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The Costs of NOT Having ACA Insurance

Deja Shantel Webster

The Costs of NOT Having ACA Insurance: Access, Costs, and Informed Choices

By
Deja Shantel Webster[1]

ABSTRACT. An investigation of how the Affordable Care Act (ACA) affected health outcomes in terms of access, cost and knowledge level was conducted using the Health Reform Monitoring Survey (2014) of about 7,500 nonelderly adults in the U.S. Content analysis, of journalistic accounts of insurance coverage experiences in tandem with interviews with healthcare professionals knowledgeable about the ACA's insurance coverage guidelines, its social, and current political constraints, were used to illustrate the survey findings. Although health outcomes of both ACA and non-ACA insurees were adversely affected by pre-existing conditions, ACA participants were better able, than non-ACA, to keep their health stable with lower costs and independently of access differentials. In contrast, non-ACA insurees were able to improve their health outcomes only if they had more access to health care and at lower costs. These findings, theoretically framed using Structural Functionalism, Strain, and Social Resources theories, contributed to the scholarly literature on Health Care Reform initiatives and equitable quality care service models. Future research, on the fate of the ACA under the current political climate, is recommended to support evidence based health care reform.

INTRODUCTION

The United States is an outlier on healthcare spending; we lead the world with health care spending at 16% of our total GDP and yet spend significantly less on social services (Kamal, Cox and Blumenkranz 2017). Hence, the most recent efforts to reform the American healthcare system are timely. But these efforts should not only focus on improving the healthcare delivery system, but also on the economic, behavioral, and environmental factors that heavily burden health behaviors and health outcomes.

The 2010 Affordable Health Care Act was a major national effort at reforming the American health care system by expanding access to health insurance, emphasizing prevention and wellness, providing improved quality and performance, as well as

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curtailing rising health care costs via subsidies[2]. In 2014, additional improvements were made to equalize existing inequalities, like ensuring nondiscriminatory prices for those with pre-existing conditions and guaranteed mental health and substance abuse coverage. The ACA was also inclusive in other ways; the system covered the insurance gap for employed citizens in the income threshold that was above Medicare eligibility but below private insurance affordability. For example, Lupita was a single mom who worked as a dental assistant, but unfortunately could not afford private insurance coverage. She was constantly worried about her lack insurance coverage when she was driving; as she said "one car crash could cost everything. I could lose it all" (Healthcare.gov 2013). Covering these gaps in health care access through ACA not only made more preventable services accessible to the general population but also had the potential for strengthening the overall health of all Americans.

Three additional elements in the ACA, relevant to the analyses presented in this paper are: coverage options, preventative care, and continued barriers to access. There are generally two types of plans offered within the marketplace: (1) low deductible plans that have higher premiums, but lower out of pocket expenses; whereas, (2) high deductible plans have lower premiums, but higher out-of-pocket expenses. However, the variety of health insurance coverage options is poorly understood by many, including young adults. For example, young adults did not understand that all plans provided preventive care; a case in point was an ACA insurer who mistakenly thought that routine visits were uncovered in her health plan (Wong, Asch, Vinoya, Ford, Baker, Town and Merchant 2014).

Preventative care, a second critical ACA component, is essential for maintaining good health and for reducing long-term health care costs by relieving some of the health threats posed by socioeconomic resource challenges that people face. Routine care identifies health problems early to keep them from becoming chronic conditions. In the United States chronic illness related mortality are at an all-time high; nearly 1 in 3 deaths in the US each year is due to heart disease and stroke; at least 200,000 of these deaths could have been prevented through changed health habits (Center for Disease Control 2013). Third, while there were attempts, in the ACA, to reduce the cost barriers to preventative services, persistent income disparities constrain ACA's success. In the last two decades, the United States has had the highest degree of income inequality among wealthy countries and Americans with lower incomes are less likely to report good health than those with high incomes (Kamal, Cox and Blumenkranz 2017). Income inequality in America cannot be effectively addressed unless accessible and affordable quality insurance options are available across the economic spectrum.

LITERATURE REVIEW

The ACA is a bold, ambitious policy that has redesigned how the healthcare model addresses the health of the American population. Its historic implications have been assessed in detail by scholars and some of their work is reviewed below. They analyzed

[2] Data in this section were compiled by the author from the resources reviewed for this paper.

the pros and cons of the Affordable Care Act along dimensions of access to care, health care costs, and knowledge level. Scholars revealed that Medicaid expansion (under the ACA) was more cost effective than the ACA Marketplace; private coverage was the most expensive. They have also demonstrated that cost fluctuations directly result in negative health outcomes. Besides, according to public health scholars, addressing unequal social determinants of health are equally important to maintain a healthy population. In a critical analysis of the ACA's attention to social disparities it was found that broad community-based interventions were more successful than those that focused on the individual. And yet, the political climate during the implementation of the ACA led critics, who were unwilling to learn from credible sources, to discredit the policy's value, and in turn, skewed public opinion.

Medicaid Expansion vs Marketplace Coverage vs Private Insurance

Health scholars have conducted comparative assessments of the cost and access implications of the three most common health insurance vehicles in the American Health Care system; they are Private Insurance, Marketplace, and Medicare Expansion. On both cost and access, Medicare expansion came out ahead of the Marketplace with private insurance lagging behind.

Health Care Cost Differentials

The Affordable Care Act expanded Medicaid coverage eligibility for non-elderly adults whose family incomes are 138% below the federal poverty line. In 2012, provisions in the Affordable Care Act allowed states to opt out of Medicaid expansions. These nineteen states took advantage of this opt-out option; instead they offered subsidized Marketplace coverage options for adults with family incomes of 100-400 percent of poverty. The ACA Marketplace is a place for adults with an income 100-400% above the poverty level to shop for subsidized private plans funded by the government through tax credits. Cost-sharing reduction subsidies generally decrease out of pocket spending to 6 percent of the premiums and are capped at 2 percent of income (Blavin, Karpman, Kenney and Sommers 2018). On the other hand, in Medicaid expansion states qualified adults typically face no premiums and have minimal cost-sharing requirements.

No doubt, the cost impact of Medicaid expansion was more beneficial than the Marketplace. For example, relative to states that did not expand Medicaid, insurees in Medicaid states had lower out-of-pocket premium spending and lower probability of having a high-out of pocket premium (more than 10% of income) (Blavin, Karpman, Kenney and Sommers 2018). In other words, in order to ensure lower costs for low-income uninsured people, states must further subsidize premiums and cost-sharing rates for those in the Marketplace plans. Increasing health credits is advantageous to the healthcare delivery system as a whole, especially in hospital care settings. There were decreases in uncompensated care expenditures when affordable coverage increased and, in turn, stabilized hospitals' financial performance and reduced hospital

closures (Lindrooth, Perraillon, Hardy and Tung 2018). On balance, although Medicaid expansion has better cost outcomes for low-income adults than the Marketplace, the Affordable Care Act as a whole is still more beneficial than private insurance plans.

