

The Actuarial Challenge

JHU Actuarial Club

Anthony Karahalios, Scott DeLawder, Muhe Chen, Jack Ye, Steven Zhang, Thomas
Cudjoe

Executive Summary:

1. Provide greater benefits to consumers for purchasing health insurance. These benefits would include gym memberships, coupons for healthy items in grocery stores, and mental health treatments such as yoga and massage therapy. This would help currently insured consumers to live healthier lifestyles, while also encouraging the healthy uninsured population to purchase insurance.
2. Transform premium payments into a form of an investment. Payments could decrease annually for consumers continuing their plans. This would encourage people to enroll in health insurance plans sooner in their lives. An increased number of young people in the insurance market's risk pool would diminish the current adverse selection.
3. Increase the number of types of health care insurance plans in order to provide more specific insurances than just overall health insurance. For example, insurance specifically for getting surgery, or insurance specifically for getting a cast on your arm could also be offered. By increasing the amount of insurances provided, it would lower the cost of the overall insurance, which would allow more individuals to afford the types of insurance that are necessary to them.
4. Market the importance of health insurance and the different options for financial aid like Medicaid. One primary reason why so many people are uninsured is because they don't know about health insurance or don't know about plans that offer financial assistance, therefore, by increasing the marketing effort, and making more people aware, more individuals could be allowed to buy health insurance.
5. Create a health insurance plan for non-citizen immigrants. A strictly protected plan would be implemented for basic coverage of non-citizen immigrants that would insure them against major procedures proven to be detrimental to their livelihoods. Currently about 20% of the uninsured population is comprised of non-citizen immigrants, so a basic protected plan would introduce a large number of new consumers into the health insurance markets in a stable manner.
6. Evaluate potential in preventive care and encourage more people to pursue it. Insurance companies should offer rewards for obtaining certain screenings. This would result in the increased diagnoses of diseases and conditions in earlier stages. Hopefully, if people are diagnosed sooner, there will be less invasive and more affordable options for treatment.
7. Require providers to have clear prices, as opposed to the vague prices currently required. Consequently, this would allow consumers to compare their options based upon price and overall quality. Once consumers have this information they can make better informed decisions that allow health insurance companies to save money. Also, providers will be more attentive to the quality and price of their

insurance if consumers are granted a facilitated access to it. The Government will play an important in the regulation and method of providing.

8. Require employers with a minimum of 30 employees to provide health insurance benefits to their full-time employees. Increasing current fine levels employers pay for uninsured full-time employees, providing benefits to companies that offer comprehensive plans, and extending more health insurance options for employers to provide. Currently 74% of the uninsured nonelderly population is comprised of members who are part of a family with at least one member who is full-time employed. Thus, requiring more of these full-time employees in large businesses to have coverage which is mostly provided by the company will greatly increase the insured population at all working ages.
9. Increase the annual penalty for not purchasing health insurance and remove the coverage gap between taking the penalty and purchasing health insurance. This will help many people to reconsider obtaining health insurance.
10. Restrict funding to states that do not expand Medicaid. This is currently leading to a coverage gap of people who do not qualify for Medicaid but cannot afford health insurance. 2.6 million people cited this as a main cause for not being insured. Therefore, bolstering Medicaid's expansion will increase the potential population to purchase health insurance.
11. Offer tax rebates for owning health insurance. This would be a further incentive for people to purchase health care in addition to the avoidance of a penalty. The price of health insurance is a main barrier to obtaining it, tax rebates would be helpful in encouraging more of the population to become insured.

Consumer-Centered Solutions

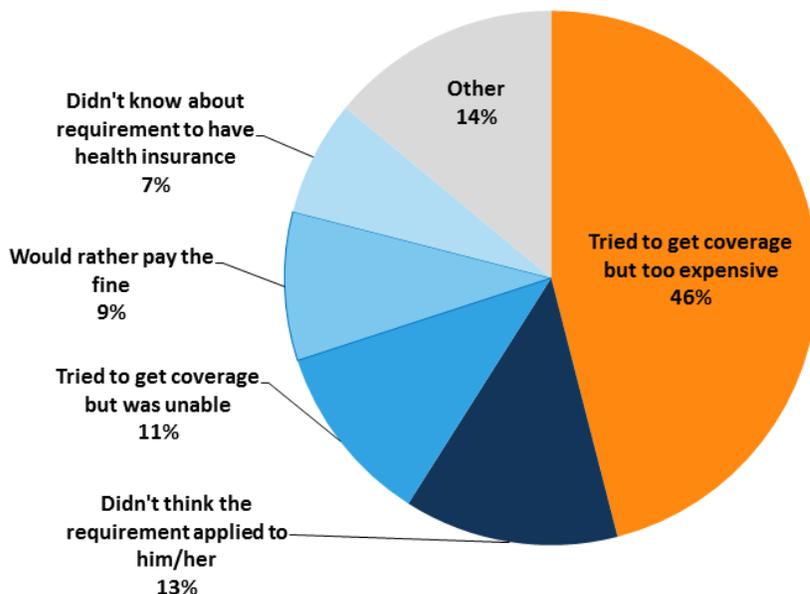
Solution 1 (Extra Benefits):

One solution that we are considering is providing rewards to individuals who buy the health insurance. We believe that a significant goal is to increase demand for health insurance. One way of accomplishing this goal would be by adding a reward system in the form of coupons to retail stores for healthy items, gym memberships for physical health, or mental health services. This way, individuals who do buy health insurance will get access to rewards or coupons for purchases, etc. This solution will be implemented by negotiating with retailers and other companies in order to get specialized deals for people who buy our insurance packages.

