

Letters

RESEARCH LETTER

Attitudes About Mandated Coverage of Birth Control Medication and Other Health Benefits in a US National Sample

Access to contraception improves maternal and child health.¹ The Patient Protection and Affordable Care Act (ACA) requires most private health insurance plans to cover contraception without a shared patient cost to improve access. However, debate continues about applying the contraception coverage mandate to public corporations that object on religious grounds^{2,3}; the US Supreme Court is reviewing the ACA's contraceptive coverage requirement. We assessed attitudes about mandated coverage of birth control medications.

Methods | A cross-sectional survey was administered in November 2013. The survey used the online KnowledgePanel (GfK Custom Research North America), a national panel established through probability sampling of the civilian, noninstitutionalized US population (aged ≥18 years). Respondents were asked, “Do you think that all health plans in the United States should be required to include coverage for the following services: birth control medications, preventive services like mammograms and colonoscopies, recommended vaccinations, preventive screening tests for diabetes and high cholesterol, mental health care, and dental/tooth care including dental screenings and tooth problems?” Possible responses included *yes*, *no*, *uncertain*, and *refused to answer*. The response rate was determined using RR1 of the American Association for Public Opinion Research.

Descriptive statistics were calculated for all items. χ^2 Analyses and logistic regression were performed to assess associations between support for birth control medication coverage and demographic factors, applying poststratifica-

tion sampling weights to draw national inferences (2-sided $P < .05$ or 95% CI not including the null was significant). *Support* was defined as answering “yes” and *do not support* as answering “no” or “uncertain.” Statistical analyses were performed with Stata version 13 (StataCorp). The University of Michigan medical institutional review board declared this study exempt.

Results | The response rate was 61% (2124/3504). Respondents were more likely to be white, older, and have higher levels of education and income than nonrespondents. After applying sampling weights, respondents were 54% female; 64% non-Hispanic white, 16% Hispanic, 12% non-Hispanic black, and 8% non-Hispanic other race. Most respondents (69%; 95% CI, 67%-72%) supported a policy of mandated coverage of birth control medication in health plans. This proportion was significantly lower than the proportion that supported other benefits (Table 1). In multivariable regression analysis, support for mandated coverage of birth control medication was significantly higher among women, non-Hispanic blacks, Hispanics, parents with children younger than 18 years living in the home, and adults with private or public insurance vs comparison groups (Table 2), but was not associated with education or income.

Among a small group (7.8%; 95% CI, 6.6%-9.3%) who supported all benefits except birth control medications, there were significantly higher proportions of men (56% vs 41%, $P = .003$), individuals older than 60 years (27% vs 10%, $P < .001$), and individuals without children younger than 18 years living in the home (39% vs 26%, $P = .003$) compared with those who supported all benefits.

Discussion | Overall, 69% of respondents supported mandated coverage of birth control medications in health plans, with significantly higher odds of support among women, black, and

Table 1. Attitudes About Mandated Coverage of Specific Benefits in Health Plans

Do you think that all health plans in the United States should be required to include coverage for the following services?	Respondents, No. (Weighted %) [95% CI] (N = 2124)			
	Yes	No	Uncertain	Refused to Answer
Birth control medications	1452 (69) [67-72]	436 (19) [17-21]	197 (10) [8-11]	39 (2) [2-3]
Preventive services like mammograms and colonoscopies	1805 (85) [83-87] ^a	172 (8) [6-9] ^a	108 (5) [4-6] ^a	39 (2) [2-3]
Recommended vaccinations	1780 (84) [82-86] ^a	183 (8) [7-9] ^a	114 (5) [4-7] ^a	47 (3) [2-4]
Preventive screening tests for diabetes and high cholesterol	1753 (82) [80-84] ^a	194 (9) [7-10] ^a	131 (6) [5-7] ^a	46 (3) [2-4]
Mental health care	1605 (77) [75-79] ^a	254 (11) [9-13] ^a	231 (11) [9-12]	34 (2) [1-3]
Dental/tooth care including dental cleanings and tooth problems	1576 (75) [73-77] ^a	344 (14) [13-16] ^a	169 (8) [7-10] ^b	35 (2) [1-3]

^a Statistically different ($P < .001$) from birth control medications and services in 1 sample test of proportion.

