**LESSONS LEARNED FROM MEDICARE PART D’S AND AFFORDABLE CARE ACT’S RISK STABILIZATION PROGRAMS APPLIED TO FUTURE AFFORDABLE CARE ACT REPLACEMENTS**

by

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**ABSTRACT**

Creating an affordable health insurance market for individuals who are not in the group market is relevant to public health. Having health insurance increases the health of the individual especially in cases of acute injury. While other interventions such as increasing individuals’ social determinants of health or other policy interventions such as a sugar tax or a smoking ban may provide larger public health benefits, providing health insurance is still a worthwhile public health intervention. Affordable access to the healthcare system can greatly reduce the large negative impacts to individuals including better control of diabetes and prevention of heart attacks and strokes. In the individual market for health insurance, risk stabilization is an important tool to induce insurers to offer affordable plans. Without risk stabilization, the insurers may still offer an insurance plan at an unaffordable rate or may not offer an insurance plan at all. Two major American government sponsored health insurance laws have utilized congruent risk stabilization in the 21st century: Medicare Part D and the Affordable Care Act. These laws utilized the 3 Rs, which are risk adjustment, reinsurance, and risk corridors. By comparing the intended effects of these risk stabilization measures with the actual effects, this essay seeks to provide analysis on how the 3 Rs could have been better implemented in the ACA to reduce costs and provide more selection for individuals. The essay also seeks to address the future policy implications of risk stabilization for the individual market.

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# preface

I want to thank Dr. Jarlenski for allowing me to explore a difficult policy topic. Her guidance through this experience was second to none and our conversations have shaped how I look at health policy. In addition, Dr. Rocco and Professor Crossley provided great direction for this essay and without them it may have been a muddled policy paper. I want to thank the whole department of Health Policy and Management for guiding me through the last two years and opening my eyes to another side of medicine. To Dr. Roberts, I cannot wait until I can know I am making a difference and I hope I never stop making a difference.

# Introduction

The 21st century has so far witnessed two major sweeping federal policy changes to improve access to health care in America. Medicare Part D went into effect in 2006, giving access to private insurance plans for prescription drug benefits for 57 million Medicare enrollees (Jack Hoadley, 2013). Part D created many firsts for Medicare; it was the first program to offer outpatient prescription drug benefits to Medicare beneficiaries, it was the first program to be solely available through private health plans, and it was the first Medicare program that offered low-income assistance directly through Medicare instead of Medicaid. After ten years, Medicare Part D has been heralded as a success by most key stakeholders, including beneficiaries, hospitals, and health plans (*The Medicare Part D Program:A Record of Success*, 2016). The Congressional Budget Office predicted in 2013 Medicare Part D’s cost to be about 50% higher than the actual cost (CBO, 2014). The reduction in cost saved taxpayers money while reducing enrollees’ out of pocket costs and insuring 90 percent of eligible Medicare members ("The Medicare Part D Prescription Drug Benefit," 2016).

Within the decade, the Patient Protection and Affordable Care Act (ACA) was signed into law on March 23, 2010, with the major benefits implemented in 2014. The ACA aimed to provide access to affordable health insurance across the spectrum of uninsured populations. The law accomplished this feat in many ways, including expanding Medicaid with federal dollars, mandating insurance and providing subsidies for individuals who could not afford it. In addition, the law created individual insurance exchanges, required health insurers to sell policies to those with pre-existing medical conditions, allowed children to be on a parent’s insurance plan until the age of 26, and closed the coverage gap in Medicare Part D ("Key Features of the Affordable Care Act By Year," 2016). The estimates for the number of individuals that gained insurance under the ACA range from 7 million to 16.4 million, but more than 30 million American are now under coverage of the ACA. As of 2015, 11.7 million Americans had selected a health plan through the marketplace, and 87% of those members had qualified for federal subsidies (David Blumenthal, 2015). The ACA has improved access to health insurance for millions of Americans. However, a substantial problem with the health insurance exchanges began to surface: an analysis by the McKinsey Center for U.S. Health System Reform projects that 18% of subscribers on exchange plans will on have one choice of carrier for health insurance (*2017 exchange market: Carrier participation trends*, 2016). The lack of participation among national and regional insurance carriers exposes structural problems with the ACA.

There are notable similarities in the structure of the insurance markets in Medicare Part D and the ACA’s health insurance exchanges. Congress encouraged private health insurance plans to participate in the newly created programs by enacting insurer risk stabilization programs. These programs are colloquially known as the three R’s, which stand for risk adjustment, reinsurance, and risk corridors. The three R’s acknowledge that insurance firms tend to be risk-averse in new or uncertain markets. Risk adjustment encourages plans to compete on quality by transferring money from insurance plans that had healthier enrollees to insurance plans that had sicker enrollees, ensuring plans are not penalized for having sicker than average patients and not rewarded for having healthier than average patients. Reinsurance allows health plans to transfer the risk of catastrophic patients to the federal government. Risk corridors protect insurance plans, in the aggregate, from experiencing catastrophic losses or windfall profits over certain prespecified levels, by partially transferring excess profit or loss to the federal government who then redistributes the proceeds to plans accordingly (Jack Hoadley, 2014).

My essay sought to analyze implementation and effects of risk stabilization programs under Medicare Part D and the ACA through a literature review and calculation of the changes for reinsurance in the ACA. The essay uses risk corridor payments and choice of insurance in the exchange as a proxy for the success of the risk stabilization programs. By analyzing what brought the individual market in the ACA to its current state, this research will inform the current policy debate about how to establish accessible and affordable health insurance plans in the individual markets whether the ACA is repealed, defunded, or replaced. Consequently, the study found that under the current provisions of the ACA, the 3 R’s are crucial to the viability of the individual market.