Disparate Health Care Access

Yet, despite the evidence showing the cost benefits of subsidized care, spending on healthcare by federal, state and local governments steadily decreased from 2015 to 2016. The decline in the amount of subsidies granted by the government reduced the use of health care goods and services from 3.5% in 2015 to 1.6% in 2016 (Hartman, Martin, Espinosa, Catlin and The National Health Expenditure Accounts Team 2017). In contrast to private health insurance coverage, Medicaid expansion has been shown to improve access to care and affordability of care. For example, Sommers, Blendon and Orav (2016), in their comparisons of the Medicaid expansion state of Kentucky and the Marketplace option in Arkansas with private coverage in Texas, Kentucky and Arkansas showed significant improvements in the affordability in care and large declines in the un-insurance rate -- compared to Texas which did not expand Medicare. In other words, there was a strong relationship between increase access to care and lower health costs for low-income adults. The reduction in cost-sharing in the Marketplace and in Medicaid expansion states had a direct negative effect on employer-sponsored insurance and directly purchased private insurance; costs for both dramatically increased (Blavin, Karpman, Kenney, and Sommers 2018).These cost burdens specifically hit employees at lower-wage firms. Before the enrollment period for the ACA in 2013, workers, in small firms, covered under employee-sponsored plans were more likely to face an annual deductible of $1,000 or more than in 2012 (Claxton, Rae, Panchal, Damico, Whitmore, Bostick, and Kenward 2013).

One major reason why private health plans are the most expensive is the high deductibility options. High Deductible Health Plans, with low monthly premiums, are the fastest growing type of private insurance plan. But, they included high liability expenses, making access an expensive commodity. Enrollment in high deductible health plans reduces the frequency of preventative care use and hinders adherence to medication regimen. More specifically, the adverse effect stems from the buyer's obligation to weigh opportunity costs for accessing preventative care services or adhering to medication regimens (Agarwal, Mazurenko and Menachemi 2017). Besides, health outcomes worsened when the high deductible plan insurees changed their health behavior in order to save money. On balance, even though there are cost differences between Medicaid expansion mandate and the Marketplace provision, both improved overall coverage. In fact, uninsured rates declined 16.4% in Medicaid expansion states in contrast to only 11.7% decline in the non-expansion states (Blavin, Karpman, Kenney and Sommers 2018).

The Affordable Care Act and the Social Determinants of Health

Affordable insurance coverage is only half the battle in ensuring a healthy and productive population. Despite increased health care coverage, low-income populations still face harsh environmental factors that have adverse effects on their health. And reduced health care use and irregular adherence to medications in low-income communities can intensify existing vulnerabilities evident in the inequalities in the social determinants of health. However, as Leong and Roberts (2013) alerted, it is a mistake to assume that health inequalities are derived only from the failure to take responsibility for one's health. Improving population health and achieving equitable healthcare reform requires a broader framework that encompasses the social, economic, political and cultural factors that influence health. President Barack Obama intended to mitigate the social determinants of health via a two prong approach that emphasized individual and community well-being (Leong and Roberts 2013). As seen below, these community initiatives were more successful than the individual programs.

As many health scholars have demonstrated, the Affordable Care Act, which was intended to bring about healthcare reform in the United States, did not address the social determinants of health and consequently was limited in its full potential. For example, individual behavior was targeted in the ACA (in Section 4108: Incentives for Prevention of Chronic Disease in Medicaid) by providing monetary incentives to Medicaid enrollees to adopt and maintain healthy behaviors (Koh and Sebelius 2010). Funds were also dedicated to create an Internet portal that allowed individuals to track their own health and ultimately reduce their health care costs. But, enrolled Medicaid participants were unlikely to see the monetary incentives associated with improved health because many enter the program with undiagnosed or untreated diabetes and other chronic conditions (Kaiser Family Foundation 2012). By placing responsibility for reducing diabetes on the individual to make informed diet choices, the ACA failed to recognize that low income neighborhoods are also food deserts and not very conducive to healthy food styles. Most food desert neighborhoods are restricted to convenience stores, which carry low-nutrition, high-cost foods, that create a stressful environment for diabetes management. In fact, diabetes risk was approximately 50% higher among adults in food-insecure households than in food-secure households (Gucciardi, Vahabi, Norris, Del Monte and Farnum 2014). In addition, the ACA's Internet portal was also counterintuitive because it did not address the digital divide in America. Americans with lower incomes are much less likely to use a computer or have Internet access than their higher-income counterparts (Brodie, Flournoy, Altman, Blendon, Benson and Rosenbaum 2000). The ACA did not address how the lack of universal access to the internet (a social determinant of education rates) as a barrier to reaching and understanding personal health information. In short, the monetary incentive approach and the implementation of electronic health records both fell short because these initiatives did not prioritize disadvantaged populations. However, community empowerment, the second major strategy to bring about healthcare reform in the ACA was more successful.

Stimulating local involvement of community-based organizations in health care initiative

can highlight and address community specific problems. For example, The Secretary of Health and Human services was enabled in Subtitle C of the ACA to award monetary grants to community organizations to address healthy living in areas that have “racial and ethnic disparities” (Leong and Roberts 2013). Community Transformation Grants also gave states opportunities to purchase vaccines at a reduced price in order to improve vaccination rates among minority groups; there is a large racial and ethnic disparity in vaccination rates. More specifically, African Americans and other minority groups are disproportionately affected by HPV infection and subsequent cervical cancer compared with non-Hispanic Whites; a primary reason for this disparities in HPV infections is that the vaccine is largely not talked about in the minority communities (Ylitalo, Lee and Mehta 2012). Community education about discounted vaccines can increase vaccination rates and decrease serious long-term, chronic health risks. The ACA also targeted another meso-level community-- the workplace. Again, the Secretary of Health and Human Services was authorized to fund small businesses to introduce wellness programs in the workplace. Similar programs in Canada have already been implemented with positive outcomes; wellness scores in Canada increased by 6.8% during a two-year period of the program (Elia and Rouse 2016). In sum, the ACA did a better job at uplifting communities and addressing the needs of specific communities than meeting individual health needs.

The Affordable Care Act: Information Barriers to Policy Implementation

While addressing the social determinants of health was an important part of health reform, there were political barriers to these social service investments in the polarized political system. Bipartisan gridlock is not uncommon in Congress as the system is resistant to change. And ACA’s major investment in social services did not go uncontested in Congress. A long list of presidents has tried to reform the U.S. healthcare delivery model, but most have failed. One failed example was the American Health Security Act (AHSA) of 1993 spearheaded by First Lady Hillary Clinton. The Clinton plan attempted to secure universal coverage and regulate the private insurance market. But this plan faced vigorous opposition as it reduced the profitability of the private healthcare (Oberlander 2007).

But, the Affordable Care Act broke the status quo with the addition of a new marketplace exchange. As noted above, the marketplace included private coverage plans at subsidized rates for those whose income was above Medicaid eligibility levels but could not afford private coverage. The e-marketplace, Healthcare.gov, was the portal for the health reform initiative. When first opened, the government website was overwhelmed by more users than it was designed to handle, causing navigational glitches, that frustrated millions of consumers who tried to complete applications for health insurance under the Affordable Care Act (Benoit 2014). Unfortunately, the initial failure of the launch decreased the credibility of the site and caused skewed bias against the health reform bill.

