

# Religious Hospitals and Primary Care Physicians: Conflicts over Policies for Patient Care

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**BACKGROUND:** Religiously affiliated hospitals provide nearly 20% of US beds, and many prohibit certain end-of-life and reproductive health treatments. Little is known about physician experiences in religious institutions.

**OBJECTIVE:** Assess primary care physicians' experiences and beliefs regarding conflict with religious hospital policies for patient care.

**DESIGN:** Cross-sectional survey.

**PARTICIPANTS:** General internists, family physicians, and general practitioners from the AMA Masterfile.

**MAIN MEASURES:** In a questionnaire mailed in 2007, we asked physicians whether they had worked in a religiously affiliated hospital or practice, whether they had experienced conflict with the institution over religiously based patient care policies and how they believed physicians should respond to such conflicts. We used chi-square and multivariate logistic regression to examine associations between physicians' demographic and religious characteristics and their responses.

**KEY RESULTS:** Of 879 eligible physicians, 446 (51%) responded. In analyses adjusting for survey design, 43% had worked in a religiously affiliated institution. Among these, 19% had experienced conflict over religiously based policies. Most physicians (86%) believed when clinical judgment conflicts with religious hospital policy, physicians should refer patients to another institution. Compared with physicians ages 26–29 years, older physicians were less likely to have experienced conflict with religiously based policies [odds ratio (95% confidence interval) compared with 30–34 years: 0.02 (0.00–0.11); 35–46 years: 0.07 (0.01–0.72); 47–60 years: 0.02 (0.00–0.10)]. Compared with those who never attend religious services, those who do attend were less likely to

have experienced conflict [attend once a month or less: odds ratio 0.06 (0.01–0.29); attend twice a month or more: 0.22 (0.05–0.98)]. Respondents with no religious affiliation were more likely than others to believe doctors should disregard religiously based policies that conflict with clinical judgment (13% vs. 3%;  $p=0.005$ ).

**CONCLUSIONS:** Hospitals and policy-makers may need to balance the competing claims of physician autonomy and religiously based institutional policies.

**KEY WORDS:** religion; conscience; primary care; hospital policy; health policy.

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## INTRODUCTION

Religious hospitals represent approximately 13% of all US community-based hospitals and provide nearly 20% of hospital beds. These facilities receive public funding in the form of Medicare and Medicaid payments and tax-exempt government bonds.<sup>1</sup> Some religious hospitals prohibit physicians who work in their facilities from providing medical interventions that conflict with religious teaching, such as contraception, abortion, and certain end-of-life treatment options.<sup>2</sup> General internists and family physicians provide a significant share of reproductive<sup>3,4</sup> and geriatric care,<sup>5–7</sup> so their beliefs and experiences with religious hospitals may affect many patients seeking these services.

Previous research has examined physician-patient moral conflicts that arise when patients request procedures from physicians who hold moral or religious objections to the requested procedure.<sup>8,9</sup> But as health care is increasingly provided within institutions that constrain professional behavior,<sup>10,11</sup> important questions emerge about physician-institution moral conflicts. When hospital policies limit physician practice based on moral or religious teachings, how do physicians respond or believe they should respond? This problem is described only in case presentations and opinion pieces in the medical literature.<sup>11,12</sup> To our knowledge, no studies have systematically evaluated physician-institution moral conflicts over patient care.

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In December 2008, the United States Department of Health and Human Services issued regulations to strengthen protections for health care providers' rights of conscience.<sup>13</sup> These regulations aimed to protect both religious institutions and individual providers, but they did not address the potential for conflict between the two parties. Spurring further debate, the Obama administration has moved to rescind these regulations, citing concerns about patients' access to family planning and end-of-life services.<sup>14</sup> In recent health reform debates, proposed policies to guarantee hospitals' and individual providers' rights to opt out of providing certain services on moral or religious grounds have again raised controversy.<sup>15</sup> Despite the large number of religiously affiliated hospitals, the importance of potential physician-hospital conflict to current policy debates, and widespread attention to these issues in the lay press,<sup>16,17</sup> little is known about the experiences of physicians working in religiously affiliated health care institutions.