# Background

Per Blue Cross Blue Shield, the first makings of a health insurance plan started in 1910; insurance plans appeared as a pre-paid group plan for medical services. In 1929, the first Blue Cross plans for hospital services were established at Baylor University (LIichtenstein). Health insurance began as a quasi-indemnity plan that paid a set amount of money per day spent in the hospital (Zeckhauser, 1999). During World War II, the National War Labor Board froze wages to ensure the wartime effort succeeded. Freezing wages mitigated the incentive for non-military corporations to poach workers by offering higher wages, but these wage freezes did not apply to fringe benefits such as health insurance, and employers took advantage by offering health insurance as an attraction to workers. This practice continued after the war and continues today because health insurance is an attractive benefit employer-based health insurance and is not subject to income tax or social security tax ("History of Health Insurance Benefits," 2002).

As health insurance moved to the latter half of the century, quasi-indemnity plans shifted to fee-for-service and managed care plans. The fee-for-service model placed moral hazard at the forefront of issues that health insurers faced. Moral hazard is the “likely malfeasance of an individual making purchases that are partly of fully paid for by other”(Zeckhauser, 1999). Moral Hazard is a larger issue in fee-for-service than quasi-indemnity because individuals pay less for the services they receive. Moral Hazard can take many forms in the health insurance market: insured members seeking care that is marginally beneficial because it is free or partially subsidized, and insured members taking worse care of themselves when insured as compared to when they do not have insurance. Insurers not only have to combat Moral Hazard but also supplier-induced demand in a fee for service model. Physicians create supplier-induced demand by shifting the patient's demand curve in the direction of the physician’s interests instead of the patients (Johnson, 2014). The physician’s interest often is economic and excess tests, procedures, and surgeries increase the cost to insurance companies. With these two economic concepts combined, insurers often have less control over the spending of their beneficiaries than would be necessary for economic prosperity. Over the decades, insurance plans sometimes used unsavory tactics, from a public health perspective, to ensure their profitability. Health insurance companies would not insure someone with a pre-existing health condition such as pregnancy, or diabetes because the condition would be expected to incur medical costs. Estimates put the number of denials at 1 in 7 of those who applied for health insurance in 2009 (Wang, 2010).

The unsavory techniques insurance companies used encouraged individual states to bring statewide reform to the health insurance market before the ACA. As an illustration of pre-ACA reform efforts, consider Kentucky’s attempt at health reform in 1994. Kentucky instituted a mandate that allowed anyone, regardless of prior health conditions, the ability to buy health insurance. Law H.B. 250 prohibiting insurers from denying coverage. Kentucky’s plan was a precursor to the ACA. Unfortunately for the citizens of Kentucky, an individual mandate was not present in the bill. Insurance companies lobbied for an individual mandate, which would have required everyone to have health insurance, but lawmakers ignored the lobbying. Within two years, 40 insurers had left the exchanges, leaving only one government plan that was offered to citizens (McCubbin, 1997). Kentucky’s attempt at universal health care serves as a warning to legislators. Passing a law that gives the constituency the right to buy health insurance at any time without an individual mandate can cause adverse selection. Adverse selection can cause the market to spiral to unsustainable conditions.

Adverse selection is the tendency for individuals that are sick to buy more generous plans. Without an individual mandate, most healthy subscribers will buy the least costly plans or go without health insurance because they do not have high expected costs. In contrast, the sickest subscribers, who often have the highest costs per beneficiaries begin to group in the most generous plans. As this separation continues, two separate risk pools begin to form, a healthy one and a sick one. With the right to buy health insurance at any time and without an individual mandate Kentucky’s individual insurance market fell into a death spiral.

A death spiral occurs in the health insurance market when sick individuals buy insurance at a much higher rate than healthy individuals. Therefore, the insurance companies must raise premiums to cover the cost of the sick patients, because there are not enough healthy individuals to subsidize the sickest enrollees. If relatively healthier enrollees cannot afford the monthly payment, they will often wait until they are sick enough for it to make economic sense to buy health insurance. The final conditions of a death spiral occur when insurers raise rates enough that no one can afford to pay for insurance or that insurers leave the marketplace altogether (Zeckhauser, 1998) Premiums in Kentucky jumped over 100% in a year span causing the beginning of a death spiral. In Kentucky, insurers left the marketplace before the full effects of the death spiral took effect and the law was consequently amended. The amended law protected insurance companies from death spirals, but many insurers never came back to Kentucky. Without the ability to deny people based on health condition, insurers found that patients could not afford the increased monthly premiums, but would often sign up for insurance when they were sick enough that the high premiums made economic sense (McCubbin, 1997).

Massachusetts instituted its version of universal healthcare in 2005, colloquially known as RomneyCare, through a series of bipartisan compromises. Massachusetts Health Care Reform achieved an uninsured rate of 2.6% in 2008 by expanding Medicaid, subsiding low to middle-income private insurance, and instituting an individual mandate (Masi, 2009). At the time of the bill’s creation, Massachusetts used federal Medicaid dollars to fund supplemental payments to safety net-sponsored managed care organizations. CMS began to challenge the waiver that funded these payments and suggested without the funds being directly tied to the expansion of coverage for the uninsured; CMS would revoke the waiver. The potential loss of 385 million federal dollars created the perfect environment for an attempt at universal health care in Massachusetts (Blumberg, 2006).