These criticisms, surrounding the Affordable Care Act, among others, skewed its

purpose and generated false information leading many Americans to believe falsified opinions rather than credible knowledge. When shopping for health insurance, it is necessary to properly weigh the benefits and costs of different plans. But, Americans were ill-equipped and unprepared to navigate the new exchanges. Besides, one-half of the American population did not know about the new health insurance exchanges or their subsidies, and 42% could not correctly describe a deductible (Barcellos, Wuppermann, Carman, Bauhoff, McFadden, Kapteyn, Winter and Goldman 2014).

But the question still remains whether this is an issue with the healthcare law. Researchers have found that when people are provided with policy-specific factual information, they use this information in formulating individual beliefs. The trouble is, ‘‘People rarely possess even a modicum of information about policies’’; meaning, personal experiences alter one's ability to learn facts if it goes against their self-interest (Bullock 2011: 498). In short, basic knowledge of different health services is crucial if people are to make the right health plan choices. Besides, identifying geographic variation in enrollment is important to developing and refining policies and enrollment strategies on a national level.

Although there is a surplus of data about access, costs and knowledge of ACA, there is not much research that related these health care dimensions to healthcare outcomes. Perhaps the newness of the ACA and its uncertain future under new political administrations might have discouraged health outcome research. In this study, attempts were made to expand on these relationships in hopes to identify further areas for improvement.

RESEARCH QUESTION

The main goal of this research was to uncover the potential health benefits of government social insurance programs such as the Affordable Care Act. As detailed above, the Affordable Care Act not only covered millions of uninsured Americans but also, rewrote insurance rules to treat millions of sick people more equitably. This new revolutionary (at least in the American system) marketplace, with changed policies and practices, requires an investigation into how ACA insurees compare with non-ACA insurees, in terms of knowledge of, access to, and costs of health care. Is there a cost for not being covered by the ACA health insurance? And is the advantage in coverage also translated into favorable health outcomes?

THEORY AND HYPOTHESIS

This research was guided by a global hypothesis that participants who enrolled in the ACA insurance program, when compared to those who had non-ACA insurance would have better health outcomes because of reduced healthcare costs, more access to care services, and more knowledge about the marketplace, net of pre-existing conditions, gender, employment status, income, and age. Talcott Parsons (1978: 437) argued that

a well-functioning health care system, that provides effective care leading to good health outcomes, is essential for the smooth functioning of a society. However, the American Health Care system has not been functioning at an optimal level. In fact, many health care critics such as Leong and Roberts (2013) have documented that the system is in disequilibrium because of discriminatory practices along many dimensions. The market model of health care delivery, which provides high cost care without the expected health benefits, critics argued, is one major problem. Besides, health care is unequal because it is contingent on how much resources you have. To address these disparities in health access and outcomes, the social justice proponents have made a theoretical and programmatic case for universal health care access. The ACA program, which offers universal coverage, was based on the premise that healthcare is a human right. The ACA is expected to equalize health care resources and offer better health outcomes than the market model could.

Labeling and Social Resource Theories In a Structural Functionalist Framework

Health is typically defined as a person's physical, mental and social well-being. Medicine refers to the institution that seeks to prevent, treat and cure disease and illness, while healthcare is the actual medical services that allows for medical treatments to be carried out. Dr. Talcott Parsons' (1978) conception of the 'sick role' and its relevance to the consumption of health integrated all three of these concepts (structural functionalism, social resources theory, and labeling theory) to theorize how they are interdependent upon one another. When one takes on a 'sick role', illness exempts them from daily obligations because they need rest, and requires them to seek appropriate medical attention to regain optimal health. The 'sick role' focuses on restoration of health as the ultimate goal and the only way to do so is to be cured by a physician. In this scenario, Parsons highlighted the importance of accessible medical services to ensure a functional relationship between illness and health.

But, accessibility to health care is contingent on whether societies perceive health care to be a human right (social justice) or a market commodity. Under a health as a market commodity principle, healthcare is offered within a free market where private insurance companies set competitive prices among themselves with little government intervention. Under a free market health care system, individuals who have resources are able to seek better care and have better outcomes. Social resources, be they ascribed (race/ethnicity, gender, religion) or achieved (education and jobs), and the associated social networks and social ties (Lin 1982) make for unequal access to knowledge about, options for health care, and health outcomes. Besides, before the implementation of the Affordable Care Act, American private insurance companies thrived under the free market model. They set their own prices and hand-picked their customers by excluding those with pre-existing conditions. Those with pre-existing conditions were 'labeled' (Mead 1934) as high-risk and were flagged under "high risk" pools with high coverage cost rates.

In contrast, the ACA was premised on a social justice principle; healthcare was treated as a human right and universal coverage is provided no matter if you can afford it or not. Expansion of Medicaid coverage and opening up a subsidized Marketplace provided more Americans with insurance coverage and attempted to close the inequality gap in health care. Besides, the safeguards against discrimination against pre-existing conditions did away with the 'high risk' label used in the free market health care model.

MIXED METHODOLOGIES

A sequential mixed methods approach was used to estimate the relative effects of Healthcare Access, Healthcare Costs, and Knowledge Level on health outcomes. The secondary survey source used was the 2014 "Health Reform Monitoring Survey". Qualitative interviews conducted for this research with healthcare professionals were used to elaborate on the survey findings.

Secondary Survey Data

In January 2013, the Urban Institute launched the Health Reform Monitoring Survey (HRMS) of nonelderly population in the U.S. to study the Affordable Care Act (ACA), aside from available federal government survey data (Holahan and Long, 2014). HRMS obtained information about one's self-reported health status, access to and use of health care, health care affordability, health insurance literacy, understanding of health insurance marketplaces, and attentiveness of ACA provisions. Additional information collected in the survey included age, gender, sex, education, income, and employment status. HRMS covered a random sample of approximately 7,500 nonelderly adults (ages 18-64).

The survey sample used in this study consisted mainly of 45-59 year old ACA insurance holders (34.0%) and non-ACA insurance holders (38.7%)[3]. High school diploma was the most frequency level of education for ACA insured participants (33.8%) and for non-ACA participants (25.9%). Nearly half of both ACA (48.9%) and non-ACA (54.1%) groups were female and over half of the former (59.4%) and latter (71.8%) groups were employed. Pre-existing conditions were important to account for because they can determine health outcomes. Unlike private insurance, the ACA protects those with pre-existing conditions from ineligibility or elevated coverage costs. An overwhelming majority of non-ACA members (90.3%) and surprisingly, protected ACA insured participants (88.4%) did not have pre-existing conditions. Finally, given the ACA's expanded medicaid (a social need) program, majority of ACA insured participants were a part of the lower economic class (40.3%), while majority of non-ACA, privately insured group consisted of upper class (45.4%). Details are available in Appendix A.

[3] The original collector of the data, or ICPSR, or the relevant funding agencies bear no responsibility for the use of the data or for the interpretations or inferences based on such uses.

Supplemental Qualitative Interviews

The statistical analyses of health outcomes, as documented in 2014 Health Reform Monitoring Survey, were illustrated with content analysis of individual experiences with the Affordable Care Act, and qualitative interviews with two healthcare professionals. The two interviewees were professionals from the healthcare administration sector specializing in policy implementation and reform. One, Interviewee #1, a Health care Program Specialist, has 12-14 years of experience working at a local health insurance plan; this focuses on providing effective, efficient, and equitable care for its participants. The second, a senior director (Interviewee #2) is an associate on the general counsel for a state health insurance plan and has worked in Washington assisting with the implementation and monitoring of the Affordable Care Act. Both were asked questions via email about their thoughts on the price of not being covered under the Affordable Care Act. Refer to Appendix B for the consent form and interview protocol.