We conducted this study to identify the proportion of primary care physicians who have worked in religiously affiliated hospitals or practices, their rate of conflict over religiously based policies for patient care, and their responses to such conflicts. We examined physician characteristics that have previously been associated with physician response to patient-doctor moral conflict to assess whether these would also predict physicians' experiences and responses to conflict with religious hospitals. In a previous study, Curlin and colleagues asked a representative sample of US physicians how a physician should respond when their patient requests a procedure to which the physician has a religious or moral objection; they found that male physicians, those with higher intrinsic religiosity, and those who attend religious services more frequently are more likely to believe the physician may describe their moral objections and less likely to believe physicians are obligated to disclose all legal options or refer patients for the procedure.<sup>9</sup> We therefore hypothesized that male physicians, those with higher intrinsic religious motivation, and those with greater participation in religious activities would similarly be less likely to experience conflict with religious health care institutions and more likely to believe physicians should comply with religiously based policies.

## METHODS

In 2007 we mailed a confidential, self-administered questionnaire to a stratified random sample of 1,000 general internal medicine, family medicine, or general practice physicians in active practice, age 60 and under, drawn from the American Medical Association Physician Masterfile—a database intended to include all physicians in the US. In order to capture diverse perspectives and adequately represent Muslim, Hindu, and Buddhist physicians (who would otherwise have been too few in number to allow for robust population estimates), we used a technique developed by Lauderdale and Kestenbaum to identify people with South Asian or Arabic surnames.<sup>18,19</sup> We divided the Masterfile into three strata: physicians with South Asian surnames, those with Arabic surnames, and everyone else. We randomly selected 250 members from each of the South Asian and Arabic surname groups and 500 from the other group. Physicians received up to three separate mailings of the questionnaire. The first included a \$5 retail gift card and

the third offered \$30 for participation. This study was approved by the University of Chicago Institutional Review Board.

## Questionnaire

This study was part of a larger survey designed to evaluate associations between physicians' religious characteristics and their clinical practices (questionnaire available online as Appendix). The primary outcome variables for this study were whether physicians had experienced conflict with a hospital or practice over religiously based policies for patient care and physicians' judgments about how such conflicts should be handled. Measures were developed through an iterative process based on the input of expert colleagues and clinicians from a diverse range of medical specialties and religious orientations.

Physicians were asked, "Have you ever taken care of patients in a religiously affiliated hospital or practice?" (Yes/No) Those who answered "Yes" were asked to indicate the religious affiliation of that hospital/practice (Jewish, Roman Catholic, Christian non-Catholic, other) and whether they have "ever had a conflict with that practice/hospital regarding its religiously based policies for patient care?" (Yes/No)

In addition, all physicians were asked, "What should a physician do if he/she believes that a patient needs a medical intervention, and the hospital in which the physician works prohibits that intervention because of its religious affiliation?" Response options were: (1) provide the intervention openly, even if doing so risks the physician's job or hospital privileges, (2) provide the intervention discretely in order to avoid risking the physician's job or hospital privileges, (3) encourage the patient to seek the intervention at another hospital, and (4) recommend another treatment option that is permitted at this hospital. Responses to this item were dichotomized to distinguish those who believe physicians should comply with religiously based hospital policies by referring the patient elsewhere or recommending an alternate treatment and those who believe physicians should provide an intervention despite its prohibition by hospital policy.

Primary predictor variables were physician sex and measures of physicians' religious characteristics. Religious affiliation was categorized as no religion, Hindu, Muslim, Catholic/Orthodox, evangelical Protestant, non-evangelical Protestant, and other religion. Jewish (n=16) and Buddhist (n=5) physicians were included among "other" because of the small number of respondents. Intrinsic religious motivation—the extent to which an individual embraces their religion as the master motive that guides and gives meaning to their life<sup>20</sup>—was measured using seven items (see Appendix, item 7, subparts a, b, c, d, e, f, and h) derived from the Hoge Intrinsic Religious Motivation Scale<sup>21</sup>. Responses, which ranged from 1 (strongly agree) to 4 (strongly disagree), were averaged to create a scale with high internal reliability (Cronbach alpha=0.94) from which we created an ordered three-category (high, medium, low) variable. Participatory religiosity was measured as frequency of attendance at religious services and was categorized as never, once a month or less, or twice a month or more. Finally, physicians were asked to what extent they consider themselves a spiritual person and to what extent a religious person. Responses, ranging from 1 (very) to 4 (not at all), were dichotomized, and respondents were classified as religious, spiritual not religious, or neither. These

variables and response groupings were derived from prior research designed to develop valid measures of physician religious characteristics.<sup>9,22</sup>

Additional predictors were physicians' age, US Census geographic region (Northeast, Midwest, South, West, or Puerto Rico), specialty (Internal Medicine, Family Medicine, or General Practice), and immigration history (born in the US, immigrated to the US as a child, or immigrated to the US as an adult).

