM), to the U.S. Treasury Department and the U.S. Department of Health and Human Services. The ISM is designed to stabilize Iowa's Affordable Care Act (ACA)—compliant individual market through a series of modifications to the ACA. These modifications are: (1) a requirement that all insurers in the individual market offer a single standard plan, which would be similar to the silver plan under the ACA; (2) elimination of costsharing reduction subsidies for those with incomes between 200 and 250 percent of the federal poverty level (FPL); (3) a new premium tax credit structure (tax credits vary by age and income, and, unlike the ACA, would be extended to individual market enrollees with incomes above 400 percent of the FPL); and (4) federally funded reinsurance (insurance for insurers) on all annual individual market claims above \$100,000. We found that the ISM is likely to lower premiums, decrease the number of uninsured, and decrease average health care spending (premiums paid after any applicable tax credits plus out-of-pocket costs) for all groups on the ACA-compliant health insurance market. We estimate that the ISM is also likely to increase the federal deficit, but that the federal per-enrollee cost of enrollees on the ACA-compliant market would decrease. In addition, we estimate that all groups with incomes over 200 percent of FPL on the ACAcompliant market could be at risk of foregoing necessary care, as they lose access to the higheractuarial value gold and platinum plans. A reinsurance-only program, without the additional features of the ISM, could insure nearly as many people as the ISM with no adverse deficit impact, assuming that reinsurance is sufficient to stimulate competition in the Iowa insurance market.

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Abbreviations

ACA Affordable Care Act

ACS American Community Survey

APTC Advanced Premium Tax Credit

CHIP Children's Health Insurance Program

CMS Centers for Medicare and Medicaid Services

CSR cost-sharing reduction

FPL federal poverty level

ISM Iowa Stopgap Measure

MEPS Medical Expenditures Panel Survey

Effects of Iowa's Proposed Stopgap Measure

Background

The 1332 State Innovation Waiver provision of the Affordable Care Act (ACA) was designed to allow states to waive certain requirements of the ACA and implement alternative reforms. To qualify for a 1332 waiver, states must demonstrate that their proposal meets four criteria:

- 1. coverage under the proposed approach is at least as comprehensive as it would have been under the ACA
- 2. coverage under the proposed approach is at least as affordable as it would have been under the ACA
- 3. a comparable number of people would be insured under the waiver as would be under the ACA
- 4. the waiver does not increase the federal deficit.

If a waiver application is determined to be acceptable, states may receive federal funding to support implementation, provided that this funding does not exceed what the federal government would have spent on the ACA. On August 21, 2017, Iowa submitted a 1332 State Innovation Waiver application, also known as the Iowa Stopgap Measure (ISM), to the U.S. Treasury Department and the U.S. Department of Health and Human Services (Iowa Insurance Division, undated). The ISM consists of a series of modifications to the ACA designed to both encourage insurers to participate in the ACA-compliant market and encourage families making over 400 percent of the federal poverty level (FPL)—who do not qualify for premium subsidies under the ACA—to enroll in the ACA-compliant market. In this report, we analyze the ISM and assess the implications for coverage, enrollee spending, and the federal deficit.

The Iowa Stopgap Measure

In April 2017, two of three insurers offering plans in Iowa's individual ACA-compliant individual insurance market—Wellmark Blue Cross/Blue Shield and Aetna—announced they would exit the market. In June 2017, the third insurer, Medica, announced that it would continue to offer plans on Iowa's individual exchange market, but would raise rates by 43.5 percent (Keenan, 2017); Medica also submitted an amended rate filing with an approximately 56-percent premium increase if the federal government did not make cost-sharing reduction (CSR) payments to insurers (Iowa Insurance Division, undated). As a result, the state is seeking a 1332 waiver that proposes four modifications to ACA regulations. These are:

1. All insurers participating in Iowa's exchange marketplace would be required to offer a single standard plan. Similar to silver-tier plans offered under the ACA, standard plans

- would be required to have an actuarial value between 68 and 72 percent (meaning that, on average, the insurer would cover between 68 and 72 percent of the costs of services covered under the plan).
- 2. Elimination of CSR subsidies for individuals with incomes between 200 and 250 percent of the FPL. Under the ACA, CSR subsidies lower the out-of-pocket costs of exchange plans for individuals with incomes below 250 percent of the FPL. By lowering out-ofpocket costs, CSR subsidies increase the fraction of health care costs covered by the insurer, and hence, the plan's actuarial value. Originally, the ISM would have eliminated CSR subsidies. However, through an addendum submitted to the Centers for Medicare and Medicaid Services (CMS), the ISM would retain CSR subsidies for individuals with incomes between 133 and 200 percent of the FPL (CMS, undated). The CSR subsidies would be based on (1) a 94-percent actuarial value plan for families with incomes between 133 and 150 percent of the FPL, as with CSR plans under the ACA; and (2) an 83-percent actuarial value plan for families with incomes between 150 and 200 percent of the FPL (individuals in this income range under the ACA on a CSR plan would have had their out-of-pocket payments based on a slightly more generous 87-percent actuarial value plan). The ISM retains the ACA's requirement that plans offered on the individual marketplace cover certain "essential health benefits," including coverage for prescription drugs, outpatient services, emergency services, and mental health, required by the ACA.
- 3. Enrollees would be eligible for monthly premium tax credits that vary by age and income. In contrast to the ACA's Advanced Premium Tax Credits (APTCs), these credits would be available to individuals with incomes above 400 percent of the FPL. These credits would range from \$56 per month for children age 14 and younger with family income above 400 percent of the FPL to \$1,067 per month for individuals age 64 with incomes from 133 to 150 percent of the FPL.
- 4. The state would use federal funds to provide reinsurance—insurance for insurers that protects them against the risk of enrolling an unusually costly individual—on all annual claims above \$100,000. It would supplement a federal reinsurance-like program—included as part of CMS's risk adjustment formula—that covers 60 percent of claims above \$1,000,000 (U.S. Department of Health of Human Services, 2016). The ISM would cover 85 percent of claims between \$100,000 and \$1,000,000; 25 percent of claims between \$1,000,000 and \$3,000,000; and 40 percent on claims over \$3,000,000. Combined with existing federal reinsurance, insurers operating under the ISM would see total reinsurance rates of 85 percent on claims between \$100,000 and \$3,000,000 and 100 percent on claims over \$3,000,000. To receive reinsurance funding, plans must participate in the ISM and adhere to the ACA's rating rules, guaranteed issue requirements, and essential health benefits requirements.

Table 1 summarizes the Iowa waiver parameters in more detail and compares them to the ACA.

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¹ In our analysis, we present results for individuals with incomes above 138 percent of the FPL, rather than those above 133 percent of the FPL. This is because Iowa is a Medicaid expansion state, and Medicaid eligibility is extended to qualifying individuals with incomes below 133 percent of the FPL *after a 5-percent income disregard*, making the effective Medicaid eligibility threshold 138 percent of the FPL. Medicaid-eligible individuals are not eligible for marketplace subsidies.