Comparing the successful expansion of health care in Massachusetts with the failure in Kentucky can provide necessary background on government intervention in expanding healthcare. The first major difference is the inclusion of the individual mandate in Massachusetts’s legislation. With the inclusion of the individual mandate, death spirals were averted because the risk pools were filled with a mix of healthy and sick individuals. The individual mandate lowered the rate of uninsured individuals in Massachusetts. Secondly, using a federal match of 50/50 to expand Medicaid to 150% of the Federal Poverty Line allowed for fewer state subsidies for the extremely poor. Using federal dollars kept the law more affordable to the state. Finally, creating a state-run “Exchange” through an independent committee called the Commonwealth Health Insurance Connector allowed for state subsidies for individuals and family members who were between 150% and 300% of the Federal Poverty level. The “Connector” was intended for the individual insurance market that was not subsidized in Massachusetts, individuals who did not qualify for subsidies could purchase affordable individual plans that had been sanctioned by the independent committee. Furthermore, tax penalties for violating the individual mandate, tax penalties for employers not offering insurance coverage and protection for safety net hospitals added to the success of the law (Blumberg, 2006).

President Obama has stated that the Affordable Care Act was modeled after the Massachusetts model, which appeared to be largely successful. The parallels between the two programs abound: sharing an individual mandate, increasing the number of people eligible for Medicaid, and a subsidizing an Exchange for low to middle-income individuals and families. The implementation of the two plans has been different. According to Mitt Romney, the Massachusetts Health Care Reform was never meant to be scaled to a national level. Instead, it was meant to re-distribute money that was being spent on uncompensated care and push that money towards insuring the uninsured. There were many differences between Massachusetts and the United States, in Massachusetts, the uninsured rate was extremely low before state health reform and the spending per beneficiary extremely high compared to national averages; these differences between Massachusetts and the United States could have contributed to the difference in the two programs (Ornstein, 2015).

The lessons learned in states that have implemented statewide health insurance reform, whether successful or not, shaped the policies of the ACA. David Cutler and Richard Zeckhauser present what seems like an obvious conclusion when they stated that “health insurance choice is important to promote efficiency” (Zeckhauser, 1999). Even before the 2016 election ushered in uncertainty about the future of the ACA, the ACA exchanges were unstable. Insurers were dropping out at an alarming rate and those that offered plans often increased rates by double digits. In 2017, nationally, 18% of individuals on the exchanges only had one insurer to choose from (*2017 exchange market: Carrier participation trends*, 2016). Cutler and Zeckhauser suggest that free market ideas often create suboptimal conditions for healthcare and are often in direct opposition to the best interests of the country (Zeckhauser, 1999). Therefore, with the lessons learned from the past failed and successful health insurance experiments, Medicare Part D and the ACA both employed government intervention in the marketplace through sophisticated risk mitigation strategies. While the risk mitigation strategies require government intervention in the free market, they act in the best interest of the country by encouraging insurance companies to join newly formed insurance markets.

In the current model of healthcare in the United States, insurance companies are pivotal to providing health care to our population. Insurance exists because of an economic principle called risk aversion, which is a behavior that most individuals exhibit when exposed to uncertainty such as the status of health. Because of risk aversion, risk-averse individuals will pay more than the expected costs (costs of the medical event multiplied by the probability the event happens) in insurance. Individuals who are risk averse pay more money to limit uncertainty because a certain outcome has a higher utility than the same outcome with uncertainty. Risk aversion allows for insurance to exist for individuals.

Health insurance firms are similarly risk averse. In the insurance realm, aversion to risk is often greater if there is no data for the population of patients that the insurers will be insuring (Blazenko, 1986). This aversion to uncertainty plays a large role in firm behavior when a new insurance program is instituted by the government. Insurers have apprehension towards regulations that may make it unprofitable to insure some parts of the population. Legislators and regulators understand that without the private insurance sector’s buy in the new insurance market will fail. Therefore, legislators created a three-pronged approach to entice insurers into the marketplace and address health insurance firms’ risk aversion. This three-pronged approach was extremely similar for both Medicare Part D and the ACA. Colloquially known as the 3 Rs, this abbreviation stands for risk corridors, reinsurance, risk adjustment. By combining these three programs, the government planned to provide enough incentives for the insurers to join the market and give the constituency choice among insurers.

# Risk Stabilization Background

## Risk Adjustment

From the standpoint of policymakers seeking universal insurance coverage, risk selection is a dangerous concept. Risk selection is the act of insurers designing plans to attract a certain subset of enrollees, often the healthiest enrollees. Risk selection is a dangerous concept because it allows insurers to avoid enrolling high-risk patients, which presents a challenge to efficiently insuring all the constituency. From an insurance standpoint, risk selection provides protection from high-cost enrollees and protects the solvency of the plan. Even though risk selection can protect plans, risk selection decreases the efficiency of the overall health system by being a catalyst for death spirals. If insurers can design different plans for different health statuses, two risk pools may begin to appear. As previously seen, a high-risk pool and a low-risk pool drive death spirals in a market. Both the ACA and Medicare Part D employ insurer risk adjustment programs as a mechanism to deter insurance companies from competing solely to attract the healthiest patients. In union with risk adjustment, the ACA required insurers to be certified as qualified health plans (QHP). To be certified as a QHP, health plans have to cover essential benefits, meet or exceed certain standards for provider networks, and offer multiple levels of coverage. Before the ACA and the certification of a qualified health plan, insurers could entice a certain population to their plans through plan design. The insurers could leverage their plans to appeal to healthier people by including memberships to gyms with the insurance plan, leaving certain specialists who take care of high-risk chronic conditions out of the insurance plan and excluding maternity benefits from their plans (Jonathan P. Weiner, 2012). Without risk adjustment, insurers have incentives to select for the healthiest enrollees (i.e., least risky) in the market. If left unchecked, risk selection can divide an insurance market into two risk pools, a healthy risk pool, and an unhealthy risk pool. With two risk pools, the market is negatively affected and risks falling into a death spiral.