Documented experiences and testimonies from the ACA and privately insured were also included in this research. Journalistic reports were incorporated about unaffordability of health insurance, ineligibility because of pre-existing conditions, and inaccessibility due to unemployment status. These stories offered supplements to the quantitative differences between the two coverage types and underscored interviewee comments.

DATA ANALYSES: SURVEY AND QUALITATIVE INSIGHTS

There were three types of analysis conducted for this research. First, univariate analyses were used to determine the participants overall health status and build a profile of their opinion on accessibility, costs and knowledge level of healthcare services. Preliminary associations between health outcomes and the way it was impacted by the initiation of the ACA expansion vs non-ACA insurance plans were done using bivariate analysis. These associations were re-tested using multiple regression analyses, which offered evidence for the theoretically grounded hypotheses. Insights from the qualitative interviews and testimonies were useful to illustrate the multivariate analysis findings as well as to offer suggestions for future research.

Operationalization and Descriptive Analyses

On balance, both the ACA and non-ACA insured were more unhealthy than healthy, and had high healthcare costs, However, ACA participants reported higher costs than non-ACA individuals. While both groups generally found difficulties in accessibility of care, more ACA generally found it harder to find care in their neighborhoods than those with non-ACA associated coverage. Knowledgeability levels differed between the two groups as well. More ACA insured participants did not know the meaning of general healthcare terms like co-payments or deductibles, yet knew more about the marketplace than non-ACA covered individuals.

Health Outcomes

The relationship between access to health insurance and overall health outcomes, evident in this study, were complex (Table 1.A). Overall, those who had health insurance through the ACA (Health Outcomes Index mean=19.0 on a range of1-74) had somewhat poorer health outcomes than the non-ACA group (mean=17.3; range of 1-74). For example, 40.7% of non-ACA participants self-reported their health to be very good compared to only 33.8% ACA insurees. Similarly, ACA respondents reported feeling unhealthy more days out of the month (mean=5.21) than non-ACA insured people (mean=4.08). Perhaps, the availability of ACA health care, irrespective of pre-existing conditions, might explain the unexpected health outcome difference.

Table 1.A Health Outcomes: ACA vs. Non-ACA
2014 Health Reform Monitoring Survey

Concepts	Dimensions	Indicators	Values and Responses	Statistics ACA (n=921)	Statistics Non ACA (n=5853)
Dependent: Health Outcomes	Overall Health	Q1_ In general, would you say your health is	1. Excellent	10.4%	10.6%
			2. Very Good	33.8	40.7
			3. Good	38.9	35.6
			4. Fair	14.1	11.2
			5. Poor	2.9	1.9
		Q18A. Standing on Poor Health Ladder[1]	1. 10	7.7%	5.8%
			2. 9	7.8	10.4
			3. 8	16.5	24.6
			4. 7	18.1	22.2
			5. 6	13.9	12.8
			6. 5	17.7	11.3
			7. 4	7.6	5.8
			8. 3	6.0	4.0
			9. 2	2.2	1.4
			10. 1	1.5	0.8
			11. 0	1.1	0.9
	Physical Health	Q2: Now thinking about your physical health,..[2], how many days during the past 30 days was your physical health not good?	1-30 (n)	5.21 (932)	4.08 (5916)
	Mental Health	Q3_Now thinking about your mental health, ..[3] how many days during the past 30 days was your mental health not good?	1-30 (n)	4.87 (930)	3.96 (5880)
		Index of Poor Health Outcomes[4]	Mean (s)	19.0(15.2)	17.3(13.2)
			Min-Max	1-74	1-74

1. Q18A _Please imagine a ladder with steps numbered from zero at the bottom to 10 at the top. Suppose we say that the top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time, assuming that the higher the step the better you feel about your life, and the lower the step the worse you feel about it?
2. which includes physical illness and injury;
3. which includes stress, depression, and problems with emotions;
4. Index of Health Outcomes: Q1 + Q18A + Q2 + Q3.

Access to Healthcare

Accessibility to healthcare coverage plays a huge role in health outcomes as well. While obtaining coverage is an important step in regulating health, accessibility is equally valuable. If the services provided by the coverage are inaccessible, then the coverage is no longer relevant. Therefore, when comparing plans offered under the ACA with privately purchased coverage it was important to measure the difference in quality of care. Inability to locate a local doctor and lack of availability of preventive and emergency services were both indicators of inaccessibility.

Table 1.B. Access to Healthcare: ACA vs. Non-ACA
2014 Health Reform Monitoring Survey

Concepts	Dimensions	Indicators	Values and Responses	Statistics ACA (n=939)	Statistics Non-ACA (n=5921)
Access to Healthcare	Emergency Treatment/care access	TQ84A_ How would you rate the characteristics of your neighborhood's availability of places to get medical care?	1. Excellent	18.6%	24.9%***
			2. Very good	30.4	30.9
			3. Good	31.7	29.0
			4. Fair	13.5	10.5
			5. Poor	5.8	4.6
	Preventative Care	Q4_Is there a place you usually go when you're sick or need advice about your health?	1. I have a place I usually go	55.9%	57.3%*
			2. I have more than one place I usually go	16.0	19.2
			3. Do NOT have place I usually go.	28.0	23.4
		Q5_ how long has it been since you last visited a doctor or other health care provider for a routine checkup?[1]	1. Within last year	66.8%	0.5%***
			2. One plus years ago	29.3	27.5
			3. Never	3.8	1.9
		Q6_A_ Did you have trouble finding a doctor or other health care provider who would see you? [2]	1. Did not need care	12.4%	11.8%***
			2. No	78.7	83.8
			3. Yes	8.8	4.3
		Q6_B Were you told by a doctor's office or clinic that they would not accept you as a new patient?	1. Did not need care	14.0%	13.2%***
			2. No	76.5	82.3
			3. Yes	9.5	4.5
		Q6_C_ Were you told by a doctor's office or clinic that they do not accept your health care coverage?	1. Did not need care	13.2%	12.6%***
			2. No	72.1	80.9
			3. Yes	14.7	6.5
		Q6_D_ Did you have trouble getting an appointment at a doctor's office or clinic as soon as you thought	1. Did not need care	14.1%	12.8%***
			2. No	72.0	75.1
			3. Yes	13.8	12.1

	you needed one?			
	Index of Access to Healthcare[3]	Mean (s) Min-Max	6.37(1.8) 3-14	5.86(1.7) 3-14

*** p<=.001; * p<=.05.

1. A routine checkup is a general physical exam, not an exam for a specific injury, illness, or condition;
2. In answering the q6_A-D, please think about your experiences obtaining health care in the past 12 months, that is, since September 2014;
3. Index of Access to Health Care: Q1+Q18A+Q2+Q3;

As seen in Table 1.B, ACA insurees not only had poorer health outcomes, but also less access to care (Access to Health care Index Mean of 6.37; range of 3-14) than non-ACA respondents (mean of 5.86 on a range of 3-14). Majority of ACA covered participants rated the availability of health care as good (31.7%) whereas most non-ACA participants found their neighborhoods to have very good care available (30.9%). The non-ACA group (57.3%) also were more likely to have a consistent place of care accessible than the ACA insured (55.9%). ACA insured people did not need care at higher rates than the Non-ACA group; however, when care was needed, ACA participants (8.8%) had more trouble finding a doctor or health care provider who would see them.