Table 1. Individual Market Insurance Design Parameters Under the ACA and ISM, 2018

Insurance design parameter	ACA	ISM
Plan Type	Insurers may offer bronze, silver, gold, or platinum plans on the health insurance marketplaces, with corresponding actuarial values in the range of 56 to 65%, 66 to 72%, 76 to 82%, and 86 to 92%.	Individual market insurers participating in the ISM may offer only a single, standard plan with benefits similar to those available in a silver marketplace plan.
Tax Credit Eligibility	Available to marketplace enrollees with incomes between 133 and 400% of the FPL and no affordable offer of insurance from another source.	Available to ISM enrollees with incomes above 133% of the FPL and no affordable offer of insurance from another source.
Tax Credit Amounts	Credits reflect the price of the second-lowest cost silver plan available to the individual, minus an income-based percentage contribution. Tax credits are available for families with incomes between 133 and 400% of the FPL. The average monthly tax credit per eligible marketplace enrollee in lowa in 2017 was \$421 (Kaiser Family Foundation, 2017).	Credits are fixed-dollar amounts that increase with age and fall with income. Proposed credits for 2018 range from \$56 per month for a child with family income above 400% of the FPL to \$1,067 per month for a 64-year-old with income between 133 and 150% of the FPL. Tax credits are available to families with incomes above 133% of the FPL; there is no upper limit on income.
CSR	Cost sharing reductions are available to reduce out-of-pocket costs (e.g., out-of-pocket maximums, deductibles) for tax-credit-eligible marketplace enrollees with incomes below 250% of the FPL.	Cost sharing reductions are available to reduce out-of-pocket costs (e.g., out-of-pocket maximums, deductibles) for eligible marketplace enrollees with incomes between 133 and 200% of the FPL.
Reinsurance	For 2018, the ACA's risk adjustment methodology will incorporate a reinsurance-like program that will pay for 60% of claims above \$1,000,000.	The ISM reinsurance program would supplement the ACA's risk adjustment payments. Together, these programs would pay for 85% of claims between \$100,000 and \$3,000,000, and 100% of claims above \$3,000,000.
Autoenrollment Essential health benefits	Allowed for marketplace coverage. Insurance plans must cover ten essential health benefits, including maternity care, mental health and substance abuse treatment, and prescription drugs.	Not allowed. No change from ACA requirements.

One of the challenges faced by Iowa's ACA-compliant market is the robustness of its grandfathered and transitional individual market. According to the Iowa Insurance Division, as many as 85,000 Iowans took advantage of grandfathered and transitional plans (also known as "grandmothered" plans) when the ACA went into effect (Iowa Insurance Division, undated). Grandfathered plans were purchased prior to March 2010 (when the ACA was enacted), and can remain in place indefinitely as long as insurers do not make changes to the plan structure that would substantially cut benefits or increase costs to the insured population. Transitional plans are subject to more requirements than grandfathered plans. Such plans were purchased between March 2010 and October 2013. Transitional plans cannot be renewed indefinitely; as of February 2017, they had been approved by CMS and the state of Iowa for plans with policy years starting on or before October 1, 2018 and ending by December 31, 2018 (Jost, 2017).

Grandfathered and transitional plans are not subject to ACA regulations on community rating, essential health benefits, and guaranteed issue and renewal, and as a result are likely to have healthier populations than ACA exchange individual plans. Because these plans have

healthier populations than the ACA-compliant market and are not subject to as many regulations, premiums on this market also tend to be lower than premiums on the ACA-compliant market. This means that many individuals eligible for grandfathered and transitional plans in Iowa tend to remain on them, which keeps this relatively healthy population out of the ACA-compliant market, which in turn leads to higher premiums on that market.

The ISM attempts to bring more insurers back to the ACA-compliant market and to lower premiums on the ACA-compliant market by drawing in enrollees from the grandfathered/ transitional market and improving the ACA-compliant risk pool. It does this through four proposed modifications to the ACA. The first and second proposed modifications (offering only a single standard silver plan and reducing eligibility for CSR subsidies) may increase predictability of claims for insurers. In addition, reducing eligibility for CSR subsidies and eliminating higher—actuarial value plans may lower health care utilization by those in the ACA-compliant market, which could decrease premiums. The third proposed modification, extending premium tax credits to those making more than 400 percent of the FPL, could encourage enrollment from higher-income individuals who are currently uninsured or enrolled in grandfathered or transitional plans and who do not currently qualify for premium tax credits. The fourth modification, offering reinsurance on all claims over \$100,000, could reduce insurers' costs and increase predictability of claims for insurers, ultimately lowering premiums.

Scenarios

We modeled five scenarios for Iowa's ACA-compliant market in 2018. They are:

- 1. **Status quo (Medica monopoly).** Consistent with the modeling approach used by the Congressional Budget Office in scoring recent legislation (Congressional Budget Office, 2017), we assumed that the federal government will continue to make CSR payments to insurers in 2018. We adjusted premiums to match those announced by Medica for 2018 as reported in Iowa's 1332 waiver application (Iowa Insurance Division, undated). We used the premiums described in the table "Average Rates by Metal Tier All Areas Combined" from the ISM application (Iowa Insurance Division, undated, p. 26). The rates are a 42-percent increase over the average 2017 premium across all carriers. This assumes that Medica will remain the sole insurer in Iowa's ACA-compliant market if the ISM is not approved.
- 2. **ISM with waiver premiums.** In this model, we assumed that actual premiums would match the premiums proposed in Iowa's waiver application. Wellmark has said that it has conducted its own actuarial analysis of the ISM and would re-enter the ACA-compliant market and set premiums no higher than those set forth in the waiver application if the ISM is approved (Iowa Insurance Division, undated). Waiver premiums in the ISM application are nearly 30 percent lower than those filed by Medica.
- 3. **ISM with competitive premiums.** In this model, we assume that premiums further adjust to account for the new risk pool, reinsurance, and changes to health care consumption resulting from the ISM's single-standard plan. To do this, instead of setting premiums exogenously, we used premiums calculated endogenously within the

- COMPARE mode. We report these results for 2018. Because Wellmark has stated that it will enter the market at premiums "no higher than" those in the waiver application, premiums in this scenario represent possible premiums if Wellmark chooses to re-enter the market with lower premiums than those in the ISM application or if additional insurers were to enter the market and attempt to gain market share by offering lower premiums than Medica or Wellmark.
- 4. **ACA, no grandfathered/transitional market.** For our fourth scenario, we modeled the ACA-compliant market if Iowa's grandfathered/transitional plans were eliminated. This allows us to estimate the degree to which enrollees currently in the grandfathered/transitional market could lower premiums on the ACA-compliant market if they lacked access to the grandfathered/transitional market. We assume that if Iowa's insurers were unable to offer health insurance on the grandfathered/transitional market, at least one insurer would join Medica to offer health insurance on the ACA-compliant market so that Medica would no longer be a monopoly. We note that this is a counterfactual scenario; the deadline for insurers to participate in the 2018 marketplace in Iowa has passed.
- 5. **ACA and reinsurance.** Finally, we estimated the impacts of the ISM's proposed state reinsurance program separately from the other provisions of the ISM. To do this, we modeled the ACA-compliant market with Iowa's proposed ISM reinsurance program. We assume that reinsurance would be sufficient to bring additional insurers back to the market and that Medica would no longer hold a monopoly in the ACA-compliant market in this scenario. We note that this is a counterfactual scenario; the deadline for insurers to participate in the 2018 marketplace in Iowa has passed.

Table 2 summarizes the assumptions used in each scenario.