Consumer Impact: With this solution, there should be an increase in the percent insured because there would be more of an incentive to buy the insurance. In addition to this, the amount of people who are insured, will most likely want to be insured for longer periods of time. Demonstrated by Figure 1 below, around 9% of uninsured identified as uninsured because they would rather pay the fine. This group of the uninsured will most likely be affected by this solution since, with a greater incentive, more people who would rather pay the fine would now get the insurance. The people who would rather pay the fine most likely do so because they realize there isn't much reason to buy the insurance since, if they do get sick, they could just buy the insurance then. However, by providing incentives, these people would be encouraged to buy the insurance which would now also give them certain benefits and rewards.

Primary Reason for Being Uninsured Among Uninsured Nonelderly Adults, 2015

Share who say the primary reason they are uninsured is because they:



NOTE: "Other" includes respondents who said the primary reason was "some other reason", respondents in the process of signing up for insurance, and respondents who didn't know/refused to respond.

SOURCE: Kaiser Family Foundation Health Tracking Poll (conducted December 1-7, 2015)

Figure 1: Chart showing the breakdown of uninsured in the US for 2015

Insurance Impact: Insurance companies will most likely have to pay a slightly increased price in order to set this solution up. This is because, in order to incorporate other store benefits with their insurance, they will have to pay these other retailers to use their name and services. Health insurers would also have to work harder to secure reward deals with other companies. However, after paying for this, there will be more customers which will eventually benefit the insurance company.

Healthcare Provider Impact: With more people insured, there health care providers will most likely have an increased number of patients. This can have a variety of effects, since, health care providers won't be able to spend as much time on each patient. However, at the same time, they will be able to treat more individuals, so the overall health of the population will increase. With more patients, the quality of treatment care on each individual may diminish slightly, but with more practice in patient care, doctors would also gain more skills allowing them to treat more patients efficiently.

Government Responsibilities: In order for this solution to be implemented, the government will have to give out more subsidies to health insurance providers so that they will be able to form deals with other retailing companies. In addition to this, the Government would also have to give out subsidies to retailing companies in order to

help settle both sides. By giving out subsidies, the Government would also be mitigating the risk from the insurance company for collaborating with retailers and then failing to obtain more customers.

Solution 2 (Premium as an investment):

Another form of rewards come not in the form of direct material rewards is to offer insurance as an investment. The goal here is similar to the solution offered above; to increase incentives for consumers to pay premiums, but rather in the form of discounts in the future. Essentially, premium rates become cheaper the longer one pays for premium; a person who has paid premium for over 10 years, for instance, would be paying less than someone who has only paid for 5. This way, when consumers pay premiums, they are not only paying for their current insurance, but are also using it as an investment in their insurance in the future. An implementation of this solution would require collaboration among insurance companies in order to create a systematic distribution of premium rates and years.

Consumer Impact: This solution will increase the percent insured through two means; it will not only make people start paying premiums from a younger age, but also incentivize those who are already paying premiums to not opt out halfway. Paying premiums is no longer just for the current year, and with the rising premium price trends, consumers will consider this when thinking about future health care insurance plans.

Insurance Impact: While insurance companies might need to make discounts to the premiums in the future, the increase in the number of people who both sign up and stick with their insurance plans will boost their revenues in the short run, thus removing the need to raise premiums by large margins in order to make a profit.

Healthcare Provider Impact: This has relatively little impacts on the health care providers, except an increase in the number of patients. This will generally increase the demand of healthcare professionals in the industry, while at the same time might decrease the amount of available resources to be allocated to each patient.

Government Responsibilities: Governments have to ensure that the discount rates offered by insurance companies are consistent across different companies. Governments can also consider subsidizing insurance companies, so as to make this more feasible.

Solution 3 (More Plan Options):

Instead of having a general health care plan, plans can be made to be more customized with more options for the consumers. For instance, plans such as hospitalization insurance, medication insurance, surgery insurance, accident insurance can be implemented for different premiums and benefits.

Consumer Impact: For the consumers, this is highly beneficial as it solves multiple problems at once. It first lowers the cost of premiums for those who do not believe that they need a full health insurance plan, and might just pay to account for accidents or

hospitalizations in the rare event of that happening. At the same time, it lowers the percent uninsured in the population, since those who would have chosen to opt out before would be more likely to consider these plans reasonable and beneficial to themselves.

Insurance Impact: Insurance companies would have to work out a system to diversify the types of insurance offered, as well as to keep pricing, benefits and other offerings consistent across these different categories. They will receive more premiums, as more people would sign up for plans. One risk of this, however, is that those who were on the full plan might switch to a cheaper plan, and this has to be weighed against the increase of people who pay for plans in general.