Health Care Costs

Cost of care is also an important dimension in promoting and maintaining health behavior. If your insurance does not subsidize a substantial portion of expensive services or if you are simply unable to cover co-payments nor prescribed medication, then there are negative implications on health. Cost burdens associated with healthcare services are potential threats to one's health.

ACA respondents (Table 1.C), in contrast to non-ACA insurees, generally found it more expensive to purchase prescription drugs (18.1% vs. 9.8%), to see a general doctor (16.9% vs. 9.6%), a specialist (19.3% vs. 10.1%), to get medical tests (31.2% vs. 18.4%), dental care (13.4% vs. 5.2%), mental health care (7.0% vs. 2.32%), medical care (19.0% vs. 9.2%) and drug/alcohol treatment (24.2% vs. 15.2%). They (ACA insurees) also found they had more trouble paying medical bills (24.2% vs. 15.2%) especially over time (27.6% vs. 22.6%). Overall, ACA insured participants incurred more costs (Health care costs Index Mean=19 on range of 1-24) than non-ACA respondents (Health Care Cost mean=17.3; range of 1-24).

Table 1. C. Health Care Costs: ACA vs. Non-ACA
2014 Health Reform Monitoring Survey

Concepts	Dimensions	Indicators	Values and Responses	Statistics ACA (n=824)	Non-ACA (n=6851)
Health Care Costs	Uncovered costs: In the past 12 months of Survey:	Q16B_ about how much have you and your family spent out-of- pocket for health care costs that were not covered by your health insurance or health coverage plan	1. Less than $500	47.3%	38.9%
			2. $500 to $999	17.5	22.3
			3. $1,000 to $1,499	13.0	12.0
			4. $1,500 to $1,999	8.3	6.9
			5. $2,000 to $2,999	5.1	7.8
			6. $3,000 to $3,999	2.9	4.5
			7. $4,000 to $4,999	1.6	2.8
			8. $5,000 to $5,999	1.0	2.1
			9. $6,000 to $6,999	0.6	0.5
			10. $7,000 to $7,999	0.6	0.7
			11. $8,000 to $8,999	0.0	0.2
			12. $9,000 to $9,999	0.0	0.2
			13. $10,000 or more	2.2	1.1
	Inability to Pay: In the past 12 months,	Q13: unable to pay any medical bills?[1]	1. No	75.8%	84.8%*
			2. Yes	24.2	15.2
		Q12[2] needed but didn't get it because you couldn't afford:	1. No	87.1%	77.0%
			2. Yes	12.9	23.0
		Q12_1_Prescription Drugs	1. No	81.9%	90.2%***
			2. Yes	18.1	9.8
		Q12_2_ Medical Care	1. No	81.0%	90.8%***
			2. Yes	19.0	9.2
		Q12_3_ To see a general doctor	1. No	83.1%	90.%***
			2. Yes	16.9	9.6
		Q12_4_To see a specialist[3]	1. No	80.7%	89.9%***
			2. Yes	19.3	10.1
		Q12_5_ To get medical tests, treatment, or follow-up care	1. No	68.8%	81.6%***
			2. Yes	31.2	18.4
		Q12_6_ Dental care	1. No	86.6%	98.4%***
			2. Yes	13.4	5.2
		Q12_7_Mental health care or counseling	1. No	93.0%	97.7%***
			2. Yes	7.0	2.32
		Q12_8_ Treatment or counseling for alcohol or drug use	1. No	75.8%	84.8%***
			2. Yes	24.2	15.2
		Q13a_Do you or anyone in your family currently have any medical bills being paid off over time?[4]	1. No	72.4%	77.4%***
			2. Yes	27.6	22.6
		Index of Health Care Costs[5]	Mean (s)	19.0	17.3
			Min-Max	1-24	1-24

*** p<=.001; * p<=.05.

[1] For this question, think about your health care experiences over the past 12 months, that is Did you or anyone in your family have problems paying or were Include bills for doctors, dentists, hospitals, therapists, medication, equipment, nursing home, or home care. For this study, we're interested in your immediate family, which would include you, your spouse (if applicable), and any children or stepchildren under 19 who are living with you;
[2] Thinking about your health care experiences over the past 12 months, was there any time when you needed any of the following but didn't get it because you couldn't afford it?,..;
[3] A specialist is a doctor who focuses on a particular class of patients (such as children) or on a specific Disease (such as heart disease) or on a particular technique (such as surgery);
[4] This could include medical bills being paid off with a credit card, through personal loans, or bill 7 paying arrangements with hospitals, physicians, or other health care providers. The bills can be from earlier years as well as this year;
[5] Index of Health Care Costs: Q16B+Q12_1_Dummy+Q12_2_Dummy+ Q12_3_Dummy + Q12_4_Dummy + Q12_5_Dummy+Q12_6_Dummy+Q12_7_Dummy + Q12_8_Dummy + Q13_Dummy + Q13A_Dummy.

Knowledge Level

Basic comprehension of how healthcare insurance works could also affect health outcomes. Inability to understand the terminology involved in coverage can influence choosing the correct plan for you. This is especially important when costs are involved. Subsidized marketplace plans are available in order to efficiently reach every single American with affordable coverage options. If plans are misinterpreted, this extension could potentially do more harm than good by negatively affecting health outcomes.

Non-ACA insured participants were more likely to understand the following terms than ACA covered participants: premiums (49.7%), deductibles (51.9%), co-payments (54.2%), co-insurance (32.4%), maximum annual out-of-pocket spending (42.6), provider network (46.7%), and covered services (43.5%). On the other hand, those insured under the ACA had higher knowledge levels (15.7%) about subsidies for premiums and out-of-pocket health care costs in the health insurance marketplaces. On balance, ACA and Non-ACA participants were even in their knowledge of relevant aspects of their insurance plans (Index of Knowledge Mean for ACA and Non-ACA was 29 and 29.58 on a range of 14-56).