Table 2. Parameters of Modeled Scenarios

	Status quo	ISM, waiver premiums	ISM, competitive premiums	ACA, no grandfathered/ transitional market	ACA and reinsurance
Plan types on the ACA- compliant market	Bronze (60% actuarial value), silver (70% actuarial value), gold (80% actuarial value), and platinum (90% actuarial value) plans are available	Only a standard (70% actuarial value) plan is available	Only a standard (70% actuarial value) plan is available	Bronze (60% actuarial value), silver (70% actuarial value), gold (80% actuarial value), and platinum (90% actuarial value) plans are available	Bronze (60% actuarial value), silver (70% actuarial value), gold (80% actuarial value), and platinum (90% actuarial value) plans are available
Tax credit eligibility (for enrollees on the ACA- compliant market with no other source of coverage)	Families with incomes between 133 and 400% of the FPL	Families with incomes above 133% of the FPL	Families with incomes above 133% of the FPL	Families with incomes between 133 and 400% of the FPL	Families with incomes between 133 and 400% of the FPL

	Status quo	ISM, waiver premiums	ISM, competitive premiums	ACA, no grandfathered/ transitional market	ACA and reinsurance
Tax credit amounts	ACA credit amounts	ISM credit amounts	ISM credit amounts	ACA credit amounts	ACA credit amounts
CSR	Available to families with incomes up to 250% of the FPL	Available to families with incomes between 133 and 200% of the FPL	Available to families with incomes between 133 and 200% of the FPL	Available to families with incomes up to 250% of the FPL	Available to families with incomes up to 250% of the FPL
Reinsurance	60% coinsurance on claims over \$1,000,000	85% coinsurance on claims between \$100,000 and \$3,000,000; 100% coinsurance on claims over \$3,000,000	85% coinsurance on claims between \$100,000 and \$3,000,000; 100% coinsurance on claims over \$3,000,000	60% coinsurance on claims over \$1,000,000	85% coinsurance on claims between \$100,000 and \$3,000,000; 100% coinsurance on claims over \$3,000,000
Grandfathered/ transitional market	Yes	Yes	Yes	No	Yes
How premiums are set	Premiums are set to equal 2018 Medica premiums from the waiver application	Premiums are set to equal proposed ISM premiums	Premiums are calculated within our model	Premiums are calculated within our model	Premiums are calculated within our model
Number of insurers in the market	One (Medica)	At least two	At least two	At least two	At least two

Methods

We estimated the effects of the ISM using RAND's COMPARE model, which uses economic theory and data to estimate the impacts of different health care reforms (Cordova et al., 2013). We used our national model, which uses data from the April 2010 wave of the 2008 Survey of Income and Program Participation, to create our population of individuals, families, and data from the 2009 Kaiser Family Foundation/Health Research and Educational Trust Employer Health Benefits Survey to create our population of firms. Health care expenditures in COMPARE are derived from the 2010–2011 Medical Expenditures Panel Survey (MEPS), the CMS National Health Expenditure Accounts, and the Society of Actuaries. While our data sources predate the implementation of the ACA, we updated them to reflect population growth (using factors reported by the U.S. Census Bureau) and to reflect health care cost growth (using the CMS National Health Expenditures Accounts).

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² More details about how health care expenditures are created in COMPARE can be found in Eibner et al., 2011, and Cordova et al., 2013.

We also adjusted total expenditures for individuals on the ACA-compliant market so that the computed premiums in COMPARE matched Medica's premiums in the status quo scenario and the ISM waiver premiums in the ISM waiver premium scenario. We applied the adjustment from the ISM waiver premium scenario to the ISM competitive premium scenario, the ACA no grandfathered/transitional scenario, and the ACA and reinsurance scenario. These adjustments assume that ISM waiver premiums are higher than what we calculate in COMPARE because total expenditures on the ACA-compliant market, and thus claims, are higher on average in Iowa than what we estimate based on national data. We also adjusted our model to account for actual take-up of ACA programs, including Medicaid expansion and marketplace plans. After we ran our scenarios, we reweighted the data to match Iowa's demographic composition based on 2015 data from the American Community Survey (ACS), and adjusted to address population changes between 2015 and 2018 using data from the Demographics Research Group at the Weldon Cooper Center for Public Service (University of Virginia Demographics Research Group, 2016). We then further adjusted the nongroup market enrollment to match the enrollment stated in the 1332 waiver application on the ACA-compliant and grandfathered/transitional markets.

Individuals in COMPARE make choices by weighing the costs and benefits of available health insurance options. The approach captures how differences in premiums, out-of-pocket costs, and risk of financial loss might impact families' decisions. In the status quo scenario, individual market enrollees can choose to enroll in a bronze, silver, gold, or platinum plan on the marketplace, or—if eligible—may opt to remain in a grandfathered or transitional plan.

Premiums in COMPARE are calculated within the model, or we may set premiums to match a predetermined value. When premiums are calculated within the model, we assume that insurers set premiums to cover all claims plus administrative costs and profit. The fraction of premiums that covers an insurer's claims is the medical loss ratio. When we model reinsurance, we assume that insurers receive payments to cover part of the costs of some of their claims, which enables them to decrease the premiums they set.

To model the ISM, we accounted for all of the provisions listed in Table 1 except autoenrollment, which is allowed under the ACA but not the ISM. Autoenrollment likely increases health insurance coverage; however, to date there are no estimates of how the ACA's autoenrollment provisions affect enrollment decisions. Because we calibrate our results to match data on post-ACA enrollment levels, the status quo analysis implicitly adjusts for any effect of autoenrollment. However, we may overstate the coverage effects of the Iowa waiver, which eliminates autoenrollment. We discuss this issue further in sensitivity analyses, described later in the document.

The weights adjust the national-level COMPARE data to match the age, poverty level, and health insurance composition of the Iowa population, given 2015 market characteristics, a year during which there were multiple insurers in Iowa's individual market. This means that, if we were to run the model assuming that there was a competitive individual insurance market, we would reproduce the insurance enrollment patterns observed in 2015. When we run the model

under alternative assumptions—such as with a single insurer and large premium increases in 2018—individuals' enrollment decisions adjust to reflect these factors.

Because the ISM primarily affects people under age 65, we limit our analysis to the nonelderly population. A more-detailed discussion of COMPARE and the assumptions used in this analysis can be found in the Appendix.

Results

In this section, we examine whether the criteria of the 1332 waiver are met by showing the effects of our scenarios on health care coverage, costs to the federal government, and costs to families. First, we examine how the ISM and alternative ACA scenarios affect the number of people who are insured and the sources of health care coverage in Iowa. We also estimate how many new enrollees on the ACA-compliant market come from the grandfathered/transitional market and from the uninsured population. Second, we estimate how premiums on the ACAcompliant market would change under our scenarios. Third, we estimate the effects of the scenarios on the federal deficit. Finally, we show how the scenarios would affect families' health care spending, their risk of catastrophic health care spending, and total (all-payer) health care spending on the ACA-compliant market.

Table 3 shows the projected health insurance enrollment for the nonelderly in 2018 under our five scenarios in 2018. Uninsurance drops relative to the status quo under our ISM scenarios and our ACA and reinsurance scenario, but increases under our ACA without grandfathered/ transitional plans scenario. We find that the number of uninsured would drop by 27,000 under the ISM in the waiver premium scenario and by 41,000 in the competitive premium scenario as the market adjusts and reduces premiums as a result of changes to the risk pool, reinsurance, and reduced consumption of health care services due to the standard plan. We find that adding reinsurance to the ACA would reduce the number of uninsured by 37,000—almost as much as the reduction we see in our competitive premium ISM scenario. We estimate that removing the grandfathered and transitional markets would increase the number of uninsured by 17,000.