## Statistical Analysis

In order to make estimates for the national population of primary care physicians, we adjusted statistically for the stratified sample design and different non-response rates across groups.<sup>23</sup> We first calculated a sample weight that accounted for the unequal selection probabilities within the three sample strata (South Asian surname, Arabic surname, and everyone else); we then calculated a weight taking into account non-response rates by physician sex, geographic region, and specialty. A final weight was calculated by multiplying the stratification and non-response weights together. This was used to generate adjusted population estimates for each of the outcome measures.

We created a predictor variable to test for the relationship between physician-institution religious congruence and reported experience of conflict. Physicians who reported working in a religious hospital or practice of the same religious denomination as their own personal religious affiliation were considered congruent; those who worked in a religious hospital or practice of one denomination and identified with any other religious affiliation (or none) were considered incongruent.

We used the chi-square test and multivariate logistic regression to examine associations between each predictor and each outcome measure. All analyses were conducted with Stata SE v10 statistical software (College Station, TX).

## RESULTS

Approximately 12% of the questionnaires were returned undeliverable. From the remaining sample, the response rate was 51% (446/879). Response rates varied among the three samples: 55% (246 respondents/450 eligible) of the general sample responded, 49% (104/212) of those with South Asian surnames responded, and 44% (96/217) of those with Arabic surnames responded. There was no significant variation in response rate by gender, geographic region, or specialty. Respondent characteristics are shown in Table 1. Counts vary slightly due to item non-response; missing data were excluded from analysis.

Many respondents (n=177) reported having taken care of patients in a religiously affiliated institution (40% of unadjusted sample; 43% adjusting for sampling design). Further percentages presented here are survey design-adjusted in order to present population estimates. When asked the religious affiliation of the hospital or practice, 115 (design-adjusted percentage, 31%) indicated Roman Catholic, 49 (10%) Christian, non-Catholic, and 18 (3%) Jewish. Among doctors who reported working in religiously affiliated institutions, approximately one in five (19%, n=33) had experienced a

Table 1. Demographics of Survey Respondents (n=446)

Respondent characteristics	n (%)
Sex	
Female	176 (39)
Race	
Asian	191 (44)
Black or African-American	18 (4)
Hispanic or Latino	23 (5)
White or Caucasian	192 (44)
Other	13 (3)
Age	
26–29	107 (24)
30–34	119 (27)
35–46	112 (25)
47–60	108 (24)
Immigration history	
Born in the US	216 (50)
Immigrated to US as a child or adult	217 (50)
Specialty	
Family Medicine or General Practice	118 (26)
Internal Medicine	328 (74)
Region	
South	125 (28)
Midwest	110 (25)
Northeast	129 (29)
West	72 (16)
Puerto Rico	10 (2)
Religious affiliation	
No religion	50 (11)
Hindu	93 (21)
Muslim	76 (17)
Catholic/Orthodox <sup>a</sup>	94 (21)
Protestant, evangelical	26 (6)
Protestant, non-evangelical	71 (16)
Other religion <sup>b</sup>	35 (8)
Intrinsic religious motivation	
Low	153 (35)
Medium	120 (27)
High	170 (38)
Attendance at religious services	
Never	53 (12)
Once a month or less	244 (55)
Twice a month or more	147 (33)
Religious/Spiritual	
Neither	94 (21)
Spiritual not religious	101 (23)
Religious	248 (56)

<sup>a</sup>Includes Roman Catholic (n=83) and Orthodox (n=11)

<sup>b</sup>Includes Buddhist (n=5), Jewish (n=16), and other religions (n=14)

conflict with the institution's religiously based patient care policies. The vast majority (86%, n=365) of physicians indicated that when such conflicts arise doctors should encourage patients to seek the recommended intervention at a hospital where the intervention is not prohibited. Fewer (10%, n=49) endorsed recommending another treatment option that is permitted at the religiously affiliated institution, and only 4% (n=23) endorsed providing the prohibited intervention (either openly or discretely) in violation of hospital policy.