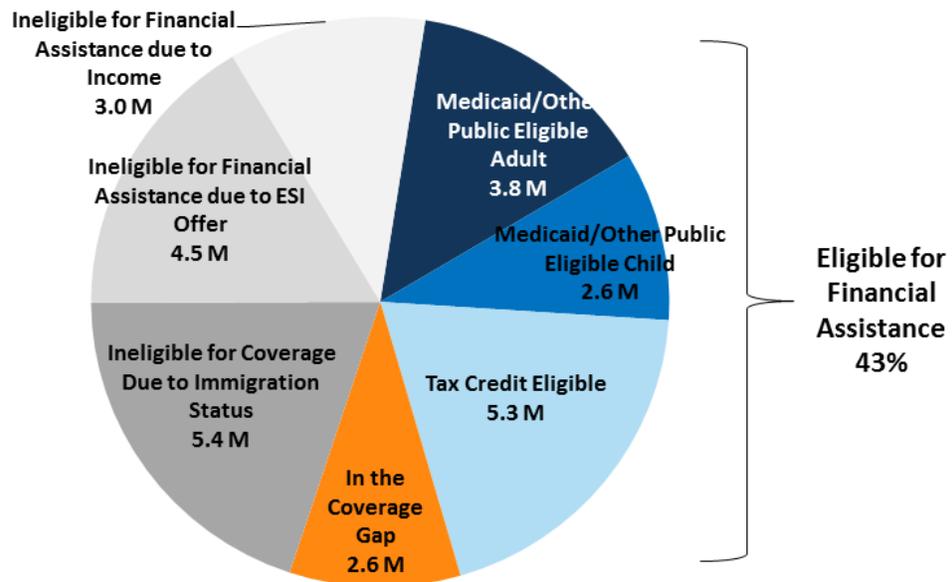
Healthcare Provider Impact: Healthcare providers will have to collaborate with insurance companies to figure out what specifically is covered by each type of insurance, so as to make this system feasible and to keep the level of service consistent across different categories of insurance.

Government Responsibilities: The role of the government in this solution is relatively small; oversight is required to make sure that these new plans are reasonably priced, and that quality of the service is consistent regardless of what plans one chooses.

Solution 4 (Marketing Campaign):

Another solution is better marketing by both health insurance companies and the government in order to spread awareness of the importance of health insurance, as well as current financial aid options like Medicaid that can help individuals pay for insurance. One of the major issues with the uninsured is their lack of knowledge about health insurance, as seen by Figure 1 above, about 20% of the uninsured population claimed to have either not known about the requirement to get health insurance, or didn't realize they were required to get it. In addition to this, according to Figure 2, of the total population of people who are uninsured, 43% are eligible for ACA coverage for insurance. With better marketing, it would inform these individuals and increase the health care insurance rate. Better marketing can be achieved by putting up more flyers and talking more about health insurance on TV and in the media. Marketing should start by targeting the South and West first because, according to data from the Kaiser Family Foundation, these regions have uninsured populations of over 12% which represents the largest percentage of uninsured. Health insurance companies and the government will both have increase awareness in the population in order to let more individuals know about health insurance.

Eligibility for ACA Coverage Among Nonelderly Uninsured as of 2016



Total = 27.2 Million Nonelderly Uninsured

NOTES: Numbers may not sum to totals due to rounding. Tax Credit Eligible share includes adults in MN and NY who are eligible for coverage through the Basic Health Plan. Medicaid/Other Public also includes CHIP and some state-funded programs for immigrants otherwise ineligible for Medicaid.

SOURCE: Kaiser Family Foundation analysis based on 2016 Medicaid eligibility levels and 2016 Current Population Survey.



Figure 2: Pie Graph showing the eligibility for some kind of financial aid to get health insurance

Consumer Impact: With this solution, more individuals will be insured since, now, more people who were previously uninsured will know about health insurance opportunities. If more individuals knew about health in general, as well as the benefits of getting health insurance, there would be more individuals who purchase insurance. There won't be any initial change in the cost of each insurance premium, but over time, as more individuals sign up for health insurance, it could lead to lower insurance premium costs.

Insurance Impact: This solution will affect health insurance companies who will have to spend a lot of money in order to properly market their premiums. Current marketing strategies are not very effective, so companies will have to spend a large amount of money and time in order to find the best ways to market health insurance to the currently uninsured.

Healthcare Provider Impact: With more individuals insured, health care providers will have more patients, which would mean that providers will have to spend more time looking after patients.

Government Responsibilities: While insurance companies will have to improve their marketing, the Government will also have to recognize the importance of health insurance in order to get people on a national or state level to get health insurance. The national government will have to increase campaigns. However, it will be the responsibility of the state governments to market better in their states since they will be able to target their individual citizens more effectively.

Solution 5 (Non-citizen coverage):

The law will change allowing non-citizen immigrants to more easily obtain health insurance. Plans will be put in place that create “safe-zones” where undocumented immigrants can go to receive treatment if they have the special undocumented insurance. This insurance will be regularly priced and somewhat limited. Access to health care may still be rare or not entirely comprehensive, but there will be strictly one package that would most benefit undocumented immigrants. Although there are currently plans in place to have children-only plans for immigrant families with children who are citizens, there is a significant barrier to health insurance for all non-citizens. Non-citizens go to the emergency room less frequently and receive less primary care than citizens. Thus, it can be argued that providing health insurance to these non-citizens would help improve the stability of the health insurance market. Instead of non-citizens trying to interpret tough laws regarding their ability to obtain health insurance, they would have a well-defined plan. Many non-citizens could not afford to have a major health problem, so they would be likely to purchase a health insurance plan especially if it is affordable and protected.

Consumer Impact: There should be an increase in the percent of the population insured. Consumers who are citizens would not really be affected by this plan, as there would be specific physicians and care locations specifically for undocumented immigrants. Roughly 20% of the uninsured population consists of undocumented immigrants (See Figure 2 Above). Thus, an effective plan would significantly reduce this number. The plan design would be very strict and access to providers would be somewhat limited, but it would be a step up from currently having no access. Currently insured people would, again, not really be affected by these specific health-care plans for non-citizens. One way they might be affected would be by longer waits at emergency rooms, although it has been shown that non-citizens go to emergency rooms much less often. Providing these non-citizens with a specific plan would boost stability of the market due to the more well-defined option as compared to child-only insurance and the attempts to use various public events to gain primary health coverage. This would allow non-citizens to have a safe and dependable way to obtain health care without a risk of being arrested for being undocumented.