We estimate that total enrollment in the individual market would increase by similar numbers—47,000 and 48,000, respectively—under the ISM competitive premium and the ACA and reinsurance scenarios. In the ISM waiver premium scenario, we estimate a more modest increase of 22,000 in individual-market enrollment. We estimate that total enrollment in the individual market would fall by 9,000 if the grandfathered and transitional markets were eliminated. Of all the scenarios that do not completely eliminate the grandfathered and transitional markets, the ISM competitive premium scenario is the most effective at increasing the share of individual-market enrollees in ACA-compliant plans. Compared to the status quo, it

³ We define catastrophic health care spending as an amount that is over 20 percent of yearly income.

increases the share of individual-market enrollees on ACA-compliant plans from 39 percent to 71 percent; such a shift could benefit the stability of Iowa's ACA-compliant market in the long run. We also estimate small decreases in employer-sponsored insurance in our ISM competitive premium ACA without grandfathered/transitional plans, and ACA and reinsurance scenarios. This reflects that a small number of firms may drop employer-sponsored insurance coverage as coverage on the individual market becomes less expensive and more attractive to employees.

Table 3. Projected Health Insurance Enrollment for the Nonelderly in Iowa, 2018 (in Thousands)

	Status quo	ISM, waiver premiums	ISM, competitive premiums	ACA, no grandfathered/ transitional plans	ACA and reinsurance
Employer-sponsored insurance	1,699	1,705	1,696	1,690	1,687
Medicaid	474	472	471	475	475
Individual, grandfathered/transitional	83	67	53	0	65
Individual, ACA-compliant	54	92	130	128	120
Individual, total	137	159	184	128	185
Other	131	131	131	131	131
Uninsured	169	142	128	186	132

NOTE: The "other" insurance category includes nonelderly enrolled in Medicare (including nonelderly who are also enrolled in Medicaid) and those who get health care from Tricare, Veterans Affairs, or the Indian Health Service.

Table 4 shows the numbers of new enrollees on the ACA-compliant market transitioning from the grandfathered/transitional market and from uninsured. We find that if the grandfathered/transitional markets were eliminated, 44,000 individuals would move from that market onto the ACA-compliant market. If the grandfathered/transitional markets remain in place, under the competitive premium scenario, the ISM would be more effective at moving individuals from grandfathered/transitional plans onto ACA-compliant plans than adding reinsurance to the ACA would be.

Table 4. ACA-Compliant Market Enrollment by New Enrollee Type (Previously Uninsured or Previously Enrolled in the Grandfathered/Transitional Market)

	ISM, waiver premiums	ISM, competitive premiums	ACA, no grandfathered/ transitional plans	ACA and reinsurance
Number of ACA-compliant enrollees from grandfathered/transitional market (in thousands)	15	29	44	18
Number of ACA-compliant enrollees from uninsured (in thousands)	19	31	20	31

Figure 1 shows how premiums change in our four scenarios. We benchmark the premiums in the status quo and under our ISM waiver premium scenario to Medica's proposed rates for 2018 and to the proposed ISM premium rates from Iowa's waiver application, respectively. The proposed 2018 ISM premiums are 27 percent lower than Medica's 2018 rates. We estimate premiums would decrease in all scenarios relative to the status quo, in part because we assume that Medica would no longer be the sole insurer under all of our alternative scenarios. Furthermore, Medica will be increasing premiums by 43.5 percent in 2018 (Keenan, 2017). When three insurers were in the market in 2017, Medica's premiums were about 17 percent higher than Aetna's and about 5 percent lower than Wellmark's. This, together with our modeling, suggests that if additional insurers were to enter Iowa's ACA compliant market in 2018, premium decreases could be significant. Premium decreases on the ACA-compliant market are greatest in our ISM competitive premium scenario (48 percent decrease) and in our ISM and reinsurance scenario (41 percent decrease). Note that these scenarios draw more enrollees onto the ACA-compliant market from the uninsured population than other scenarios (see Table 4), but do not draw as many enrollees from the grandfathered/transitional market as the scenario in which that market is eliminated.

We find little change in the grandfathered/transitional premiums in either of the ISM scenarios, but we estimate that premiums on the grandfathered/transitional market would decrease by 12 percent in the ISM and reinsurance scenario. Because the reinsurance scenario retains CSR subsidies, gold, and platinum plans to continue, some high-cost enrollees move out of the grandfathered/transitional market under this scenario, reducing premiums in grandfathered and transitional plans. Premiums in the ACA-compliant market fall as well, due both to reinsurance and to an influx of relatively healthy enrollees who would otherwise have been uninsured.

Figure 1. Change in Age-Standardized Individual-Market Premiums in 2018, Relative to Status Quo

NOTE: While there is a grandfathered/transitional market in the ISM competitive premiums scenario, premiums in that market decrease by just 0.1 percent relative to the status quo, a change that is not easily visible in the figure. AV = actuarial value; GF = grandfathered.

Table 5 shows the federal government impact of our scenarios. We estimate that the waiver premium ISM scenario increases the federal deficit by \$117 million, and the ISM model premium scenario increases the federal deficit by \$142 million. We estimate that eliminating the grandfathered/transitional market would decrease the federal deficit by \$143 million and that adding reinsurance to the ACA would decrease the federal deficit by \$19 million relative to the status quo. The results in both of these ACA scenarios are largely driven by large decreases in premium tax paid by the federal government, which reflect both improvements in the risk pool and increases in competition in the individual insurance market. The structure of premium tax credits under the ACA results in the federal government absorbing most of the costs of premium increases on the ACA-compliant market for the tax credit eligible population. Conversely, when premiums decrease substantially, so do federal premium tax credit payments. Furthermore, we estimate that all scenarios we considered would decrease federal spending per enrollee on the ACA-compliant market.

Table 5. Federal Deficit Impacts (in Millions)

	Status quo (Medica monopoly)	ISM, waiver premiums	ISM, competitive premiums	ACA, no grandfathered/ transitional plans	ACA and reinsurance
a. Premium subsidies	\$418	\$450	\$407	\$282	\$237
b. CSR subsidies	\$24	\$15	\$16	\$29	\$39
c. ISM reinsurance ^a	_	\$66	\$119	_	\$109
d. Individual mandate revenue	\$86	\$58	\$44	\$98	\$48
Federal deficit impact (a+b+c–d)	\$356	\$473	\$498	\$213	\$337
Federal spending per enrollee on the ACA- compliant market	\$6,590	\$5,140	\$3,830	\$1,660	\$2,810

^a We include only the cost of the ISM reinsurance program (reinsurance on claims over \$100,000) because CMS estimates that the ACA's reinsurance program, which applies to claims over \$1 million, will impact fewer than 0.5 percent of premiums (Jost, 2016).