Table 2 shows the likelihood of having worked in a religiously affiliated hospital or practice by physician characteristics. Women and men had similar likelihood of working in a religiously affiliated institution. Religious affiliation was not significantly associated with having worked in a religious hospital. Doctors with high intrinsic religious motivation were more likely to report having worked in a religiously affiliated institution (82/170, design-adjusted percentage 52%) com-

**Table 2. Prevalence of Physicians' Having Worked in a Religious Institution<sup>a</sup>**

Respondent Characteristics (no. responding to item <sup>b</sup> )	Have worked in a religiously affiliated practice or hospital (no. responding "yes" <sup>b</sup> )		
	Bivariate		Multivariate
	n(%)	p( $\chi^2$ )	OR (95% CI) <sup>c</sup>
Sex <sup>d</sup>			
Female (173)	70 (45)	0.72	1.0 referent
Male (265)	107 (43)		0.9 (0.5–1.4)
Age <sup>d</sup>			
26–29 (106)	35 (34)	0.29	1.0 referent
30–34 (116)	46 (41)		1.6 (0.8–3.2)
35–46 (110)	47 (49)		1.9 (0.9–4.1)
47–60 (106)	49 (46)		1.3 (0.6–3.1)
Geographic region <sup>d</sup>			
South (121)	46 (45)	0.37	1.0 referent
Midwest (109)	55 (51)		1.2 (0.6–2.3)
Northeast (127)	49 (41)		0.6 (0.3–1.3)
West (71)	24 (36)		0.6 (0.3–1.2)
Puerto Rico (10)	3 (28)		0.5(0.1–2.3)
Religious affiliation <sup>e</sup>			
No religion (49)	20 (47)	0.69	1.0 referent
Hindu (90)	31 (44)		1.0 (0.4–2.5)
Muslim (75)	24 (33)		0.5 (0.2–1.4)
Catholic/Orthodox (93)	48 (49)		1.0 (0.5–2.3)
Protestant, evangelical (26)	13 (48)		1.0 (0.3–2.8)
Protestant, non-evangelical (70)	27 (38)		0.5 (0.2–1.2)
Other religion (35)	14 (38)		0.6 (0.2–1.8)
Intrinsic religious motivation <sup>e</sup>			
Low (151)	53 (40)	0.03	1.0 referent
Medium (115)	41 (34)		0.7 (0.4–1.4)
High (170)	82 (52)		1.6 (0.9–2.9)
Attendance at religious services <sup>e</sup>			
Never (50)	17 (42)	0.006	1.0 referent
≤Once a month (239)	83 (35)		0.8 (0.4–1.7)
≥Twice a month (147)	76 (55)		1.6 (0.7–3.7)

<sup>a</sup>Percentages reflect survey-design-adjusted estimates. Example interpretation: after adjusting for survey design, 43% of male physicians ( $n = 107$ ) report having worked in a religiously affiliated hospital or practice. In multivariate analysis, men have 0.9 times (95% confidence interval=0.5–1.4) the odds of having worked in a religious practice or hospital compared to women

<sup>b</sup> See Appendix, question 23

<sup>c</sup>Odds ratio (95% confidence interval) for odds of answering "yes"

<sup>d</sup>Multivariate model controls for specialty, demographics (age, geographic region, immigration history), and religious characteristics (religious affiliation, intrinsic religious motivation, attendance at religious services, and identification as religious/spiritual)

<sup>e</sup>Multivariate model controls for specialty and demographics

pared to those with medium (41/115, 34%) or low (53/151, 40%) intrinsic religious motivation ( $p=0.03$ ). Similarly, those who reported attending religious services at least twice a month were more likely to report having worked in a religious hospital (76/147, 55%) than those attending services once a month or less (83/239, 35%) or never (17/50, 42%,  $p=0.006$ ). However these associations did not remain statistically significant when adjusted for physician specialty and demographics.

Table 3 displays physician experience of and response to conflicts with religious institutions by physician characteristics. Women were twice as likely as men to have experienced conflict with religiously based hospital policies (19/66, design-adjusted percentage 29%, vs. 14/100, 14%;  $p=0.04$ ), but this association did not remain significant after adjusting for other

covariates. In multivariate analyses, compared to the youngest physicians (ages 26–29), those of older age groups were less likely to report conflict with a religious hospital or practice, though no linear trend in strength of association was apparent. Odds ratio (OR) [95% confidence intervals (95% CI)] were, for comparison with physicians, 30–34 years: 0.02 (0.00–0.11); for 35–46 years: 0.07 (0.01–0.72); for 47–60 years 0.02 (0.00–0.10)]. Compared with doctors practicing in the South, those in the Midwest and West were more likely to report conflict [OR (95% CI), 6.7 (1.2–38), and 12.1 (1.2–119), respectively].