Table 1. D. Knowledge Level: ACA vs. Non-ACA
2014 Health Reform Mentoring Survey

Concepts	Dimensions	Indicators	Values and Responses (n)	Statistics ACA (778)	Statistics NonACA (6807)
Knowledge Level	General insurance knowledge level: How well do you understand:	TQ7A_ what the term premium means for health insurance coverage	1. Very Confident	40.5%	49.7%***
			2. Somewhat confident	33.4	30.4
			3. Not too confident	18.0	13.8
			4. Not confident at all	8.1	6.1
		TQ7B_ the term deductible?	1. Very Confident	41.2%	51.9%***
			2. Somewhat confident	35.1	32.7
			3. Not too confident	17.1	10.6
			4. Not confident at all	6.6	4.8
		TQ7C_ the term Co-payments?	1. Very Confident		
			2. Somewhat confident	42.7%	54.2%***
			3. Not too confident	35.7	31.5
			4. Not confident at all	15.6	9.9
		TQ7D_ the term Co-insurance?	1. Very Confident	6.0	4.5
			2. Somewhat confident	24.5%	32.4%***
			3. Not too confident	31.7	32.5
			4. Not confident at all	29.5	25.5
		TQ7E_ the term maximum annual out-of-pocket spending?	1. Very Confident	14.3	9.5
			2. Somewhat confident	31.9%	42.6%***
			3. Not too confident	36.6	34.2
			4. Not confident at all	20.9	16.5
				10.6	6.7
		TQ7F_ the term provider network?	1. Very Confident	37.1%	46.7%***
			2. Somewhat confident	36.6	33.9
			3. Not too confident	17.1	13.4
			4. Not confident at all	9.2	6.0
		TQ7G_ the term covered services?	1. Very Confident	34.8%	43.5%***
			2. Somewhat confident	36.4	36.4
			3. Not too confident	20.2	14.6
			4. Not confident at all	8.6	5.5
		TQ19A[1]_ Subsidies	1. A lot	15.7%	8.1%***
			2. Some	32.2	24.9
			3. Only a little	21.7	25.3
			4. Nothing at all	30.4	41.7

ACA marketplace Knowledge: How well do you know how to figure out how to:	TQ7a_A_ find a doctor or other health provider who is in your health plan's network?	1.	Very Confident	43.9%	54.8%***
		2.	Somewhat confident	38.4	35.2
		3.	Not too confident	14.2	7.2
		4.	Not confident at all	3.5	2.8
	TQ7a_B_ whether a service is covered by your plan?	1.	Very Confident	31.6%	36.7%***
		2.	Somewhat confident	40.8	42.2
		3.	Not too confident	22.3	16.7
		4.	Not confident at all	5.4	4.3
	TQ7a_C_which prescription drugs are covered by your plan?	1.	Very Confident	30.8%	35.3%***
		2.	Somewhat confident	40.6	41.3
		3.	Not too confident	23.1	18.3
		4.	Not confident at all	5.5	5.1
	TQ7a_D_how much a health care visit or service will cost you	1.	Very Confident	30.6%	33.2%***
		2.	Somewhat confident	39.0	37.8
		3.	Not too confident	22.2	20.9
		4.	Not confident at all	8.2	8.1
	TQ7a_E_ how much it will cost to visit a health care provider or use a service that is not in your health plan's network?	1.	Very Confident	25.2%	26.3%***
		2.	Somewhat confident	34.8	33.8
		3.	Not too confident	27.5	27.6
		4.	Not confident at all	12.5	12.2
	TQ7a_F_ what counts as preventive care services under plan?	1.	Very Confident	25.9%	31.4%***
		2.	Somewhat confident	39.4	39.8
		3.	Not too confident	26.4	22.3
		4.	Not confident at all	8.2	6.5
	Index of Knowledge Level[1]	Mean (s)		29.58(9.66)	29(9.8)
		Min-Max		14-56	14-56

*** p<=.001; * p<=.05.

[1] Index_ACAKnowledge=TQ7_A + TQ7_B + TQ7_C + TQ7_D + TQ7_E + TQ7_F + TQ7_G + TQ7A_A + TQ7A_B + TQ7A_C + TQ7A_D + TQ7A_E + TQ7A_F + TQ19A.

Bivariate Correlational Analyses

Correlations or bivariate analysis were used to compare the preliminary empirical relationship of Health Outcomes (effect) with Healthcare Access, Healthcare Costs, and Knowledge Levels, Pre-existing Conditions, Income, Gender, Employment Status and

Age (Appendix C). The analyses were run separately for ACA and non-ACA members.

As seen in Table 2, the primary driver of health outcomes for both ACA (r=.32***) and non-ACA members (r=.34***) was pre-existing conditions. Those who had pre-existing conditions had worse health outcomes of both groups. As for the potential import of the three components of health care, the more costs (r=.196***), more access (r=.15***), and to a lesser extent, the more knowledge (r=.07***) that non-ACA members incurred or had the poorer their health outcomes were. Similarly, higher health care costs (r=.15***), and to a lesser extent access (.07***) were the only possible predictors of health outcomes of ACA insurees. The robustness of the respective effects of the three aspects of health care on the health outcomes of ACA and non-ACA participants, net of pre-existing conditions, economics, and demographics, was tested using multivariate analyses presented below.

Regression Analyses and Qualitative Insights

To assess the costs to Non-ACA insurees of not participating in the ACA marketplace, separate regression analyses for ACA and non-ACA members were conducted. As seen in Table 3, pre-existing conditions were the strongest predictor of poor health outcomes for both ACA (β=.30***) and Non-ACA (β=.30***) groups. But, the different pathways to avoiding poor health outcomes between the ACA and non-ACA members illustrated the costs of not having ACA coverage. Net of the pre-existing conditions, economics, and age, non-ACA isurees who had better health outcomes were those who did not access much healthcare (β=.07***) and incurred less costs (β=.14***). But for ACA members, perhaps because ACA equalizes access and cost, neither healthcare access nor knowledge made a net difference in their health outcome (betas not significant). The only significant predictor of good health outcomes for the ACA insured participants was lower costs (β=.09*). In other words, ACA insurees had to incur only fewer costs, but not access or knowledge, for their good health outcomes. But, non-ACA insurees had to access less care and incur fewer costs to achieve good health.

That any effective health reform needs to address income inequalities were also evident in the negative effects of income and employment on health. Irrespective of the type of health coverage, those who had more income (ACA β=-.10**; Non-ACA β=-.07***) had better health. Similarly, non-ACA insurees better health outcomes only when they are employed (β=-.11***).

Table 3. Health Outcomes of ACA vs. Non-ACA members: Regression Analysis of the Relative Effects of Healthcare Access, Healthcare Costs, and Knowledge Levels[1]: Beta (β) Coefficients 2014 Health Reform Monitoring Survey

	Beta	
	ACA	**Non-ACA**
A. Insurance Factors		
1. Healthcare Access	.05	0.07***
2. Healthcare Costs	.09*	0.14***
3. Knowledge Level	-.01	0.03
B. Outside Factors		
1. Pre-existing conditions	.30***	0.30***
2. Family's total income	-.10***	-.07***
3. Gender	-.01	-0.03
4. Employment Status	-.06	-.11***
5. Age	.03	0.04**
Model Statistics:		
Constant	15.79***	11.87***
Adjusted R^2	.132	.197
DF 1 & 2	8 & 707	8 & 2899

*** p<=.001; * p<=.05.

1. Index of Health Outcomes: Q1 + Q18A + Q2 + Q3 (Range = 1-74);
Index of Access to Health Care: Q1+Q18A+Q2+Q3 (Range= 1-24);
Index of Health Care Costs: Q12_1_Dummy + Q12_2_Dummy + Q12_3_Dummy + Q12_4_Dummy + Q12_5_Dummy+Q12_6_Dummy+Q12_7_Dummy+Q12_8_Dummy + Q13_Dummy + Q13A_Dummy (Range = 3-14);
Index_ACAKnowledge=TQ7_A + TQ7_B + TQ7_C + TQ7_D + TQ7_E + TQ7_F + TQ7_G + TQ7A_A + TQ7A_B + TQ7A_C + TQ7A_D + TQ7A_E + TQ7A_F + TQ19A (Range =14-56);
Age: Range:(1 = 18-29 ; 2= 30-44; 3= 45-59 ; 4= 60+);
Gender (Ppgender):(1= Female; 2 = Male);
Employment Status (ppwork):(1= Not Working ; 2=Self-Employed/Working);
Pre-exisitng Conditions (Q3A):(1= No; 2= Yes);
Income level (Q14B): (1= Lower Class; 2= Lower Middle Class ; 3= Middle Class ; 4= Upper Class).