Insurance Impact: Insurers will benefit from this new plan because many new families will likely purchase the insurance. This is a whole new pool of the population to serve and figure out how to best price their insurance. Currently, these non-citizens are not paying the fine for lacking insurance because, under the law, they are not required to pay any fine. Some non-citizens may choose this route of not paying any fine or purchasing insurance, but with a specific and enticing plan with basic coverage for disasters that might otherwise devastate a family, large groups of non-citizens will begin to trust and purchase health coverage. Because the coverage is limited, the insurance companies will make a profit on healthy individuals purchasing the health insurance as well as individuals who will not receive health care unless truly necessary. There will be a regulatory burden on the insurers to make sure that the non-citizens remain anonymous and are not reported to the government for being undocumented. Plan offerings should be quite viable if made extremely simple with reasonably low to regular premiums and decently sized deductibles. Pricing requirements would have to be reasonable to make non-citizens interested enough to purchase the insurance, but most non-citizens will likely not want comprehensive coverage plans or anything extensive. This could even open up an alternative space for small businesses to be created revolving around this type of health care. Because there are a reasonable amount of non-citizen immigrants who are uninsured, this may be a space to expand markets into quite easily.

Healthcare Provider Impact: Health care providers will have more potential patients to see as well as potential for opening new practices specifically for non-citizen patients. Providers would begin to serve non-citizen immigrants and provide them with much better care than they are currently receiving if they receive health care at all. The providers would be helping in mostly serious cases. If some providers specialize in this undocumented immigrant care, their direction of support will change dramatically. The plans would have to be set-up in a way that creates as little risk as possible for the provider. This would mean that insurance covers very few expensive procedures fully, while many of the procedures would have a large deductible to cover a reasonable portion of the total cost. There would be strict laws in place protecting health care providers from incurring risk.

Government Responsibilities: The government will have a significant responsibility in keeping these plans protected for the non-citizen immigrants. Especially states in the West and South-West of the United States may have more specific issues with creating these new plans. Therefore, each state would be responsible for configuring the specific policies for some of the health insurance markets. However, the federal government would be responsible for passing legislation to ensure that this insurance is offered at a reasonable price and with full protection. Initially, each state will have to decide how to best provide subsidies to new small business that may want to form in this space. Each

state most likely will not have to provide anything regarding risk-mitigation programs. Having some sort of benefit mandate with which non-citizens can speed up the process of becoming documented could be a role the Government might play in these markets. This would ensure that a sizable portion of undocumented immigrants purchase the insurance due to the potential to gain citizenship through owning this special insurance as an enticing incentive. Along with this would, again, come many practices that would need to be kept in place to ensure that these non-citizens are being protected.

Insurance Company - Centered Solutions

Solution 6 (Greater Focus on Preventive Care):

Health care is frequently utilized only when a consumer is already ill and is in need of immediate help. To achieve a healthier America in general, it is important to keep our citizens living a healthy lifestyle year round, not just when they fall sick. Insurance companies in the United States have a special opportunity to promote good health in their consumers. According to the CDC as recently as 2013, Americans only use preventive services at half the recommended rate. Out-of-pocket payments deter consumers from utilizing the offered preventive care. A study found the percent of mammograms in women went up by nine percent when the cost-sharing was removed. We suggest the government can provide subsidies to insurance companies to replace consumer cost-sharing for preventive care as well as reward consumers for pursuing these options.

Consumer Impact: Consumers will be more inclined to be screened for certain conditions if they are paid in full and monetarily rewarded by their policy. When consumers utilize the preventive care opportunities, health care providers may be able to catch diseases and other concerns earlier, making them less dangerous and less expensive to treat. There are currently preventive tests required by ACA to be free of cost-sharing to the consumer, however consumers still are not taking full advantage of these opportunities. If an insurance company offers a \$20 bonus for a client to get screened for cancer, it is likely more people would get screened. Consumers could also be incentivized to live healthier lifestyles including exercise, a healthy diet, and quitting tobacco, leading us to an overall healthier United States. This will make insurance less expensive for those doing their best to live a healthy lifestyle. In figure 3, it is shown that a large number of people put off preventive care when they are uninsured. If these screenings were provided for free, the uninsured people may be more inclined to sign up.

