Early Effects of the ACA on Women's Health Measures

Lois K. Lee, MD, MPH[1,2], Michael C. Monuteaux, ScD[1], and Wendy Everett, ScD[2]

[1]Division of Emergency Medicine , Boston Children's Hospital, Boston, MA, USA; [2]Network for Excellence in Health Innovation, Cambridge, MA, USA.

KEY WORDS: affordability; Affordable Care Act; insurance coverage.

Abbreviations

ACA	Affordable Care Act
CI	Confidence interval
ER	Emergency room
FPL	Federal poverty level
NCHS	National Center for Health Statistics
NHIS	National Health Interview Survey
U.S.	United States

J Gen Intern Med 33(12):2034–6
DOI: 10.1007/s11606-018-4598-0
© Society of General Internal Medicine 2018

INTRODUCTION

Women had challenges obtaining health insurance and accessing health care in the decade prior to passage of the Affordable Care Act (ACA). Low-income women were at increased risk of being uninsured (40%) compared to higher income women (5%). Uninsured women reported that health costs were a substantial barrier to receiving care, resulting in going without or delaying care.[1] Since women have had unique challenges in obtaining health insurance and affording medical care, we hypothesized that the ACA would have differential effects on women of different income groups, with larger effects in lower-income women. The objectives of this study are to analyze the effects of the ACA on health insurance coverage and affordability of medical care for women by income level.

METHODS

We used the difference-in-differences design to compare changes for two outcomes: health insurance coverage and health care affordability, by family income. We used data for women 19–64 years old from the National Health Interview Survey (NHIS). This is a nationally representative, annual, in-person survey conducted by the National Center for Health Statistics (NCHS).[2] Income was categorized into three groups: ≤138% of the federal poverty level (FPL) (eligible for Medicaid in expansion states), 139–399% FPL (eligible for insurance premium subsidies), and ≥400% FPL. This study was deemed exempt from review by our institutional review board.

All analyses were conducted within the survey design characteristics of NHIS,[2] as implemented in STATA's *svyset* command (Version 14.0, StataCorp, College Station, TX). Differences with 95% confidence intervals (CI) were used to estimate changes for each outcome (pre-ACA 2010–2013 versus post-ACA 2015) within each income group. The difference-in-differences estimate was calculated to compare changes over time between income groups. We estimated a multivariable logistic regression model to test the difference-in-differences effects for uninsured status (adjusting for race, ethnicity, marital status, education status, employment).

RESULTS

The study sample included an estimated 95,610,990 women: 22.2% ≤138% FPL, 39.6% 139–399% FPL, and 38.1% ≥400% FPL. The uninsured rate in 2015 decreased in all income groups (Table 1). The multivariable logistic regression analysis demonstrated a significantly greater decrease in uninsured status in the lowest income group compared to the highest income group (OR 0.78, 95% CI 0.66, 0.92).

To further explore effects of the ACA specifically on uninsured women, we analyzed changes to specific demographic groups, focusing on the low and middle income groups, as the highest income group had a minimal change in insurance status (Table 2). Black women and those living in the south had the highest percentage of uninsured women before the ACA. All women in each demographic group in both income groups demonstrated decreases in being uninsured.

DISCUSSION

After the ACA, women of all income groups experienced increases in private and public insurance coverages and decreases in affordability problems affecting care. Given the challenges that women have had obtaining and affording insurance and medical care, these improvements are an important gain for women after the ACA. Our results are consistent with studies comparing coverage Medicaid expansion states to non-expansion states.[3]

Published online July 27, 2018

Table 1 Changes in Insurance Coverage and Affordability Before (2010–2013) and After (2015) the ACA for Women 19–64 Years

Outcome	U.S. estimate, 2010–2013[a]	Percent difference before versus after ACA (percent change (95% confidence interval))			Difference in percentage-point change between FPL groups
Insurance status		≤138% FPL	139–399% FPL	≥400% FPL	≤138% FPL vs. ≥400% FPL
Private	64.8	4.36 (2.77, 5.95)	3.60 (2.38, 4.83)	1.53 (0.82, 2.23)	2.84 (1.07, 4.60)
Medicare/Medicaid/ Other Public	15.6	9.61 (7.75, 11.47)	4.73 (3.83, 5.63)	0.35 (−0.19, 0.89)	9.26 (7.36, 11.16)
Uninsured	18.7	− 14.5 (− 15.9, − 13.1)	− 8.74 (− 9.63, − 7.85)	− 1.92 (− 2.34, − 1.50)	− 12.59 (− 14.12, − 11.07)
Affordability					
Delayed care	13.0	− 5.93 (− 7.16, − 4.71)	− 3.44 (− 4.28, − 2.60)	− 1.57 (− 2.09, − 1.04)	− 4.37 (− 5.73, − 3.00)
Did not get care	9.9	− 5.04 (− 6.25, − 3.83)	− 3.05 (− 3.76, − 2.34)	− 1.09 (− 1.46, − 0.71)	− 3.95 (− 5.24, − 2.66)
Problems paying medical bills[b]	20.6	− 5.64 (− 7.42, − 3.86)	− 4.36 (− 5.56, − 3.17)	− 1.07 (− 1.82, − 0.31)	− 4.57 (− 6.49, − 2.64)

[a]*U.S. women 19–64 years old*
[b]*Only collected from 2011 to 2015*

The primary reason women have reported that they do not have health insurance is cost.[1] Starting from a baseline of 18.9% in 2013, the proportion of uninsured women decreased to 9.5% in 2016.[3] This improvement is thought to be due to the increased options of affordable insurance for low and modest-income women.[1] Our results demonstrating decreased affordability problems are consistent with previous research showing that the proportion of women reporting problems paying medical bills has diminished since the ACA; however, cost-related problems in paying for medical care are still high.[4]

Our study has several limitations. The study used data from health interview surveys, so there is potential for recall or responder bias. We measured changes associated with the implementation of the ACA, but did not explore any differences by state.