CONCLUDING REMARKS: Empirical and Applied Implications

These findings suggested that if one did not have ACA, you need more access to healthcare services in order compensate for pre-existing conditions and to have better health outcomes. More specifically, it was primarily in the non-ACA market that access to care and costs differentiated the healthy from the not-so-healthy. For example, Howard, a self-employed diabetic, found it harder to access insurance and services provided with an incurable disease. In fact, Harold has to participate in trials studies on diabetes in order to get the necessary services to live (Healthcare.gov 2013). Since it costs more to maintain health in the private market than in the ACA market, pre-existing

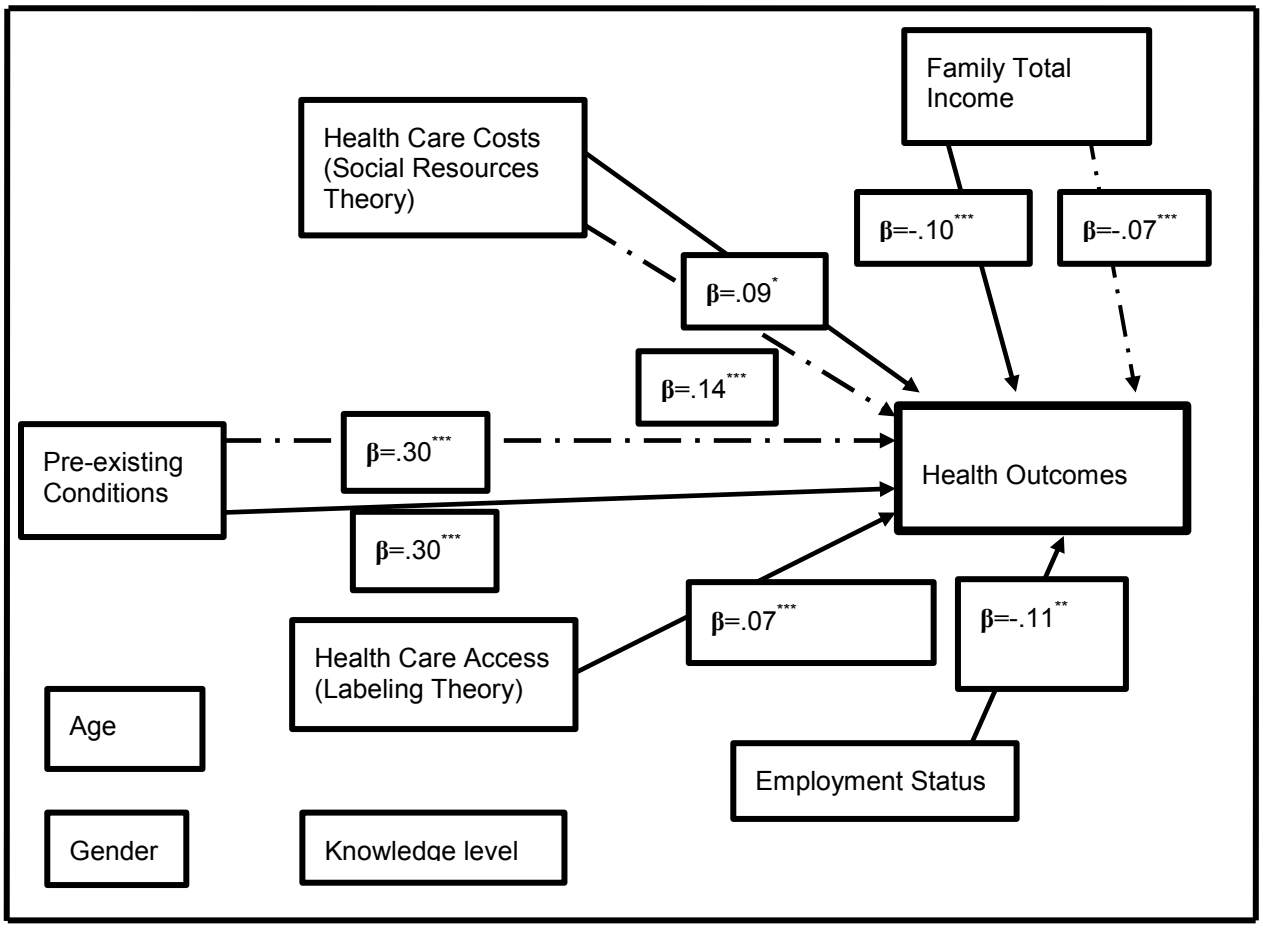
conditions are more of a burden on the privately insured. More affordable health plans available in a subsidized ACA marketplace renders access less relevant.

The bottom line is that, in both high and low deductible private (non-ACA) plans the patient ends up paying higher premiums than ACA-sponsored insurance plans. It stands to reason, as noted by Interviewee #1, a senior program health specialist at a local hospital network, there is a delay of care in care and worsening health when faced with high costs. The affordable care act opened up insurance options for those who considered themselves “low acuity”, or healthy enough not to need consistent care. However, as Interviewee #1 explained, individuals who did not purchase insurance because they thought they could self-maintain their health, often suffered from chronic pre-existing conditions like diabetes, a symptomless disease and ended up incurring more costs.

Theoretical Implications

The essential relationship between health services and good health outcomes outlined in this paper was analyzed using Parson’s Structural Functionalism framework (see Figure 1). That it was only primarily in the non-ACA market that access to care and costs differentiated the healthy from the not-so-healthy pointed to the need for ACA-type universal health care access. The Social Resources Theory also helped contextualize the relationship between high cost of care and health outcomes for non-ACA and ACA participants. As suggested by the theory, those with more resources could afford and access private insurance in the Non-ACA market and thereby increase the likelihood of addressing their health care challenges and ultimately maintain better health. The subsidized prices (supplemented resources) provided with ACA insurance can have similar effects on health outcomes. Finally, as predicted using Labeling Theory, pre-existing conditions was the prime driver of poor health outcomes in both ACA and Non-ACA markets and underscored the need for the types of waivers available in the ACA markets.

FIGURE 1
Theoretical and Empirical Model of the Relative Effects of Cost, Access and Knowledge Level, on Health outcomes, net of Pre-existing Conditions, Family Total Income, Age, Employment Status and Gender (Beta Coefficients)
Health Mentoring Survey 2014



[2] Refer to Table 3 for index coding
*** p<=.001; * p<=.05.