The ACA’s goal was to make it functionally impossible for insurers to go after healthier enrollees to make a profit. Instead, insurers are incentivized to compete for enrollees on quality. It is less likely that they can make their plans unattractive to sicker patients under ACA regulations, but if they do, risk adjustment is meant to make it no more or less profitable to insure healthy people or sick people (Cynthia Cox, 2016). Both Medicare Part D and the ACA achieved the goal of preventing risk selection by employing risk adjustment. Risk adjustment transfers funds from insurance plans with healthier enrollees to plans with sicker enrollees. This transfer of funds counteracts the economic drive to enroll healthier subscribers in an insurance plan to keep the solvency of said insurance plan. An added benefit of risk adjustment is the stabilization of premiums through balanced risk pools by making sure that insurance plans have both health and unhealthy enrollees. This balance, in turn, reduces the dollar amount of federal subsidies for insurance plans by not concentrating high-cost enrollees in one plan, which means that low-cost members of the insurance plans are subsidizing the higher cost members, instead of the federal government subsidizing the high-cost members (Cynthia Cox, 2016).

## Reinsurance

Insurance companies behave like individuals when it comes to risk and use reinsurance to mitigate that risk. The government administers catastrophic insurance through the Department of Health & Human Services (Cox, Claxton, and Levitt, 2016). The administration of reinsurance is not constant across the board; there are subtle differences in how HHS pays for catastrophic losses in the ACA and Medicare Part D that are discussed later in the paper("The Medicare Part D Prescription Drug Benefit," 2016). The goal of reinsurance in both markets is the same, to make sure that plans do not raise their insurance rates to an actuarially fair rate because of the concerned with expenses past a certain threshold. For example, if an insurance plan covers 1,000 people and expects one of them to have a catastrophic cost of $1 million, the actuarially fair rate increase would be $1,000 per person, but if reinsurance exists, insurance plans do not have to charge each member $1,000 extra. With the assurance of reinsurance, the insurance plans can offer lower premiums.

## RIsk Corridors

Risk adjustment and reinsurance targeted and protected specific populations in the newly insured markets but risk corridors targeted and protected the total cost of the new plans. Even with the protections that risk adjustment and reinsurance provided, insurance companies still have the ability to incur large losses through unexpected events in a newly insured market. Risk corridors offered insurers insulation from windfall losses or gains, which in turn promoted competition between insurance plans (Cynthia Cox, 2016). By transferring funds from plans that had higher profits to plans that had higher losses, risk corridors encouraged plans to be aggressive with their pricing, which made premiums affordable for their subscribers and protected the solvency of the insurance plan.

# Methods in ASSESSING risk stabilization in the Aca and medicare part d

## Databases used

This essay analyzed previously published literature and data. Google, Google Scholar, and PubMed were the search engines used to find information on all the pertinent issues. Search terms consisted of “Medicare Part D Risk Stabilization Measures” and “Risk Corridor Payments: ACA vs. Medicare Part D.” Searches were conducted from September 2016 to January 2017. There was a restriction on websites and information cited in the paper, blogs and other sources that had not been verified were excluded from the literature. Web sites such as Kaiser Family Foundation were deemed to be acceptable sources of information. Previous published catastrophic claim estimates were used to calculate potential reinsurance changes for the ACA.

## risk STABILIZATION measures

The success of risk stabilization was based on two proxy measures, the amount of risk corridor money owed to insurers and number of plans in the exchanges. The amount of risk corridor money owed or received was used because it demonstrated how well the other two risk stabilization measures had worked. The number of plans in the exchanges was used because the lack of choice in insurer is a symptom of poorly risk stabilized exchanges.

# Risk Stabilization in the affordable Care act and medicare part d

## Risk Adjustment

In both Medicare Part D and the Affordable Care Act, risk adjustment allows CMS to mitigate the incentives that exist to enroll healthier subscribers by penalizing plans with healthier enrollees and subsidizing plans with sicker enrollees. Risk adjustment is a permanent part of both the ACA and Medicare Part D. The two risk adjustment programs appear to be similar in the ACA and Medicare Part D; there are two key difference between them: how CMS risk adjusts and how feasible risk selection is.

External factors including age, “churn” (which is enrollees moving in and out of different insurance markets: Medicaid to commercial), and the previous history of subscribers affect the outcome of the risk adjustment, especially in the ACA. For example, each group of 26-year-olds comes to the exchanges for the first time, and there is no medical history for the insurers on them. Many exchange members are on the cusp of Medicaid eligibility and can switch from commercial insurance to Medicaid at a moment’s notice. These differences force CMS to risk adjust for ACA on a concurrent basis by utilizing the same year’s data to perform risk adjustment. In Part D, the enrollees are much more stable, which allows CMS to risk adjust on a prospective basis, using previous years’ data from enrollees to predict the average risk score for insurance plans. Medicare’s enrollees are more stable, on average, because beneficiaries stay enrolled in the program for the long-term, and there is not enough churn to affect the risk scores in a meaningful way. The decades of complete data on Medicare beneficiaries also help to calculate risk scores. In contrast, the ACA did not have risk data from 50 years of enrollees and had a high possibility of subscribers churning in and out of the marketplace. These differences forced CMS to employ a concurrent risk adjustment model in the ACA while using a prospective model in Part D (C. f. M. M. Services, 2016)

The second difference in risk adjustment between the programs is the feasibility of risk selection, which allows plans to compete for selected enrollees, usually healthier ones. The ACA intended to make risk selection by insurers difficult by forcing all plans to cover certain guaranteed benefits, coverage guarantees, and multiple levels of benefit generosity. In theory, Medicare Part D allowed for slightly more risk selection. Insurers had more knowledge of the population they were covering and did not have as strict of guidelines for plan design as the ACA. Setting the number of drugs covered by the plan, setting the deductible higher, and other plan designs could entice certain enrollees in specific plans. These are all techniques insurance plans could use to risk select for Medicare Part D. Risk selection may have happened in Medicare Part D, but risk adjustment by redistribution and suboptimal plan choice mitigated this effect. Jason Abaluck and Jonathan Gruber showed in an analysis of Medicare Part D plans that the enrollees often choose suboptimal plans based on plan premiums, instead of expected out of pocket costs. If enrollees had picked the optimal plans, there was an opportunity for risk selection to occur in Medicare Part D. But because enrollees chose suboptimal plans, risk selection was mitigated in Medicare Part D (Gruber, 2011). The intent of risk adjustment was to force plans to compete on quality and not on attracting the healthiest enrollees, and from that perspective, both risk adjustment programs are on their way to achieving their goals. The ACA instituted a more complex form of risk adjustment, while Medicare Part D relied on a simpler form to achieve this goal.