Our study demonstrated improved insurance coverage and reported affordability of medical care since the ACA. Although these gains are encouraging, there continue to be threats to equitable health care for women, including for funding of reproductive services.[5] Efforts must continue not

Table 2 Changes in Uninsured Rate After the ACA in 2015 for Women 19–64 Years, by Subgroups

Demographic group	U.S. estimate uninsured, 2010–2013*	Difference in percentage-point change between FPL groups ≤138% FPL	139–399% FPL	Difference in percentage-point change between FPL groups ≤138% FPL vs. 139–399% FPL
Age				
19–34 years	23.6	− 13.78 (− 15.78, − 11.77)	− 9.57 (− 11.08, − 8.06)	− 4.21 (− 6.87, − 1.54)
35–44 years	19.1	− 14.03 (− 17.08, − 10.98)	− 7.16 (− 9.04, − 5.29)	− 6.87 (− 10.44, − 3.30)
45–54 years	16.2	− 17.68, (− 20.53, − 14.84)	− 10.06 (− 11.61, − 8.51)	− 7.62 (− 10.95, − 4.3)
55–64 years	12.8	− 12.88 (− 15.81, − 9.95)	− 7.71 (− 9.42, − 5.99)	− 5.18 (− 8.53, − 1.82)
Race				
White	18.1	− 14.67 (− 16.43, − 12.91)	− 8.20 (− 9.29, − 7.12)	− 6.47 (− 8.57, − 4.36)
Black	21.2	− 13.89 (− 16.35, − 11.44)	− 8.35 (− 10.17, − 6.52)	− 5.55 (− 8.56, − 2.53)
Other	20.6	− 14.21 (− 18.67, − 9.76)	− 14.16 (− 16.64, − 11.68)	− 0.05 (− 5.20, 5.09)
Ethnicity				
Hispanic	15.4	− 15.2 (− 16.79, − 13.61)	− 8.11 (− 9.07, − 7.15)	− 7.09 (− 9.02, − 5.17)
Non-Hispanic	37.4	− 13.47 (− 16.07, − 10.86)	− 14.19 (− 16.42, − 11.96)	0.73 (− 2.99, 4.44)
Region				
Northeast	11.6	− 10.15 (− 13.01, − 7.29)	− 5.89 (− 7.64, − 4.14)	− 4.26 (− 7.40, − 1.13)
Midwest	14.8	− 14.81 (− 18.08, − 11.54)	− 7.06 (− 9.18, − 4.94)	− 7.75 (− 11.39, − 4.10)
South	22.9	− 12.62 (− 14.92, − 10.32)	− 8.76 (− 10.20, − 7.31)	− 3.86 (− 6.81, − 0.92)
West	21.3	− 19.56 (− 22.04, − 17.07)	− 12.96 (− 14.86, − 11.06)	− 6.59 (− 3.12, − 10.07)

**Baseline percentage of uninsured women 19–64 years old, all income groups, 2010–2013*

only to protect women's health rights,[6] but also to support policies to expand insurance coverage and uphold cost-sharing reductions to improve the health of all women.

Corresponding Author: *Lois K. Lee, MD, MPH; Division of Emergency Medicine Boston Children's Hospital, Boston, MA, USA (e-mail: Lois.lee@childrens.harvard.edu).*

Funding Information *Funding for this work was provided by the Network for Excellence in Health Innovation (NEHI).*

Compliance with Ethical Standards:

Conflict of Interest: *The authors declare that they do not have a conflict of interest.*

REFERENCES

1. **Salganicoff A, Ranji U, Beamesderfer A, Jurani N.** Women and health care in the early years of the ACA: Key findings from the 2013 Kaiser Women's Health Survey. *Henry J Kaiser Fam Found*. 2014;(May):Publication #8590. http://kff.org/womens-health-policy/report/women-and-health-care-in-the-early-years-of-the-aca-key-findings-from-the-2013-kaiser-womens-health-survey/.
2. National Center for Health Statistics. National Health Interview Survey, 2015. Public-use data file and documentation. 2016. http://www.cdc.gov/nchs/nhis/quest_data_related_1997_forward.htm.
3. **Sommers BD**, **Gunja MZ**, **Finegold K**, **Musco T.** Changes in Self-reported Insurance Coverage, Access to Care, and Health Under the Affordable Care Act. *JAMA*. 2015;314(4):366. doi:https://doi.org/10.1001/jama.2015.8421.
4. **Gunja MZ, Collins SR, Doty MM.** How the Affordable Care Act Has Helped Women Gain Insurance and Improved Their Ability to Get Health Care Findings from the Commonwealth Fund Biennial Health Insurance Survey, 2016. 2017;(August). http://www.commonwealthfund.org/~/media/files/publications/issue-brief/2017/aug/gunja_women_hlt_coverage_care_biennial.pdf.
5. **Davis JH**, **Haberman M.** Trump Administration to Tie Health Facilities' Funding to Abortion Restrictions. *The New York Times*. https://www.nytimes.com/2018/05/17/us/politics/trump-funding-abortion-restrictions.html. Published May 17, 2018.
6. **Murray SP.** Save Women's Preventive Care Act. Congress.gov; 2017. https://www.congress.gov/bill/115th-congress/senate-bill/1045/text.