^b Statistically different ($P = .01$) from birth control medications and services in 1 sample test of proportion.

Table 2. Respondent Characteristics Associated With Support of Mandated Coverage of Birth Control Medication in Health Plans

Respondent Characteristic	Support Mandated Coverage of Birth Control Medications, Unweighted No. (Weighted %) (n = 2085) ^a		Odds Ratio (95% CI)	
	Yes	No	Unadjusted Bivariate Analysis	Adjusted Multivariable Logistic Regression ^b
Sex				
Male	589 (64)	367 (36)	1 [Reference]	1 [Reference]
Female	863 (77)	266 (23)	1.86 (1.48-2.35)	1.83 (1.45-2.32)
Age group, y				
18-29	211 (68)	95 (32)	1 [Reference]	Not included
30-44	657 (74)	257 (26)	1.38 (0.98-1.96)	
45-59	462 (71)	209 (29)	1.16 (0.81-1.66)	
≥60	122 (62)	72 (38)	0.79 (0.51-1.24)	
Race/ethnicity^c				
Non-Hispanic white	995 (67)	491 (33)	1 [Reference]	1 [Reference]
Non-Hispanic black	170 (81)	35 (19)	2.02 (1.27-3.21)	1.96 (1.19-3.22)
Non-Hispanic other	114 (72)	47 (28)	1.24 (0.82-1.89)	1.15 (0.76-1.74)
Hispanic	173 (76)	60 (24)	1.57 (1.07-2.29)	1.57 (1.06-2.32)
Educational level				
≤High school	506 (72)	210 (28)	1 [Reference]	Not included
Some college	446 (74)	163 (26)	1.11 (0.83-1.49)	
≥Bachelor's degree	500 (67)	260 (33)	0.79 (0.61-1.04)	
Annual income, \$				
<30 000	306 (72)	127 (28)	1 [Reference]	Not included
30 000-<60 000	369 (71)	150 (29)	0.99 (0.70-1.39)	
60 000-<100 000	390 (73)	165 (27)	1.07 (0.77-1.49)	
≥100 000	387 (68)	191 (32)	0.82 (0.59-1.15)	
Insurance status (n = 2070)				
No insurance	169 (63)	103 (37)	1 [Reference]	1 [Reference]
Private	974 (71)	425 (29)	1.45 (1.04-2.02)	1.58 (1.12-2.24)
Public	302 (77)	97 (23)	1.99 (1.33-3.00)	1.94 (1.28-2.93)
Parenting children aged <18 y				
No	394 (64)	199 (36)	1 [Reference]	1 [Reference]
Yes	1058 (74)	434 (26)	1.57 (1.24-2.01)	1.54 (1.20-1.98)

^a All percentages are weighted to approximate the US population and are calculated on a per-question basis, excluding those who were eligible for each question but did not respond. Respondents who answered "no" or "uncertain" to the survey question were included in "no" column.

^b Included all variables from bivariate screening with $P < .05$. The Hosmer-Lemeshow goodness-of-fit statistic was acceptable for the model ($F_9 = 0.09, P > .20$).

^c Self-identified by respondents when presented with US Census categories for race/ethnicity. Race/ethnicity was a demographic factor of interest because of its known association with contraceptive access.¹

Hispanic respondents. Support for mandated coverage of birth control medication was lower than for other benefits, including services that have prompted public debate (eg, vaccination and mental health services). The small group who supported coverage for services except birth control medication included a higher proportion of persons unlikely to use such coverage.

Findings are potentially limited by lack of information about respondents' political views, voter record, and religiosity; social desirability bias (minimized by an anonymous, online survey); and cross-sectional design that may not capture rapidly evolving opinions. Potential response bias due to differences between respondents and nonrespondents was addressed by post-stratification weighting and minimized by lack of disclosure of survey content at time of invitation to participate.