## Reinsurance

The goal of reinsurance is to maintain lower premiums by mitigating the insurer’s risk aversion to a catastrophic event for an individual enrollee. The ACA and Medicare Part D have different approaches to reinsurance. Most notably, Medicare Part D’s reinsurance plan is more generous than the ACA’s. Medicare Part D is a permanent program, covers 80% of the costs over a set annual catastrophic level ($7,515 in 2016), and does not have a limit on the amount that is reimbursed beyond the catastrophic level. The reinsurance program is integrated into the total amount that CMS pays for Medicare Part D. Payment for the program is funded by the Medicare Trust, which means there are no special taxes levied for the reinsurance program in Medicare Part D("The Medicare Part D Prescription Drug Benefit," 2016). This funding structure is in opposition to the ACA, in which there was a special tax levied to fund the reinsurance program.

The ACA’s reinsurance plan is a temporary program that ended in 2016. The reinsurance program was funded through a tax levied on every covered life in America. Whether the individual received insurance through a self-insured plan, large group plan, or small group plan, the insurance companies paid a reinsurance contribution rate. In 2014 it was $63 per person, in 2015, it was $44 per person, and in 2016 it was $27 per person (Cynthia Cox, 2016). Because of this policy design, the proportion of catastrophic costs that are paid by the ACA’s reinsurance program is subject to change each year. The threshold for claims was $45,000 in 2014 and 2015, and those claims were capped at $250,000. In 2016, HHS raised the threshold for claims to $90,000 and continued to keep the cap at $250,000. Furthermore, the Department of Health and Human Services adjusted the coinsurance rate for the reinsurance program. This rate is the percent of the claim that HHS pays, which was originally intended set at 80% in 2014 and 50% in 2015 and 2016. HHS had extra funds in the reinsurance pool in 2014, so the department could pay a 100% coinsurance rate in 2014 and was able to roll over $1.7 billion into 2015’s reinsurance fund. This extra money allowed HHS to pay a coinsurance rate of 55.1% in 2015, instead of the estimated 50%. 2016’s reinsurance numbers have not been released yet (Cox, Claxton, and Levitt, 2016). A concrete example of a hypothetical reinsurance scenario is considered in Table 1. Let’s supposed an insurance company had an individual enrollee claim for $100,000 in medical expenses. The insurance company would have been paid $55,000 in 2014 ($100,000-$45,000), in 2015 they would be paid $30,305 (($100,000-$45,000)\*0.551), and in 2016 they would be paid $5,000 (($100,000-$90,000)\*0.5).

Table 1. Reinsurance Rate for 2014-2016 for ACA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Medical Expense** | **$100,000** |  |  |  |  |
|  | Attachment Point | Reinsurance Claims Cap | Projected Coinsurance Rate | Actual Coinsurance Rate | Payment with $100,000 claim |
| 2014 Reinsurance | $45,000 | $250,000 | 80% | 100% | $55,000 |
| 2015 Reinsurance | $45,000 | $250,000 | 50% | 55.1% | $30,305 |
| 2016 Reinsurance | $90,000 | $250,000 | 50% | TBD | $5,000 |

It is difficult to compare Medicare Part D’s reinsurance rate to the ACA in a concrete example, however, if one were undertaken, the analysis would be skewed because of a magnitude issue, since Medicare Part D’s attachment point is $7,515. Also, while pharmaceutical drugs can cost upwards of hundreds of thousands of dollars, almost all of the drugs are charged as a hospital expense in the inpatient setting. Even so comparing the relative generosity of the two reinsurance programs can provide insights. The difference in the generosity through the attachment point and coinsurance rate can partially be attributed to the differences in the success of the risk stabilization.

## Risk corridors

Risk corridors function as an ex-post-facto premium stabilization program in both the ACA and Medicare Part D. HHS bases the risk corridors on expected cost and then compares the expected cost to the actual cost the insurers incurred. There are substantial differences in the risk corridors for each program. Medicare Part D’s risk corridor is a permanent program whereas the ACA’s program is a temporary program that ended in 2016. Also, the risk corridors were tightened in the first two years of Medicare Part D compare to current years (see Figure 1). If plans had higher than expected costs compared to the originally expected costs, the plan was subsidized beginning at 2.5% higher than expected costs, the plan was paid 75% of losses, while the insurance plan paid for 25% of the losses until the higher than expected costs reached 5%. At that point, the plan was subsidized 80% of losses from 5% on, while the insurance plan paid for 20% of the losses. The reverse happened if the plans had lower than expected costs, from 2.5%-5% the plans would pay 75% of the gains and keep 25%. If the plans had 5% or less for actual costs, they kept 20% of those gains while paying 80% of the gains (H.R. 1 (108th).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Actual Spending Less Than Expected Spending | | | Actual Spending Greater Than Expected Spending | | |
| Plan Keeps 20% Of Gains | Plan Keeps 25% of Gains | Plan Keeps All Gains | Plan Bears Full Losses | Plan Bears 25% of Losses | Plan Bears 20% of Losses |
|
| Plan Pays Government 80% of Gains | Government Reimburses 80% of Losses |
| Plan Pays Government 75% of Gains | Government Reimburses 75% of Loses |
|
|
|
|
|
|
| -5% | -2.5% | 0% | | 2.5% | 5% |