Finally, we estimated how consumer health care spending and consumption changes in the waiver premium ISM scenario relative to the status quo. For both scenarios, we examined the spending of individuals who remain in the ACA-compliant market, estimating spending and consumption for a constant population. We reported results at the family level by income and by the age of the oldest member of the household. First, we reported the change in average total family spending—which includes premiums paid by the family, accounting for any premium tax credits the family is eligible for and out-of-pocket spending after CSR subsidies—in our ACA scenarios. Second, we reported the change in risk of catastrophic spending. Third, we reported the change in average total health care spending, including claims covered by the insurer and consumer out-of-pocket costs.

Table 6 shows the impact of the ISM (using waiver premiums) on family-level health care spending in the ACA-compliant market. We assigned families to an age category based on the age of the oldest member. We find that all groups will see decreases in average total family health care spending under the ISM relative to the ACA's status quo. In many cases, these decreases in average spending would be large; older families over 400 percent of the FPL could see spending fall by an average of over \$4,000. In addition to considering average spending, we analyzed the risk of catastrophic spending (defined as spending more than 20 percent of income on health care). Older individuals with incomes above 400 percent of FPL would see a large decrease in their risk of catastrophic spending—a decrease of 22 percentage points. Lower-income individuals between the ages of 35 and 49 would also see a large decrease in the risk of catastrophic spending under the ISM (an 18-percentage point decline). We estimate a mix of small increases and decreases in risk of catastrophic spending in other groups. While these

groups are also likely to see increases in out-of-pocket costs under the ISM, these increases can be offset by significant decreases in premiums they would be paying as a combined result of the lower exchange premiums under the ISM and generous premium tax credits. Note that our estimates of family health care spending do not include the portion of taxes paid by the family that go toward health care. Because the ISM waiver premium scenario increases the federal deficit, it is possible that the federal government would increase income taxes or generate revenue through other means to keep the waiver deficit neutral. These increases would likely be spread across the U.S. population, with little overall effect on Iowa residents.

In the third panel of the table, we report total health care expenditures. The expenditures include claims paid by the insurer and the families' out-of-pocket costs. We estimate that all groups above 150 percent of FPL would have decreased total health care expenditures under the ISM as a result of the single standard plan that would be offered. This result comes from our assumption, based on the RAND Health Insurance Experiment (Newhouse and the Insurance Experiment Group, 1993), that individuals will use less health care as they move from a higher actuarial value plan to a lower-actuarial value plan. While some individuals have plans more generous than the ISM standard plan (gold, platinum, and silver plans with affordable costsharing credits) and others have plans that are less generous (bronze plans), we estimate that individuals who use more health care (such as older and sicker individuals) were more likely to have enrolled in more generous plans under the status quo so that total health care spending would decrease on average under the ISM. We estimate that, on average, total expenditures increase for families with incomes between 138 and 150 percent of the FPL because, under the ISM, all enrollees in the ACA-compliant market will be on a standard plan and will be eligible for reduced cost sharing. Under the ACA, some individuals in this income group could have chosen to enroll on a bronze plan. We estimate those individuals would use more health care under the ISM than under the ACA. Prior research has shown that individuals on plans with greater cost sharing are more likely to report forgoing necessary care (Collins et al., 2015), so this decrease in total health care spending could represent some individuals going without some of the health care they need.

Table 6. Change in Average Family Health Care Spending, Risk of Catastrophic Spending, and Health Care Consumption Under the ISM Waiver Premium Scenario Relative to the Status Quo

	Family income relative to the FPL						
Age of oldest member of household	138–150% FPL	150-200% FPL	200-300% FPL	300–400% FPL	>400% FPL		
Change in average family health care	Change in average family health care spending (premiums and out-of-pocket costs)						
18–34	-\$450	-\$740	-\$1,720	-\$3,230	- \$60		
35–49	-\$960	-\$920	-\$1,340	-\$3,460	-\$1,490		
50–64	-\$410	-\$240	-\$50	-\$1,040	-\$4,300		
Change in risk of catastrophic spendi	ng						
18–34	-4%	-1%	1%	-1%	3%		
35–49	-18%	-6%	-3%	-2%	0%		
50–64	-1%	3%	1%	-6%	-22%		
Change in total health care spending by all payers							
18–34	\$30	- \$5	- \$140	-\$50	-\$320		
35–49	\$140	- \$5	-\$680	-\$560	-\$330		
50–64	\$130	-\$40	-\$2,010	-\$220	-\$860		

NOTE: This table shows the difference in family health care spending, risk of catastrophic health care spending, and catastrophic health care spending between the waiver premium ISM scenario and the status quo. Results are reported for the population in which the entire family is enrolled in the ACA-compliant market under both scenarios. Family health care spending includes spending on premiums (after any applicable tax credits) plus spending on out-of-pocket costs. Changes in risk of catastrophic spending are percentage-point changes in risk. Total health care spending by all payers includes claims paid by the insurer plus the families' out-of-pocket costs.

Sensitivity to Autoenrollment Assumptions

Because we do not account for autoenrollment, our analysis may overstate the effect of the ISM waiver on coverage. According to analyses by the U.S. Department of Health and Human Services (2016), 17 percent of marketplace enrollees in states using the healthcare.gov platform were automatically re-enrolled in plans between 2015 and 2016. While there is no way to know what percentage of these individuals would have enrolled had active enrollment been a requirement, it is likely that a portion of them may have been uninsured in the absence of autoenrollment. According to the Kaiser Family Foundation (2017), there were 51,573 marketplace enrollees in Iowa in 2017, ⁴ suggesting that roughly 8,800 individuals could have been autoenrolled (17 percent of 51,753). If we increased the estimated number of uninsured individuals by this amount—reflecting an extreme assumption that all people who are autoenrolled would otherwise be uninsured—we would still conclude that the ISM insures more people than the status quo. A similar back-of-the-envelope calculation suggests that the assumptions about autoenrollment would not change our estimated impact of the ISM on the federal deficit. The results presented in Table 5 indicate an average cost per individual insured in

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⁴ The number of marketplace enrollees is lower than the number of individual market enrollees on the ACA-compliant market because some ACA-compliant plans can be purchased outside of the marketplace.

the ACA-compliant market of \$3,830 to \$5,140. If 8,800 fewer people were insured, this would decrease the deficit impact of the ISM scenarios by \$34 to \$45 million, not enough to offset the \$117 to \$142 million additional cost of the program relative to the status quo.

Limitations

Our study has a number of limitations. First, we do not have detailed data from Iowa about the mix of individuals on the grandfathered/transitional market and the ACA-compliant market by age or health status. We also do not have detailed data on the distribution of health care spending in Iowa. In particular, we did not have access to data about the frequency and magnitude of very high cost claims in Iowa. We would expect estimates of reinsurance costs to be sensitive to the distribution of high cost claims. Second, we used the COMPARE model, which estimates insurance coverage at the national level to model our ISM scenarios, and then reweighted the results to estimate impacts in Iowa using data from the ACS. Like all surveys, the ACS has some limitations; for example, it is known to overestimate the number of individuals on the individual market, particularly for lower-income individuals (Lynch et al., 2011; Boudreaux et al., 2015). The Appendix discusses the adjustments we make to account for these issues.

Additionally, much of the uncertainty around the future of the ACA-compliant market is due to uncertainty around whether insurers will re-enter the market under the ISM. In the status quo scenario, we assume that premiums are set based on rates filed by Medica, and in the waiver-premiums scenario we assume that premiums reflect rates included in Iowa's waiver application. Both of these rating assumptions reflect significant lack of competition. In the other three scenarios (ISM with competitive premiums, ACA with no grandfathered/transitional plans, and ACA and reinsurance), we estimate premiums assuming a competitive market. We think it is reasonable to assume that any of the scenarios would lead to increases in competition, particularly over time, because they would implement reforms that expand the risk pool and lower costs to insurers. However, this assumption is highly uncertain.