Cost barriers to use of preventive services for women and men

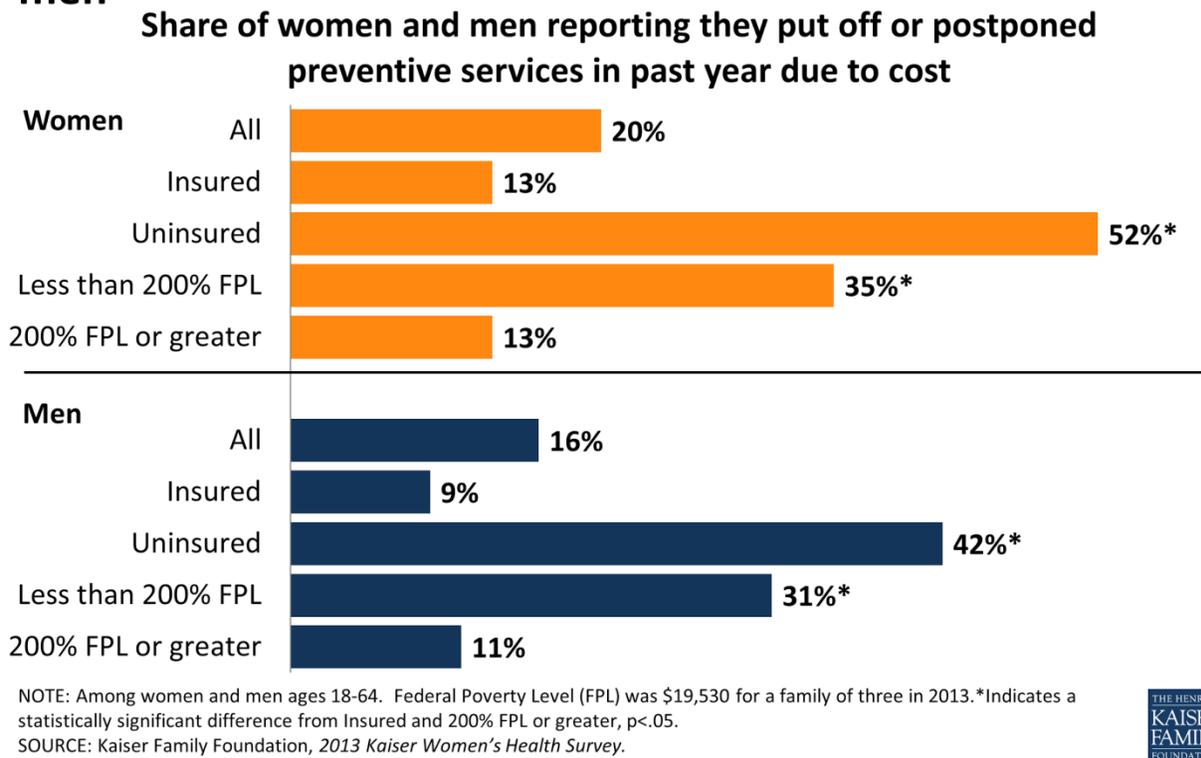


Figure 3 - Cost Barriers To Use Of Preventive Services For Women And Men

Insurance Impact: Insurance companies will have their consumers cost-sharing replaced by government subsidies therefore not changing their year to year income. However, when a company's consumers are healthier, their risk pool shrinks. When a condition is diagnosed earlier, it is typically less expensive to treat. More consumers getting screened for diseases leads to a lower overall treatment cost. When treatment costs goes down, insurance companies expend less money for clients utilizing their policies.

Healthcare Provider Impact: Providers will be encouraged to develop more advanced preventive care to keep up with the market's new demand. The providers will put more effort into these measures in order to increase their quality of care reporting. With greater advancements in preventive care, the costs of typical treatments in America could decrease.

Government Responsibilities: The Government will be responsible for providing subsidies to insurance companies in order to make preventive care free for consumers. The Integrated Benefits Institute reported the U.S. economy loses \$576 billion from poor health. If there were fewer sick days incurred, the economy could gain some of this

money back with increased productivity. The increased output could result in new tax revenue that can fund the insurance companies' subsidies.

Solution 7 (Clearer Pricing):

Price discrepancies which play a substantial role in the current healthcare system are causing inefficiencies. Right now, prices for the same procedures can vary widely from provider to provider. Uninformed consumers often are not able to anticipate what their level of cost-sharing will be until after a procedure or why some options are more expensive than others. To fix this issue, we suggest more transparencies with pricing from healthcare providers and insurance companies. Cost transparency will benefit everyone. It will allow the consumer to be more informed about different insurance policies and have better knowledge to shop by comparison.

Consumer Impact: If presented with a clear cost vs. quality rating of healthcare options, consumer may choose more expensive policies to have a higher quality of care. If consumers can comparatively shop for cost and quality, it will make insurance policies be more competitive to offer the best care for the lowest price. This would in turn result in a cost savings on the procedures, which could stabilize premiums. A more informed consumer will require a more competitive marketplace.

Insurance Impact: Insurance companies will have to keep tighter controls on their level of quality. Their customers will be better educated on their options which could make insurance companies' premiums decrease. The clients will be more informed of their options and could choose cheaper treatments to save both themselves and the insurance company money.

Healthcare Provider Impact:

Providers will not be allowed to have hidden deals with insurance companies allowing these companies to charge consumers excessively for a larger profit. This will lead to more innovative care not only with medical treatment advancement but also with cost effective solutions. Once providers have to offer services at lower prices, they will be pressured to focus on more efficient care. We understand it will be difficult at first for the providers to offer clear prices because treatment costs are very difficult to estimate, however, in the long run, this will lead to a more stable market.

Government Responsibilities: The Government will require health providers and insurance companies to clearly price their treatments. The Government will also have to monitor how the rating system is conducted. The insurance companies could assist in these reviews by having their customers rate their treatment. The Government will have a role in ensuring the insurance companies and providers do not use unethical practices

to boost their health ratings and fool consumers into paying more for an average level of care.

Solution 8 (Full-time Employment Benefits):

A law requiring employers to purchase health insurance for full-time employees should be implemented. There may be a cheaper package and a limit on the size of the company. For example, we suggest employers with 30 or more full-time employees be required to provide the health benefits to full-time employees with options to insure their whole families. This will greatly improve the stability of the health insurance market, because this will provide a steady inflow of money to insurance companies. The stability will be enhanced by the employers’ relationship with one insurance company, most likely over a long period of time, insuring about the same number of people year to year. This solution is supported by the fact that of the non-elderly uninsured in 2015, 74% had one or more full-time workers in the family (See Figure 4). The income among these uninsured workers was distributed relatively evenly, but to most impact the market, we suggest that starting with forcing medium to large sized companies to provide health insurance will do the most to increase revenue and stabilize the market.