Figure 1. Medicare Part D Risk Corridor 2006-2007

In 2008, HHS widened the risk corridors to allow plans more financial incentives for plans to reduce cost. From 5% higher than expected cost to 5% lower than expected cost the plan kept all losses or the gains respectively. From 5%-10% of higher or lower than expected cost, the plans were either subsidized 50% or paid 50%. Finally, if the insurance plan had expected cost 10% higher or lower, they either paid 80% of the gains or were reimbursed 80% of the losses. This change is illustrated in figure 2. The reimbursement or payments by plans in the risk corridor model are progressive. Therefore, in the 2008 model if a plan has 15% lower than expected costs the plan would be progressively charged. Under the current Medicare Part D risk corridor guidelines, the plan would keep the first excess 5% wholly, then pay 2.5% for the next 5%, and pay 4% for the last 5%. This structure of the risk corridors allows the plan to keep 8.5% of the excess revenue compared to the 15% in excess revenue they originally had (Medpac, 2015).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Actual Spending Less Than Expected Spending | | | Actual Spending Greater Than Expected Spending | | |
| Plan Keeps 20% Of Gains | Plan Keeps 50% of Gains | Plan Keeps All Gains | Plan Bears Full Losses | Plan Bears 50% of Losses | Plan Bears 20% of Losses |
|
| Plan Pays Government 80% of Gains | Government Reimburses 80% of Losses |
|
|
| Plan Pays Government 50% of Gains | Government Reimburses 50% of Loses |
|
|
|
|
| -10% | -5% | 0% | | 5% | 10% |

Figure 2. Medicare Part D Risk Corridor 2008-Current

In contrast, the ACA’s risk corridors started out with more risk for the insurers than Medicare Part D’s original risk corridors. From 3% higher costs to 3% lower costs the plans bear all the losses and keep all the gains, from 3%-8% higher or lower than expected costs the plans the plans either pay 50% or are subsidized 50%. For gains greater than 8% or losses larger than 8% the plans would pay 80% or be reimbursed 80% (Cynthia Cox, 2016). The ACA’s risk corridors were progressive, as Medicare Part D’s are.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Actual Spending Less Than Expected Spending | | | Actual Spending Greater Than Expected Spending | | |
|
| Plan Keeps 20% of Gains | Plan Keeps 50% of the Gains | Plan Keeps All Gains | Plan Bears Full Losses | Plan Bears 50% of Losses | Plan Bears 20% of Losses |
|
| Plan Pays Government 80% of Gains | Government Reimburses 80% of Losses |
|
|
| Plan Pays Government 50% of Gains | Government Reimburses 50% of Losses |
|
|
|
|
| -8% | -3% | 0% | | 3% | 8% |

Figure 3. ACA Risk Corridors

# Analysis of the Risk STABILIZATION Programs In the AFFORDABLE Care Act and Medicare Part D

## Risk Adjustment

Insurance companies already had a wealth of knowledge on enrollees in Medicare Part D. Most companies had been participating in Medicare Advantage and had the ability to pull claims data for a certain percent of the Medicare population. In addition to Medicare Advantage, Medicare fee-for-service data (Part A and Part B) is publicly available through CMS. By using prior data on Medicare beneficiaries to extrapolate the health of the new Part D covered population, the insurance companies could more accurately price what the total cost of care for the enrollee was including the prescription drug cost. The prospective risk adjustment worked well for the program. Whereas, there was scant existing information for the insurance plans to pull from for the ACA. Forcing CMS to risk adjust on a concurrent basis for the ACA. The concurrent risk adjustment model allowed for better risk adjustment especially when the exchanges’ populations turned out to be unhealthier on average than the individual market and group market. According to CMS, the concurrent risk adjustment model worked well for the ACA (Cynthia Cox, 2016). Without this model of risk adjustment, the risk corridors may have been even worse. With prospective risk adjustment, it was possible that CMS would have underestimated how unhealthy the population was, which would have force unhealthier plans to incur larger losses. Even though there was a large difference in the two risk adjustment programs, both proved to have mostly effective risk adjustment programs that achieved their intended goal(Cynthia Cox, 2016; John Hsu, 2009).

## Reinsurance

In a white paper on benefit designs for high-cost medical conditions, *Benefit Designs for High Cost Medical Conditions*, Kate Fitch, and Bruce Pyenson, who are principals at Milliman, presented best practices for designing plans for high-risk individuals. This white paper will be used as a basis to show how increasing the generosity of the reinsurance in the ACA, could have partially closed that gaps in the risk corridors. Fitch and Pyenson arbitrarily defined catastrophic costs for this paper as patients who incur over $100,000 in claims in a year. For a typical commercially insured population (which may tend to be healthier than ACA marketplace enrollees), the percent of members who will incur this amount is 0.2% or 200 members per 100,000. In 2014, around 8 million people signed up for the ACA’s exchanges (*Enrollment in the Health Insurance Marketplace totals over 8 million people*, 2014). Using Fitch’s estimate that would mean that 16,000 enrollees in the exchanges would have claims over $100,000.