In this study, the majority of participants supported universal coverage of birth control medications, as well as mandated coverage of several other services. These results are similar to prior polls describing support for the contraceptive coverage mandate among 61% to 66% of US adults.⁴⁻⁶ In this study, women, black, and Hispanic respondents were more likely to support coverage of birth control medication benefits than men, older respondents, and adults without children younger than 18 years. These findings may inform the ongoing national debate around the contraceptive coverage mandate.

Michelle H. Moniz, MD
Matthew M. Davis, MD, MAPP
Tammy Chang, MD, MPH, MS

Author Affiliations: Robert Wood Johnson Foundation Clinical Scholars Program, University of Michigan, Ann Arbor (Moniz); Institute for Healthcare Policy and Innovation, University of Michigan, Ann Arbor (Davis); Department of Family Medicine, University of Michigan, Ann Arbor (Chang).

Corresponding Author: Michelle H. Moniz, MD, Robert Wood Johnson Foundation Clinical Scholars Program, University of Michigan, 2800 Plymouth Rd, Bldg 10 G016, Ann Arbor, MI 48109 (mmoniz@med.umich.edu).

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COMMENT & RESPONSE

Influence of Chronic Kidney Disease on Warfarin Therapy for Atrial Fibrillation

To the Editor Dr Carrero and colleagues¹ evaluated the influence of chronic kidney disease (CKD) on the efficacy and safety of warfarin therapy in a population with atrial fibrillation and recent myocardial infarction. Previous studies have found that warfarin, when added to aspirin or dual antiplatelet therapy, is associated with increased risk of major bleeding.^{2,3} We thus find it surprising that, in this registry-based Swedish investigation, no excess bleeding risk was observed in warfarin users across stages of CKD. Accord-

ingly, the characteristics of the study population deserve careful examination.

Only 21.8% of patients with atrial fibrillation were prescribed warfarin, despite more than 75% of patients having a CHADS₂ score of 2 or higher, perhaps reflecting stringent selection of patients with low overall bleeding risk. The reasons for withholding warfarin were not detailed. Moreover, Scandinavian cohorts typically have a higher prevalence of time in therapeutic range while taking warfarin, perhaps further curtailing bleeding risk, compared with the general population.

Furthermore, rates of percutaneous coronary intervention in this postmyocardial infarction population were low (approximately 30%), despite an incidence of ST-elevation myocardial infarction (STEMI) of roughly 22%. Rates of STEMI and percutaneous coronary intervention were lower in the warfarin cohort, and associated uptake of dual antiplatelet therapy and aspirin monotherapy was also reduced in this group. Thus, relatively few patients (approximately 17%) were discharged taking triple therapy (warfarin plus dual antiplatelet therapy) after myocardial infarction, which may underestimate the overall bleeding risk in patients who were treated with warfarin after a myocardial infarction in this study compared with the general population, despite multivariable modeling.

These data stand in contrast to figures reported in contemporary US-based registries with 60% of patients treated with warfarin admitted for myocardial infarction requiring stenting and being discharged taking triple therapy.⁴

This study informs understanding of the prescribing patterns of warfarin in a relatively low-risk bleeding cohort, but specific ischemic and bleeding outcomes should be interpreted with caution. Limited data were provided regarding anticoagulation strategies in patients at higher risk of bleeding after myocardial infarction, including the large percentage of patients requiring dual antiplatelet therapy by current guidelines.

As the armamentarium of available oral antiplatelet and anticoagulant agents grows, specific testing of this subgroup is required to optimize combination postmyocardial infarction therapies. On balance, major bleeding may be the single most important predictor of subsequent long-term mortality, potentially surpassing risk associated with early recurrent myocardial infarction.⁵ The study by Carrero et al¹ may provide false reassurance that warfarin therapy following myocardial infarction is without significant risk of bleeding.

Muthiah Vaduganathan, MD, MPH
Stephen J. Greene, MD

Author Affiliations: Department of Medicine, Massachusetts General Hospital, Boston (Vaduganathan); Department of Medicine, Northwestern University Feinberg School of Medicine, Chicago, Illinois (Greene).

Corresponding Author: Muthiah Vaduganathan, MD, MPH, Department of Medicine, Massachusetts General Hospital, 55 Fruit St, Boston, MA 02114 (muthu@md.northwestern.edu).

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