Because of our assumptions about competition, we find that reinsurance alone is a very attractive option, reducing both premiums and the federal deficit. However, these estimates are highly specific to the health insurance landscape in Iowa. For 2018, Medica filed premiums that are over 40 percent higher than 2017 rates, a result that likely reflects both uncertainty about the future of the ACA and Medica's market power as the only insurer in 2018. Because we assume reinsurance will bring additional insurers into the market, the change in premiums in the ACA and reinsurance scenario reflects not only the effects of the reinsurance itself, but also rate decreases due to competition. In other states, particularly those with more competitive individual insurance markets, a federally financed reinsurance program could lead to smaller change in premiums and enrollment. Further, it is not generally the case that a federally financed reinsurance program would reduce the deficit. Reinsurance leads to a deficit reduction in the Iowa case primarily because the status quo reflects a monopoly market.

Conclusions

Our analysis suggests that, if regulators were to strictly adhere to the requirements set forth in the ACA, the Iowa Stopgap Measure may not meet the qualifications for a waiver. This outcome is due to our estimate that the ISM could increase the federal deficit. However, Iowa has asked that if the ISM does not meet the 1332 waiver, it still be considered as an emergency waiver, and our findings suggest that the ISM has many benefits. We estimate that the ISM is likely to reduce premiums and decrease the number of uninsured. In addition, the ISM could improve the stability of the ACA-compliant market by bringing an estimated 29,000 individuals into that market from the grandfathered/transitional market, which currently is composed of a relatively healthy population. In fact, we estimate that the ISM could decrease per-enrollee federal spending on Iowa's ACA-compliant market. If the waiver were accepted, some of these benefits would be realized immediately, because Wellmark has stated that it will enter the ACA-compliant market at rates "no higher than those set forth" in Iowa's waiver application if the ISM is approved (Iowa Insurance Division, undated).

We also examined an alternative scenario in which the proposed ISM reinsurance program would be implemented with no other changes to the ACA. We found that relative to the status quo, in which Medica is a monopoly, such a program could increase insurance coverage and insurance affordability and decrease federal government spending. These estimates suggest that a reinsurance-only program would more squarely meet the waiver criteria because it would both increase coverage and reduce the deficit. The deficit-reduction finding hinges on our estimate that reinsurance will reduce premiums by more than enough to offset the cost of the reinsurance program. Federally funded reinsurance will automatically reduce premiums, because the federal government funds a portion of claims from high-cost enrollees. The reductions to the deficit that occur despite this influx of federal funding reflect the offsetting effects of additional reductions to premiums and tax credits stemming from improvements in the risk pool and increases in insurer competition. In particular, we assume that Medica would no longer be a sole insurer and that Wellmark or another insurer could enter the market with significantly lower premiums. Theory and past experience support the assumption that federal policies can successfully improve the insurance risk pool, leading to premium reductions (Hackman, Kolstad, and Kowalski, 2015). Insurers have strongly advocated for individual market stabilization programs such as reinsurance (AHIP, 2017a; AHIP, 2017b), which supports the assumption that additional insurers will enter the market if reinsurance becomes available. However, whether reinsurance alone would be sufficient to substantially increase the competitive environment in Iowa is speculative. Further, although our analysis focuses on 2018, the reinsurance scenario presented in our model represents a counterfactual situation, as the deadline for further insurer participation for the 2018 plan year has now passed.

COMPARE Overview

COMPARE is a microsimulation model that uses economic theory, nationally representative data, and evidence from past experience to estimate how consumers and business will respond to health policy changes (Cordova et al., 2013). The model creates a synthetic population of individuals, families, health expenditures, and firms using data from the April 2010 wave of the 2008 Survey of Income and Program Participation, the 2010–2011 MEPS, and the 2009 Kaiser Family Foundation/Health Research and Educational Trust Employer Health Benefits Survey. While the data sources predate the implementation of the ACA, we update them to reflect population growth based on factors reported by the U.S. Census Bureau, and to reflect health care cost growth using the CMS National Health Expenditures Accounts.

We assign each individual in the Survey of Income and Program Participation a spending amount using the spending of a similar individual from the MEPS. We then augment spending imputations with data on high-cost claims from the Society of Actuaries. These adjustments account for the fact that the MEPS underrepresents individuals with high spending.

Individuals in COMPARE make health insurance enrollment decisions by weighing the costs and benefits of available options, an approach that is referred to by economists as "utility maximization." The utility-maximization framework accounts for the following:

- premium costs
- anticipated out-of-pocket health care spending
- the value of health care consumption
- the risk of incurring a financially devastating health care bill, and
- any penalties the individual would face by remaining uninsured, including the risk of facing denial or being charged higher premiums at a later date.

Premium costs are adjusted to account for tax credits, if such credits are available to the enrollee. All else being equal, higher premiums reduce an individual's probability of enrolling in health insurance. In contrast, several factors encourage enrollment, such as a lower risk of catastrophic spending, reduced out-of-pocket spending, the avoidance of penalties, and increases in health care utilization.

Businesses in the model make decisions by considering the value of health insurance to their workers. Tax credits for individual market coverage and Medicaid eligibility expansions may reduce the value of health insurance to workers, leading firms to drop insurance. However, mandates requiring individuals to enroll in insurance, as well as mandates requiring firms to offer coverage, tend to increase the likelihood that a firm will offer insurance.

We calibrate the model to ensure that it accurately predicts outcomes for years in which complete data exist. As new data emerge, we update the model to reflect this information. For example, we added an adjustment to our Medicaid enrollment algorithm to account for the "welcome mat" effect—in which previously eligible people newly enrolled as a result of the ACA. This adjustment is described in more detail below.

The Approach to Modeling the ACA

To model individual and family health insurance enrollment decisions under the ACA, COMPARE uses a utility-maximization approach, in which decisionmakers weigh the costs and benefits of available options. The utility-maximization framework accounts for the tax penalty for not purchasing insurance, the value of health care consumption, premium costs, expected out-of-pocket health care spending, and financial risk associated with out-of-pocket spending.

We scale each of these components of utility to dollars and assume that they are additively separable (Goldman, Buchanan, and Keeler, 2000). We further assume that individuals' utilities are separable in consumption and health. The health-related component of the utility function is modeled as follows:

$$U_{ijk} = u(H_{ij}) - E(OOP_{ij}) - p_{ij}^{(H)} - \frac{1}{2}rVAR(OOP_{ij}) - (0.8 * Penalty_j) + Calibration_{jk}$$

Within this equation:

- $u(H_{ij})$ is the utility associated with consuming health care services for individual i under insurance option j
- k represents an individual's demographic group based on age, health status, and income
- OOP_{ii} is the out-of-pocket spending expected
- $p^{(H)}$ is the individual's premium contribution (after adjusting for tax credits)
- r is the coefficient of risk aversion.