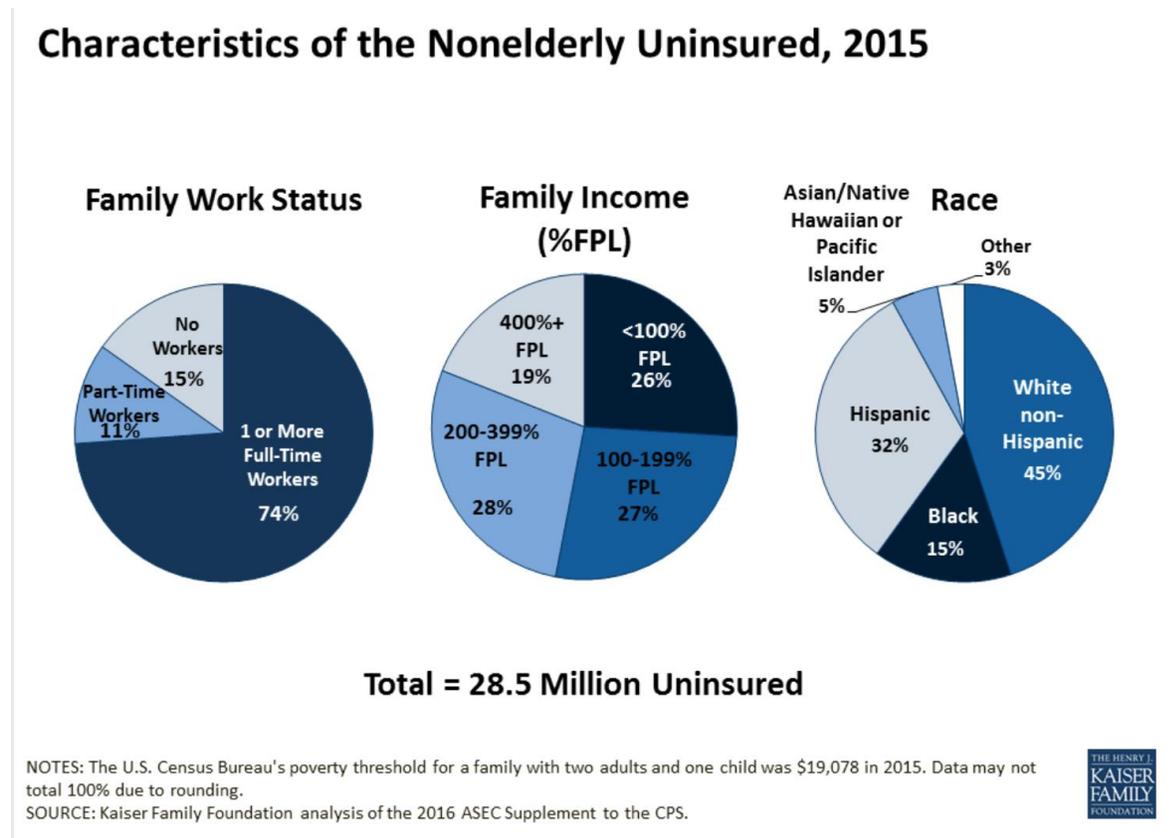


Figure 4 - Characteristics of the Nonelderly Uninsured

Consumer Impact: Consumers who are employed full-time will be more likely to be on these plans from their employers and thus fewer of them will have to pay a penalty to opt out of a plan, even if they believe that is the best option. They will still have health care, and they will not have to deal with fees, which seems like the best of both worlds for consumers. Many people might also be more inclined to look for a full-time job at a larger company which offers these benefits, and competition for positions will greatly increase as well. This could ultimately lead to salary decreases in some jobs to offset the additional costs, but this would definitely lead to an increase in the number of insured people in the United States. Currently insured people will choose to join their company's plan, or in addition to this, insured people might just opt to purchase a more extensive plan on top of the one the company provides. This will offer more options to consumers to purchase health care in the most individualized manner for them. Much of the premiums will be paid by the companies with only partial cost sharing by the employees, and many of the current plans seem to be working well for families, so they would just be extended to even more companies. The individual marketplace would become very competitive for large employers that are just beginning this process of enrolling thousands of employees in insurance plans. This would lead to better options for consumers that are most optimal in price and offer more access to health care providers and better overall quality of the package.

Insurance Impact: Insurance companies will be competing to pick up as many of these new clients as possible. With a new, large pool of insurance packages being purchased by employers, innovative, new health plans will be made available among the options from which a company may choose. Different companies of varying sizes will also prefer potentially different packages, making insurance companies have another space to explore in terms of making profit and insuring the most people possible. There will most likely be pricing requirements for keeping these plans relatively cheap for companies depending on their size, but the plans would be viable especially for larger companies. Many companies are currently offering a variety of plans that work well for employees, so other companies should be able to do the same.

Healthcare Provider Impact: Healthcare providers will experience increased business through networks related to the health insurance purchased. With more health insurance packages, providers may be more likely to have regular patients come in for primary care annually or more frequently. With the employer health care benefit potentially encouraging more family plans, this would also allow health care providers to see families of patients which often benefits in the quality of treatment because the health care provider has more in-depth information about the patients.