Fitch and Pyenson also have estimated for the annual cost range for high-cost individuals: 35 people per 100,000 will have costs between $200,000 and $299,999, with an estimate of a third of those individuals to have average cost of $275,000, there will be 11 individuals per 100,000 with costs of $275,000. 13 people per 100,000 will have cost between $300,000 and $399,999. With an estimate of the group’s average claim to be $350,000. 14 people per 100,000 will have costs over $400,000 per year, with an estimate of average claim of $600,000 (Pyenson, 2011). It is possible to see that a fully funded reinsurance program for the ACA with no cap could have reduced the losses in the risk corridors. As previously mentioned, the reinsurance program in the ACA did not pay past claims of $250,000. `

The estimates show that 880 people out of 8 million would have an average claim of $275,000, of which insurance companies pay $25,000 on top of the reinsurance for a total cost of $22 million. The middle group had an average cost of $350,000, which will cost insurers $100,000 on top of the reinsurance program. An estimated 1,040 people would cost insurers $104 million. The top group had an average cost of $600,000, which will cost insurers an average of $350,000 per person on top of the reinsurance. An estimated 1,120 people will cost insurers $392 million. My conservative estimates put fully funding the reinsurance program in 2014 to subsidize insurers losses of $518 million.

This analysis only portrays widening the reinsurance rate past the reinsurance cap of $250,000 and does not approach lowering the attachment point. Therefore, the complete risk corridor expense is not covered by widening this gap, but with further analysis, the break-even point could be estimated. Forging on without this academic exercise and focusing on $500 million in possible reinsurance reimbursement it is important to realize that this increased risk stabilization could have decreased the burden the insurers had. If the amount of reinsurance provided impacts risk corridor performance, it would be expected that 2015 would have worse risk corridor results because of the narrowing of the reinsurance program and an increase in the number of individuals covered under the marketplace. In fact, the risk corridor performance suffered in 2015. As the reinsurance program shrank from 2014 to 2015 a coinsurance rate of 100% in 2014 to 55.1% in 2015, the attachment point rose to $90,000 in 2015 from $45,000 in 2014, and the exchange insured around 4 million people in 2015. These issues could lead to decreased reinsurance payments, which could be seen in an increase in risk corridor payments owed to the insurance companies. In fact, risk corridor payments doubled from $2.87 billion in 2014 to $5.8 billion in 2015. These data partially support the claim that the lack of a substantial reinsurance program further damaged the risk corridors. Most analysts suggested that as the companies grew more comfortable with the population and raised premiums to be more in line with actual costs, the risk corridor payments should have shrunk but instead, they doubled.

## Risk Corridors

There were not statutory provisions in either the ACA’s and Medicare Part D’s risk corridor laws that required the programs to be revenue neutral (Jost, 2016). Revenue neutrality means that the federal budget would not be affected by greater-than-expected losses. It was assumed that if total losses were higher than total gains the government would step in and pay the full amount of the risk corridors payments (Jost, 2016). In fact, according to CMS payment data, in each year of Medicare Part D’s risk corridor, payments were made back to the government, therefore making the program revenue-generating. The ACA’s risk corridors functioned differently. Between 2014 and 2015, the insurers on the exchange have lost $8.3 billion. The insurance plans assumed that the federal government would subsidize the difference (Livingston, 2016). In fact, in the Federal Register in 2014 HHS wrote “HHS recognizes that the Affordable Care Act requires the Secretary to make full payments to issuers. In that event, HHS will use other sources of funding for the risk corridors payments, subject to the availability of appropriations” (D. o. H. a. H. Services, 2014). As a premium stabilization tool, the risk corridors are most effective if the government fully backs the risk corridors. Otherwise, if insurers have a high number unexpected losses, there may not be enough profits to subsidize the losses. The original goal of the risk corridors in both the ACA and Medicare Part D was to instill confidence in the insurance market. This confidence should have allowed plans to set premiums aggressively so that the individuals on the exchange could afford the premiums.

Senator Marco Rubio played a role in changing the intended function of the risk corridors in the ACA. He started asserting in late 2013 that the risk corridors had the possibility of being another bailout for the insurance industry, such as the one in 2008. He was one of the first politicians to realize that even though the administration had said the risk corridors would be revenue neutral if they were not, the government would pick up the rest of the payments in. Sen. Rubio did not appear to have any role in drafting the legislation that made the risk corridors revenue neutral. Instead, Republican staffers on the Senate Budget Committee and the House Energy and Commerce Committee drafted a rider to the 2015 and 2016 appropriations omnibus laws that stated that no funds from any outside trust could be used to pay the risk corridor deficit, which essentially made the risk corridors revenue neutral (Levin, 2015). This rider forced HHS and the Obama administration to concede that risk corridor payments would have to be made through lawsuits of the federal government because there was no money to pay the risk corridors. When the risk corridor results came in for 2014, insurance plans had contributed $362 million in excess revenue but were owed $2.87 billion in excess losses. In 2015, the results got worse as insurance plans were owed $5.8 billion dollars in risk corridor payments in 2015 (Livingston, 2016).

Articles in *The New York Times* and *The Washington Post* credited Sen. Rubio with subtlety undermining the ACA through his and other Republicans attachment of the rider to the omnibus appropriations. By “saving” the taxpayers a total of $8.3 billion over two years, Republicans destabilized the individual exchange insurance market. The lack of risk corridor payments contributed to the rise of premiums and insurers dropping out of marketplaces across the country. With the ability of retrospective analysis, a subtle change in the crafting of the original legislation could have mitigated this issue. By including a more generous reinsurance program mirroring that of Medicare Part D, Democrats could have avoided the instability that was caused by the rider that made risk corridors revenue neutral. For example, as previously stated, the risk corridors in Medicare Part D functioned as a premium stabilization tool, and since the inception of the program, the government has not had to fund the risk corridors. In fact, the risk corridors have been a revenue producing tool each year for CMS. There are two large differences between the programs; these are the reinsurance program and the ability to accurately predict the overall health and medical costs of the newly covered population. One of these differences was handled well, while the other was, in my opinion, the largest contributing factor to the lack of stabilization provided by the 3 R’s.