Possible health insurance enrollment choices (*j*) under the ACA may include employer coverage, Medicaid or Children's Health Insurance Program (CHIP) coverage, an ACA-compliant individual-market plan (including plans available on and off the marketplaces), or another source of coverage. Individuals can also choose to forgo insurance. Not all individuals will have access to all forms of coverage. For example, access to Medicaid is contingent on eligibility, and individuals will have access to employer coverage only if they (or their spouse or parent) work for a business that offers insurance.

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⁵ Other sources of coverage include Medicare for the nonelderly with qualifying conditions and military-related sources of coverage, such as TRICARE.

The **Penalty** term represents the tax penalty associated with insurance status *j*, and it is 0 for all but the uninsured insurance status. We downweight the tax penalty by a factor of 0.8 to capture the fact that, on average, the Internal Revenue Service collects only about 80 percent of taxes owed (Internal Revenue Service, 2016).

The term **Calibration**_{jk} is a factor that adjusts utilities to match enrollment patterns observed in pre-ACA data. The term accounts for nonpecuniary factors that may influence preferences for different types of insurance. Such factors include the convenience associated with enrolling in employer coverage and access constraints associated with Medicaid. Specific modeling strategies for each source of coverage *j* are described next.

Small-Group Employer Coverage. Small employers in the model choose whether to offer coverage based on worker preferences and a small set of other factors, including the employer's industry and whether workers are unionized. Under the ACA, all small firms are part of a single risk pool with guaranteed issue, three-to-one rate banding on age, and restrictions that preclude insurers from charging different premiums to different groups other than based on geography, family size, tobacco use, and plan generosity.

In the current version of the model, small-group market regulations apply to all firms with 50 or fewer employees, regardless of year. Earlier versions of the model expanded the small group market to include firms with 100 or fewer workers after 2015, as originally intended by the ACA. We revised the definition because the Protecting Affordable Coverage for Employees Act, signed into law in late 2015, amended the ACA's definition of a *small employer* to include firms with one to 50 employees in perpetuity, unless states opt to extend the small-group market to firms with up to 100 workers.

Small firms in the model are permitted to purchase a 60-percent, 70-percent, 80-percent, or 90-percent actuarial value plan on the ACA's regulated small group market, which includes the Small Business Health Insurance Options marketplaces. Small firms in the model may retain grandfathered status, which exempts them from the ACA's rating regulations, although we assume that a certain percentage of small firms will lose grandfathered status each year.

The ACA also offers a small business tax credit to small firms with low-wage workers who obtain coverage through the Small Business Health Insurance Options marketplaces. Because firms can take advantage of these credits for only two years, we assume that all small firms will have exhausted their tax credit eligibility by 2020.

Large-Group Employer Coverage. Like small employers, large employers choose whether to offer coverage based on worker preferences and several other characteristics, including union status and industry. We allow large firms that offer coverage to choose between four different plans, which are distinguished by plan generosity and rated based on enrollees' expected health expenditures. We estimate premiums for the large-group market based on a regression. The firm's decision to offer is modeled using structural econometric techniques.

Medicaid. Because we ran the national model and reweighted to Iowa, and Iowa is a Medicaid expansion state, we extended Medicaid eligibility to all individuals with incomes

below 138 percent of the FPL who could be Medicaid eligible based on immigration status. Through our calibration process, the model accounts for the fact that not all Medicaid-eligible individuals chose to enroll, perhaps because of stigma, lack of information, or transaction costs associated with enrolling. To account for the fact that the ACA increased Medicaid enrollment among the previously eligible population, we increase the calibration parameter by a factor of approximately \$200 in the post-2014 period.

Individual Market. Under the ACA, the individual market consists of two components: (1) the insurance marketplaces where individuals can receive tax credits, and (2) off-marketplace plans that comply with the ACA's rating requirements. Because the ACA requires all plans in the individual market to be rated together, we model on- and off-marketplace plans that are ACA-compliant as a single risk pool. Hence, we do not distinguish between enrollment in on-marketplace plans and off-marketplace plans that comply with the ACA. In the ACA-compliant individual market, modeled individuals and families can purchase plans with a 60-percent, 70-percent, 80-percent, or 90-percent actuarial value, corresponding to bronze, silver, gold, and platinum plans on the marketplaces, respectively. We do not model catastrophic plans, which are available only to those under age 30 or who qualify for a hardship exemption from the individual mandate. According to a 2015 fact sheet published by the Centers for Medicare and Medicaid Services (CMS), less than 1 percent of all marketplace enrollees have selected catastrophic coverage (Centers for Medicare & Medicaid Services, 2015).

ACA-compliant individual market premiums are calculated endogenously in the model based on the health expenditure profile of those who choose to enroll. The total, unsubsidized premium is based on enrollees' age, smoking status, and market-rating reforms implemented under the ACA (U.S. Department of Health and Human Services, 2013). We model three-to-one rate banding on age for adults ages 21 and older, with a separate age-band for children and young adults under age 21. We also account for the ACA's risk-adjustment requirements, which transfer funds from plans with lower-than-average actuarial risk to plans with higher-than-average actuarial risk.

Under the ACA, the actual premium an enrollee pays is adjusted to account for tax credits available to qualifying individuals with incomes between 100 and 400 percent of FPL who do not have affordable offers of insurance from another source (e.g., employer coverage, Medicaid). We apply the ACA's subsidy formula using the benchmark silver premium and the individual's income. Eligible individuals who have incomes between 100 and 250 percent of FPL can also receive CSR subsidies that help to lower out-of-pocket spending. As required by the ACA, individuals who receive CSR subsidies in COMPARE must be tax-credit eligible and purchase a silver plan (70 percent actuarial value). With the CSR subsidies, the effective actuarial value of the plan is increased to 94 percent in income is below 150 percent of FPL, 87 percent if income is between 150 and 200 percent of FPL, and 73 percent if income is between 200 and 250 percent of FPL. Accordingly, out-of-pocket spending is adjusted downward to reflect the higher

actuarial value of the plan. Note that out-of-pocket spending enters the individual's utility function; hence, individuals receiving CSR subsidies are more likely to purchase coverage.

Modeling Iowa Health Care Coverage and Spending

We modeled the four components of the ISM: (1) the standard plan, (2) the elimination of CSRs for those with incomes between 200 and 250 percent of FPL, (3) flat premium tax credits by age and income, and (4) reinsurance. In addition, Iowa has an unusually robust non-ACA compliant (grandfathered and transitional) market, and we made adjustments to account for this market. We ran all of our scenarios using our national-level model. We reweighted the results of our ACA run to match 2015 ACS data. We then applied the weights we derived to our other scenarios to estimate the impacts of those scenarios on health care spending and enrollment in Iowa. We describe these adjustments in further detail below.

Modeling the ISM

To model the standard plan in Iowa, we prohibited individuals in COMPARE from enrolling in the bronze, gold, or platinum exchange plans, leaving silver as the only remaining exchange option. We also eliminated the CSRs for individuals with incomes between 200 and 250 percent of the FPL. All individuals within incomes above 200 percent of the FPL had out-of-pocket expenditures consistent with a 70-percent actuarial value plan. We retained CSR subsidies for individuals and families with incomes between 133 and 200 percent of the FPL. We used out-ofpocket limits from Iowa's CSR supplement to model the 83-percent actuarial value plan for individuals with incomes between 150 and 200 percent of the FPL, which is slightly less generous than CSR subsidies for individuals in this income range under current law (CMS, undated). We replaced the ACA's APTCs with the ISM's credit structure. Each individual in a household receives a credit based on his or her age and income level; the credits are unrelated to premium levels. To calculate the after-credit family premium, we subtracted the sum of the tax credits each household member was eligible for from the sum of the individual-level premiums (which vary by age). To model the impacts of the reinsurance on premiums, we calculated the amount of each individual's claim that would be covered by state reinsurance and reduced the claims covered by the insurer by this amount.