Government Responsibilities: State governments will ultimately need to decide on the regulatory pricing and option availabilities depending on their state's needs (amounts

and types of businesses). Federal government would need to pass legislation requiring states to put these plans into effect for companies of sufficient size. The Government would also be responsible for subsidies to some companies depending on how the packages roll out, because purchasing health care for a certain amount of employees (most likely near the smaller end) may not be feasible for all companies. Government would also be responsible for benefit mandates for companies to give them more of an incentive to follow legislation to the fullest. Imposing a penalty for not adhering to the legislation would also be useful. Because there already is a law similar to this, raising the penalty substantially would enforce compliance.

Government-Centered Solutions

Solution 9 (Increased Penalty):

In 2017 the penalty for not having health insurance will be 2.5% of a household's income, or \$695 per adult and \$347.50 per minor, depending on which is higher. According to KFF the main reason for uninsured citizens is that they cannot afford health care. If the Government raises the penalty so it is almost as much as a policy, more of the uninsured will realize if they are going to pay that much they may as well get a benefit out of it. We suggest raising the penalty to 4% of income or \$1,250 per adult and \$550 per child with a maximum equivalent to a Bronze family plan in the Marketplace.

Consumer Impact: There would be considerable consumer backlash due to higher penalties. With just this action plan, it doesn't provide a way for customers to pay for the health insurance. If they couldn't afford health insurance before the penalty increase, they won't be able to pay for health insurance even after the penalty. If other means are used to help provide people with a way to pay for health insurance, this would encourage people to buy health insurance since if they were going to be penalized just as much for not buying it.

Insurance Impact: Insurance companies would benefit since more people would want to buy insurance due to increased penalties. Since there would be more plans bought, insurance companies would profit from this course of action.

Healthcare Provider Impact: There wouldn't be much change for providers since nothing about the service is being changed, however if the number of insured people increases, providers are less likely to treat someone that's uninsured and end up losing money.

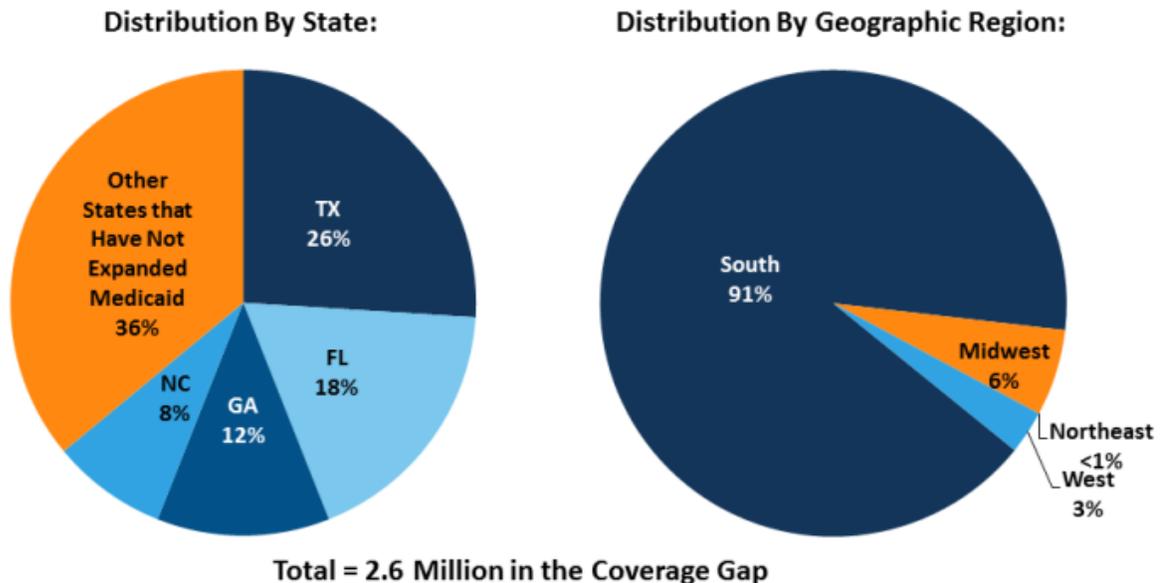
Government responsibilities: If this method is utilized, the Government needs to enforce this strictly in order for it to be effective. Currently, the penalty is enforced when the uninsured do their tax returns. The penalty is deducted from any tax refunds the

uninsured would have received. This may not be as effective for a family which never receives tax refunds, as they wouldn't lose money to the penalty other than as an increase to their tax liability, limiting their available cash to get health insurance. Stricter penalties would typically encourage people to buy health insurance nonetheless.

Solution 10 (Restrict Funds to Non-Expansion States):

The Affordable Care Act had provisions for increasing the coverage of Medicaid, but because of a Supreme Court ruling in 2012, states could opt into expansion or not. 19 states had not expanded Medicaid as of September 2016. Because of this, there are approximately two million adults who don't qualify for tax credits from marketplace insurance, but have a high enough income to disqualify them from Medicaid. Over 26% of people in this coverage gap are in Texas, where there's limited Medicaid eligibility and a high uninsured population.

Distribution of Adults in the Coverage Gap, by State and Region



Note: Totals may not sum to 100% due to rounding.
 Source: Kaiser Family Foundation analysis based on 2016 Medicaid eligibility levels and 2016 Current Population Survey.