The $2.6 billion owed to insurers in 2014 from net losses in risk corridors and $5.8 billion owed in 2015 portray a story of broken risk corridors. While the rider that made risk corridors revenue neutral had a large part destabilizing the individual exchanges, another R, reinsurance played a supporting role to risk corridors in destabilizing the market. If the architects of the ACA legislated a wider reinsurance plan comparable to Medicare Part D’s plans, there could have been noticeably fewer losses in risk corridors and could have mitigated some of the losses the insurers claimed in the risk corridors.

# Limitations

There were many limitations of this essay. A major limitation was the inability to show cause because this paper was a retrospective analysis without out any mathematical simulation. Instead, the reinsurance changes could only be correlated with the risk corridor performance, which then would be correlated with the performance of the ACA. There was no way in this paper to say that the lack of reinsurance was the cause of the poor risk corridor performance. In addition to this limitation, this essay cannot speak to the other reasons the risk stabilization measures could have performed poorly in the ACA. These factors include the fact that insurers could have undercut the market to an insurance rate that was not sustainable and the rate would cause losses even with all of the risk stabilization measures. Another possibility is that there were just too many sick people for the risk stabilization measures to work. A final possibly that limits this study is that if changes were made to the reinsurance program in the ACA to better mirror that of Medicare Part D, the distribution of reinsurance money might not have increased risk corridor performance. In fact, there is a possibility that many plans who lost 2.5% with respect to the risk corridors could have seen the increase in reinsurance to put them at a gain of 2.5%. If this distribution happened with most of the influx of reinsurance money, there would be no changes in the risk corridors. A final limitation is the lack of privately held enrollee data at an individual level that the insurers possess. Without this information, this essay is severely hampered because none of the theories that have been presented in the essay could be verified. With the data, most of the questions could be answers because the theories could be simulation and cause could be determined.

# Discussion

This essay originally intended to be a guide on how to fix the ACA exchange market through better risk stabilization. The risk corridors had been getting a lot of attention, especially at the parent company of Allegheny Health Network: Highmark Health. David Holmberg, the CEO of Highmark Health, sued the federal government for $550 million in risk corridor payments that Highmark Inc (the insurance arm) was “owed” per the original interpretation of the risk stabilization laws in the ACA. In September of 2016, Hillary Clinton was solidly in the lead of the presidential election, and the consensus of pundits felt that Democrats would win the White House and possibly have control of the Senate. With these issues in my mind, the essay sought to investigate how the risk corridors could have been altered to enhance the ACA’s stability in the coming years. After researching the risk corridors in both the ACA and Medicare Part D, it became clear that the risk corridors were not the only issue in the premium stabilization legislation. In fact, the 3 Rs were inherently tied together in the pursuit of a stable insurance “exchange” market that allowed insurers to enter the insurance market in a new arena and provide enough competition to drive premiums to affordable levels.

After three years of full implementation of the Affordable Care Act and more than ten years of Medicare Part D, there are conclusions to be made about the risk stabilization in insurance plans supported by the government. Without sufficient risk stabilization, insurance premiums can rise to a level that makes the program unsustainable. For public health, the failure of a government supported insurance program is hugely relevant because if people lose their ability to pay for insurance, maintaining their access to medical care is almost impossible. The three risk stabilizations programs mentioned in the essay need to work together as a coherent unit to achieve affordable premiums in the individual market.

The lesson learned through the comparison of Medicare Part D and the ACA’s risk stabilization programs can be applied to any governmental supported health insurance policy in the future. This essay has shown how the 3 Rs are a 3-legged stool and not three independent programs that can function in isolation. While there are differences in the two government program, the simple fact is that Medicare Part D has been successful for its entire life and the ACA has shown increasing losses in the risk corridor program year over year and insurers dropping out year over year. In fact, the importance of the risk stabilization programs in governmental insurance programs has been shown in the ACA. Fortunately, from a policy perspective, a retrospective look at the importance of the 3 Rs will be possible for the ACA. A retrospective look at the result of the ACA for 2014-2018 will most likely show the most generous risk stabilization year based on reinsurance generosity of 2014 was the most successful from a public health perspective. As the risk stabilization became less generous in 2015 and 2016 because the reinsurance program became less generous and the risk corridors continued to be underfunded, the losses mounted for the insurers causing many to pull out of the market and as previously stated many individuals only had one plan to choose from. Looking forward to 2017 and 2018, the ACA’s individual market presents two very interesting years to analyze because the only risk stabilization program offered will be risk adjustment. Premiums have skyrocketed each year in the ACA; these increases can not only be attributed to the lack of risk stabilization in the market. This must also be attributed to the increase of required coverage in a federally qualified health plan and the fact that the enrollees in the exchange plans were sicker than average. At the same time, the reason for the 3 Rs was to stabilize premiums. If the risk corridors had been subsidized by the government and the reinsurance program would have been more generous the issues that plagued the ACA could have been better mitigated.

# Conclusion

Risk stabilization measures, specifically the 3 Rs, are imperative for the health of individual insurance markets. Low premiums and insurer choice are symptoms of a healthy insurance market. Individual insurance markets can be run without the 3 Rs, in fact, previous individual markets did not have the benefit of these risk stabilization programs, but they did have the benefits of medical underwriting, denial of coverage because of a pre-existing condition and did not have to meet federally qualified health plan standards. With current ACA provision and a lack of risk stabilization insurers may not join the market or if they do, they will price premiums extremely high, which are both symptoms of an unhealthy insurance market. Risk adjustment is imperative to encourage plans to compete on quality and not for the healthiest enrollees. Reinsurance is imperative to allow plans to price their products below actuarial fair rates which reduces premiums for individuals. Risk corridors are imperative to encourage participation in the market and ensure solubility for the insurance plan. It is in the government’s best interest to continue to fund the 3 R’s to encourage competition among insurance plans in the individual market and create a healthy insurance marketplace.

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