Limitations and Suggestions for Future Research

A full evaluation of the costs of not having ACA insurance was limited because participants were surveyed at the beginning of the open-enrollment period, before they were able to use the plan they were purchasing for the year. Since this study was conducted in 2014, at the beginning of the enrollment period, Interviewee #2 (a Senior Program Specialist) hinted that it might have been too premature to evaluate access to services and their connections to health outcomes. Interviewee #1 (the Senior Program Specialist) also noted that those who were not insured until the individual mandate

kicked in, might have not perceived they had an access problem because they originally did not go to the doctor. So, to a once non-health care user any care might seem "good" which could also have skewed the results. In addition, Interviewee #2 (Senior Director, State Policy & Strategy) noted that future researchers need to control for geographical differences in health outcomes. Not all states carried out the same method in introducing the marketplace exchange plans. In fact, some states limited standardized plans and emphasized consumer choice while others adopted formal mechanisms to foster competitive marketplaces (Dash, Lucia, Monahan, and Keith 2013).

APPENDICES

Appendix A

Concepts	Indicators	Values and Responses	Percentages ACA	Percentages Non ACA
Age	Ppagect4	1. 18-29	23.9%	17.7%
		2. 30-44	24.8	28.4
		3. 45-59	34.0	38.7
		4. 60+	17.3	15.3
Gender	Ppgender	1. Female	54.1%	48.9%
		2. Male	45.9	51.1
Employment Status	Ppwork	1. Not Working	40.6%	28.2%
		2. Working/self-employed	59.4	71.8%
Pre-existing conditions	Q3A_ Do you have a physical or mental condition, impairment, or disability that affects your daily activities OR that requires you to use special equipment or devices, such as a wheelchair, TDD or communication device?	1. No	88.4%	90.3%
		2. Yes	11.6	9.7
Family Income	Q14B_ Please mark your family's income level based on category.	1. Low class	40.3%	16.9%
		2. lower middle class	30.5	17.3
		3. Middle class	15.7	20.4
		4. Upper class	13.4	45.4

Appendix B
Letter of Consent

Dear Interviewee,

I am a Sociology Senior working on my Research Capstone Paper under the direction of Professor Marilyn Fernandez in the Department of Sociology at Santa Clara University. I am conducting my research on health outcomes for those insured through the Affordable Care Act compared to those who aren't in terms of knowledge of, access to, and costs of health care. I will investigate if there's a cost for not being covered by the ACA health insurance and if this advantage can be measured by health outcomes.

You were selected for this interview because of your knowledge of and experience working in the health policy arena, particularly with the ACA.

I am requesting your participation, which will involve responding to questions about parent participation and access to funding. This will last about 20 minutes. Your participation in this study is voluntary. You have the right to choose to not participate or to withdraw from the interview at any time. The results of the research study may be presented at SCU's Annual Anthropology/Sociology Undergraduate Research Conference and published (in a Sociology department publication). Pseudonyms will be used in lieu of your name and the name of your organization in the written paper. You will also not be asked (nor recorded) questions about your specific characteristics, such as age, race, sex, religion.

If you have any questions concerning the research study, please contact me at ___ or Dr. Fernandez at mfernandez@scu.edu

Sincerely,
Deja Webster

By signing below you are giving consent to participate in the above study. (If the interviewee was contacted by email or phone, request an electronic message denoting consent).

_____ _____ _____

Signature: Printed Name: Date

Interview Schedule

Interview Date and Time:_____

1. What is the type of Agency/Organization/Institution where you work with this issue?
2. How long have you been working here and what is the name of your position (formal title)?
3. Based on what you know about the Affordable Care Act, how well has it:
    a. mediated the costs of health services?
    b. affected accessibility of health services?
    c. been marketed to the general public?
4. In your opinion, which is the better option: Privately purchased insurance or ACA mandated insurance?
5. Why might it cost most to maintain good health for non-ACA insured participants?
6. Is there anything else you think I should take into consideration in the relationship between insurance coverage and health?
    a. What further research would enhance the study?

Appendix C

Table 2

Correlation Matrix: Indices of Health Outcomes, Healthcare Access, Healthcare Costs, Knowledge Level, Age, Education Level, Gender, Employment Status, Pre-existing Conditions and Income level[1,2]

2014 Health Reform Monitoring Survey

	A	B	C	D	E	F	G	H	I
A. Index of Healthcare Outcomes	1.0	.15*** (5803)	.198*** (5736)	.07*** (3104)	.04** (5853)	-.09*** (5853)	-.22*** (5853)	.34*** (5829)	-.23*** (5749)
B. Index of Healthcare Access	.07* (905)	1.0	.22*** (5765)	.24*** (3118)	-.07*** (5884)	-.07*** (5884)	-.08*** (5884)	.09*** (5858)	-.20*** (5775)
C. Index of Healthcare Costs	.15*** (895)	.17*** (900)	1.0	.11*** (3079)	-.03* (5815)	-.06*** (5815)	-.07*** (5815)	.14*** (5791)	-.24*** (5710)
D. Index of Knowledge Level	.01 (762)	.17*** (767)	.12*** (759)	1.0	-.17*** (3148)	-.03 (3148)	-.06*** (3148)	-.02 (3135)	-.18*** (3052)
E. Age	.03 (921)	-.03 (925)	-.07* (915)	-.09*** (778)	1.0	-.05*** (5938)	-.001 (5938)	.10*** (5911)	.12*** (5825)
F. Gender	-.05 (921)	-.03 (925)	-.01 (915)	-.01 (778)	-.08** (942)	1.0	.16*** (5938)	-.03 (5911)	.10*** (5825)
G. Employment Status	-.14*** (921)	-.03 (925)	-.03 (915)	-.003* (778)	-.07** (942)	.10** (942)	1.0	-.26*** (5911)	.36*** (825)
H. Pre-existing Conditions	.32*** (918)	.06 (922)	.14*** (912)	-.05 (776)	.05 (939)	.01 (939)	-.19*** (939)	1.0	-.190*** (5799)
I. Income level	-.15*** (900)	-.18** (901)	-.08** (891)	-.05 (759)	07* (917)	.07* (917)	20*** (917)	-.09** (917)	1.0

1. Correlations above the diagonal of 1.0 are for non-ACA; Below the diagonal = ACA;
2. *Index of Health Outcomes*: Q1 + Q18A + Q2 + Q3 (Range =1-74);
   Index of Access to Health Care: Q1+Q18A+Q2+Q3 (Range = 1-24);
   Index of Health Care Costs: Q12_1_Dummy + Q12_2_Dummy + Q12_3_Dummy + Q12_4_Dummy + Q12_5_Dummy + Q12_6_Dummy + Q12_7_Dummy + Q12_8_Dummy + Q13_Dummy + Q13A_Dummy (Range = 3-14);
   Index_ACAKnowledge=TQ7_A + TQ7_B + TQ7_C + TQ7_D + TQ7_E + TQ7_F + TQ7_G + TQ7A_A + TQ7A_B + TQ7A_C + TQ7A_D + TQ7A_E + TQ7A_F + TQ19A (Range = 14-56)
   Age: Ppagect4 (1= 18-24; 2= 30-44 ; 3= 45-59 ; 4= 60+);
   Gender: Ppgender (1= Female; 2= Male);
   Employment Status: ppwork (1 =Not Working ; 2 =Self-employed/ Working)
   Pre-exisitng Conditions: Q3A (1 = No ; 2= Yes);
   Income level: Q14B (1 = Low Class; 2= Lower Middle Class; 3= Middle Class; 4=Upper Class)
   *** p<=.001; * p<=.05.

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