Figure 5 - Distribution of Adults in The Coverage Gap, By State And Region

Consumer Impact: If states expanded Medicaid, then everyone in the coverage gap would be eligible for Medicaid. In addition, people in the lower income bracket that rely

on marketplace insurance would be able to switch to Medicaid. This benefits families with lower income especially because they wouldn't be stuck in a position of not being able to afford health insurance and not being able to qualify for Medicaid.

Insurance Impact: Insurance companies would suffer slightly because there would be more people switching to Medicaid, instead of using the insurance company's plans. This may force insurance companies to try and offer incentives to lower income families in order to keep them on their insurance plan. This would benefit the consumer, but hurt the insurance.

Healthcare Provider Impact: There would be an increased number of patients with health insurance so providers would benefit. They would be treating fewer patients who are uninsured, which is usually a loss for them.

Government Responsibilities: The government would suffer some backlash from the insurance companies and states. It would be very difficult to get states to go along with this because it would interfere with the sovereignty of states and impact their revenue. Some of them might even try to secede from the Union since they would think the federal government is overstepping their power

Solution 11 (Tax Rebate):

Currently there's a premium tax credit given to families with low to moderate incomes to help them afford health care. When they file taxes, they get an increased tax refund. By increasing the amount of the tax credit the family receives for being on health insurance, it would incentivize them to buy health care in order to receive these benefits. This tax credit would also be able to be used on monthly premiums in order to lower them, or it could just be received as a tax refund.

Consumer Impact: If the tax credit is increased for families with health care, more consumers would be incentivized to go out and buy health care. In addition, they would become more inclined to remain on their insurance plan after the rebates are given.

Insurance Impact: Insurance companies would benefit from the increased tax rebates because consumers would buy more insurance policies. They would also be able to offer a greater variety of packages to the consumers as many more look for policies to for which to sign up. They would also need to plan for a larger number of long term policyholders since many consumers will retain their insurance after the rebates end.

Healthcare Provider Impact: Health care providers would be able to treat more patients with insurance since more patients would have health insurance. Many patients would also be inclined to come in for yearly checkups now that they have insurance so there

would be many more regular customers, which would greatly benefit health care providers.

Government Responsibilities: The Government would lose money since it would lose tax money from having to give out increased amounts of rebates to families that have health insurance. This could be mitigated by potentially giving smaller rebates as time goes on. Ideally, this method would be used to get people accustomed to the idea of paying for health insurance so that when their rebate decreases, they would remain on the health insurance plan. The Government could also try random increased tax rebates on certain years in order to keep people on their plans.

Works Cited

1. "The Affordable Care Act Decision." *How the Affordable Care Act Helps Undocumented Immigrants* (1899): n. pag. Southeast Asia Resource Action Center. Web. 03 Dec. 2016.
2. Carswell, William J. "The 3D Elevation Program: Summary for Connecticut." *Fact Sheet* (2015): n. pag. Kaiser Commission. Web. 03 Dec. 2016.
3. Damico, Oct 19 2016 | Rachel Garfield and Anthony. "The Coverage Gap: Uninsured Poor Adults in States That Do Not Expand Medicaid." *Kaiser Family Foundation - Health Policy Research, Analysis, Polling, Facts, Data and Journalism*. Henry J Kaiser Family Foundation, 19 Oct. 2016. Web. 07 Dec. 2016.
4. Garfield, Rachel, Anthony Damico, Cynthia Cox, Gary Claxton, and Larry Levitt. "Estimates of Eligibility for ACA Coverage among the Uninsured In 2016." *Estimates of Eligibility for ACA Coverage among the Uninsured in 2016*. Henry J Kaiser Family Foundation, 18 Oct. 2016. Web. 06 Dec. 2016.
5. Norris, Louise. "I've Heard That the Government Can't Really Enforce the Penalty for Not Having Health Insurance. True?" *Health Insurance Resource Center*. HealthInsurance.org, 31 Oct. 2015. Web. 01 Dec. 2016.
6. Oct 18, 2016 | Rachel Garfield, Anthony Damico, Cynthia Cox Follow @cynthiaccox on Twitter , Gary Claxton, and Larry Levitt Follow @larry_levitt on Twitter, Distribution of Nonelderly Eligibility for ACA Coverage Among Those Remaining Uninsured as of 2016, Discussion, and Oct 2016. "Estimates of Eligibility for ACA Coverage among the Uninsured In 2016." *Kaiser Family Foundation - Health Policy Research, Analysis, Polling, Facts, Data and Journalism*. Henry J Kaiser Family Foundation, n.d. Web. 09 Dec. 2016.
7. Pipes, Sally. "Here's Why States Must Resist The Temptation To Expand Medicaid." *Forbes*. Forbes Magazine, 27 July 2015. Web. 04 Dec. 2016.
8. "The Premium Tax Credit." *The Premium Tax Credit*. Internal Revenue Service, n.d. Web. 04 Dec. 2016.

9. "Preventive Health Care." *Centers for Disease Control and Prevention*. Centers for Disease Control and Prevention, 12 June 2013. Web. 05 Dec. 2016.
10. "Preventive Services Covered by Private Health Plans under the Affordable Care Act." *Kaiser Family Foundation - Health Policy Research, Analysis, Polling, Facts, Data and Journalism*. Henry J Kaiser Family Foundation, 4 Aug. 2015. Web. 08 Dec. 2016.
11. 29, 2016 Sep. "Key Facts about the Uninsured Population." *Kaiser Family Foundation - Health Policy Research, Analysis, Polling, Facts, Data and Journalism*. Henry J Kaiser Family Foundation, 29 Sept. 2016. Web. 04 Dec. 2016.