Modeling the ACA in Iowa

When we model the ACA at the national level, we typically assume that the grandfathered individual market attrites at a rate of 50 percent per year, based on historical trends in individual market churn, because individuals need to maintain continuous coverage to be eligible for grandfathered or transitional plans. The end result of this attrition is that, at the national level, we typically no longer have a non-ACA compliant nongroup market by 2018. To achieve levels of non-ACA compliant nongroup enrollment comparable to what we see in Iowa, we assumed no

attrition; that is, we allowed any individual who was enrolled in nongroup coverage pre-ACA (in the Survey of Income and Program Participation sample from April 2010) to enroll in our grandfathered/transitional market. We assume that premiums in the grandfathered/transitional market vary by both age and health status, and we assume that the ratio between the premiums for the oldest enrollees is 3.75 times the premiums of the youngest enrollees, rather than restricting the premium variability to the 3:1 age band required by the ACA.

In addition, because Iowa expanded Medicaid, to model the ACA in Iowa we assume that all individuals under 138 percent of the FPL are eligible for Medicaid unless their immigration status makes them ineligible.

Generating Weights for Iowa

In order to reweight the COMPARE data to accurately reflect the Iowa population, we used age, gender, income, health insurance, and immigration status data from the ACS 2015 one-year public use microdata sample (PUMS). Since the ACS data include the institutionalized population (i.e., nursing home, prison residents) and the COMPARE data do not, we excluded these individuals.

We categorized age into the following categories: 0–17, 18–34, 35–49, 50–64, and 65 and above. For health insurance, the ACS includes the following non-mutually exclusive categories: Medicare, Medicaid, employer-sponsored, non-group, TRICARE, Veterans Affairs, and Indian Health. Those who report no health insurance are categorized as uninsured. We assigned individuals to one of the following five mutually exclusive categories:

- other (Medicare, TRICARE, Veterans Affairs, Indian Health)
- Medicaid
- employer-sponsored
- nongroup
- uninsured.

We assigned individuals hierarchically, following the order listed above. For example, individuals who reported both Medicare and Medicaid coverage were assigned to "other." Immigration status was assigned as citizen or non-citizen, and gender was male or female. Finally, in order to assign income relative to the FPL, we first assigned the correct FPL to each person based on the 2015 FPL cutoffs (U.S. Department of Health and Human Services, 2015) and the number of people that reside in the household. Next, for the non-institutionalized group quarters population (e.g., dormitory residents), we assigned household income based on the mean household income in their age and insurance category. Finally, we calculated the percent of FPL as the household income divided by the FPL and assigned individuals to the following groups: under 138 percent, 139 percent to 200 percent, 201 percent to 250 percent, 251 to 300 percent, 301 to 400 percent, and 401 percent and above. As a final step in assignment, we reassigned individuals that were categorized to non–group health insurance but with income less than 138 percent of the FPL (adults) or 307 percent of FPL (children) to Medicaid as their primary

insurance type based on eligibility rules in Iowa and the fact that the ACS is known to overestimate nongroup enrollees (Lynch et al., 2011).

For each combination of age category, gender, insurance category, immigration status, and FPL category, we calculated the proportion of the Iowa ACS population that was in each group. Some groups had zero individuals. We then applied population growth rates from the Demographics Research Group at the Weldon Cooper Center for Public Service at the University of Virginia to generate insurance enrollment estimates for Iowa for 2018 (University of Virginia Demographics Research Group, 2016).

Next, we ran a "healthy market" scenario in which we estimated health care coverage in our national model assuming that all of Iowa's ACA rules were still in place, including Medicaid expansion and CHIP eligibility. For this scenario, we assumed 2018 premiums were only 4.5 percent higher than those in 2017, representing our assumed health care inflation costs at the national level. Separately, we applied growth rates from Demographics Research Group to 2015 data from the ACS to project what health care enrollment would look like in 2018 if the 2015 health care market had remained relatively stable. We then reweighted our national model so that health insurance enrollment by age and income level match the 2018 projections we derived from the ACS. We ran a "healthy market" scenario rather than our "status quo" scenario, because, due to the steep premium increases on Iowa's ACA-compliant market in 2018, we expect that the demographic distribution of enrollees would look very different in the 2018 status quo than it did in 2015. We then applied the weights we derived from our healthy market scenario to the national-level runs for the four scenarios we present in this report to derive our estimates for Iowa. Finally, we adjusted our nongroup enrollment so that we had 85,000 individuals on the grandfathered/transitional market and 72,000 individuals on the ACAcompliant market to match the enrollment figures for these markets from Iowa's waiver application. We further adjusted enrollment on the ACA-compliant market to match the numbers of individuals receiving APTCs and CSRs (Kaiser Family Foundation, 2017).

Table A.1 compares our healthy market estimates to estimates from the Kaiser Family Foundation for 2016 (Kaiser Family Foundation, 2017). Our nongroup enrollment is lower than the Kaiser Family Foundation estimates because we re-assign some individuals from Medicaid to nongroup and we make adjustments to match enrollment data from the waiver application. In addition, individuals in our model who are non-elderly are assigned to "other" insurance status, while Kaiser Family Foundation assigns these individuals to Medicaid. This also contributes to our lower estimates of Medicaid enrollment and higher estimates of the number of individuals on "other" compared to Kaiser Family Foundation.

Table A.1. Comparison of Estimated Insurance Coverage in Iowa in 2015 from Kaiser Family Foundation to COMPARE's "Healthy Market" Estimates (in Thousands)

Insurance Coverage Type	2016 Coverage Estimates for lowa from Kaiser Family Foundation	COMPARE 2018 Estimates for low with a "Healthy Market"	
Employer-sponsored insurance	1,652	1,675	
Nongroup	189	157	
Medicaid	554	483	
Other	57	131	
Uninsured	162	164	

Estimating Iowa Premiums and Expenditures

In the status quo and ISM waiver premium scenarios, we set premiums exogenously; premiums were set to equal Medica premiums in the status quo scenario and premiums were set to the ISM waiver application for the ISM short-run scenario. COMPARE also calculates premiums endogenously, as described above. To estimate Iowa-specific premiums on the ACA-compliant market and total expenditures on the ACA-compliant market (claims and out-of-pocket costs for each individual), we calculated the following adjustment factors:

- expenditure adjustment factor, monopoly = (silver 21-year-old Medica premium)/(silver 21-year-old endogenous COMPARE premium from status quo scenario)
- expenditure adjustment factor, at least 2 insurers = (silver 21-year-old ISM premium)/(silver 21-year-old endogenous COMPARE premium from ISM, waiver premium scenario)

Total health care expenditures on the ACA-compliant market in each scenario were then adjusted by the relevant adjustment factor (the monopoly factor for the status quo scenario and the "at least two insurers" factor for all other scenarios). These adjustments assume that ISM waiver premiums are higher than what we calculate in COMPARE because total expenditures on the ACA-compliant market, and thus claims, are higher on average in Iowa than the estimated national average, based on national data.

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