Neither religious affiliation nor physician-institution congruence was significantly associated with having experienced conflict with religiously affiliated institutions. Conflict rates were roughly the same among physicians who shared the religious denomination of their hospital or practice (7/37, design-adjusted percentage 21%) and those who did not (26/130, 18%,  $p=0.73$ ). However, doctors with no religion were roughly three times as likely as those with religious affiliations to believe that physicians should provide an intervention despite its prohibition by hospital policy (6/50, 13%, vs. 17/387, 3%;  $p=0.005$ ). In adjusted analyses, compared with physicians who never attend religious services, those who attend up to once per month and those who attend twice a month or more were less likely to report conflict with religiously affiliated institutions, though no trend in strength of association is seen [OR (95% CI) for comparison with attend up to once a month: 0.06 (0.01–0.29); for attend twice a month or more 0.22 (0.05–0.98)]. Respondents who attend religious services up to once per month were less likely to believe that doctors should provide an intervention prohibited by hospital policy compared to those who never attend [OR (95% CI) 0.1 (0.0–0.7)]. Intrinsic religious motivation was not significantly associated with experience of or responses to conflict.

## DISCUSSION

This study empirically examined physician-hospital conflicts over religiously based patient care policies. We found that almost half of primary care physicians have worked in a religiously affiliated hospital or practice, and among these physicians, approximately one in five has had conflicts with the institution's religiously based patient care policies. Most primary care physicians believe that when a physician's clinical judgment conflicts with religiously based policies, the physician should refer the patient to another hospital. Controlling for potential confounders, we found no association between religious characteristics and whether or not a physician had worked in a religious hospital. However, among physicians who have worked in religious hospitals, younger physicians and those who never attend religious services are somewhat more likely to report conflict with religiously based policies.

As a result of widespread hospital consolidations many patients, and perhaps particularly those in underserved communities, have fewer choices regarding where to receive health care.<sup>24</sup> Policy debates about religious hospitals have largely focused on the tension between patients' rights to access services and hospitals' rights to practice within their moral tradition. Our study does not measure the effect of

Table 3. Physician Experiences and Beliefs Regarding Conflicts with Religiously Based Institutional Policies<sup>a</sup>

Respondent characteristics	Have had conflict with religiously based policies				Believe doctors should provide indicated treatment despite policy			
	No. responding to item <sup>c</sup>	No. responding "yes" <sup>c</sup>			No. responding to item <sup>d</sup>	No. responding "openly" or "discreetly" <sup>d</sup>		
		Bivariate		Multivariate		Bivariate		Multivariate
		n (%)	p( $\chi^2$ )	OR (95% CI)		n(%)	p( $\chi^2$ )	OR (95% CI)
Sex <sup>e</sup>								
Female	66	19(29)	0.04	1.0 referent	174	7(3)	0.57	1.0 referent
Male	100	14(14)		0.5(0.1–2.1)	263	16(5)		1.4(0.4–5.3)
Age <sup>e</sup>								
26–29	35	13 (46)	0.005	1.0 referent	107	6 (4)	0.35	1.0 referent
30–34	43	6 (12)		0.02(0.00–0.11) <sup>g</sup>	118	8 (7)		2.4(0.4–15.5)
35–46	43	9 (20)		0.07(0.01–0.72) <sup>g</sup>	108	3 (2)		0.7(.005–0.9) <sup>g</sup>
47–60	46	5 (10)		0.02(0.00–0.10) <sup>g</sup>	104	6 (5)		0.2(0.03–1.9)
Geographic region <sup>e</sup>								
South	43	6 (13)	0.56	1.0 referent	121	6 (4)	0.69	1.0 referent
Midwest	52	11 (25)		6.7 (1.2–37.7) <sup>g</sup>	109	3 (2)		0.3(0.05–1.4)
Northeast	46	10 (19)		3.5(0.7–18.6)	127	7 (5)		0.6(0.1–2.4)
West	23	6 (26)		12.1 (1.2–119.0) <sup>g</sup>	70	6 (6)		1.1(0.2–6.3)
Puerto Rico	3	0 (0)		n/a	10	1 (9)		5.8(0.7–51)
Religious affiliation <sup>f</sup>								
No religion	19	7 (33)	0.13	1.0 referent	50	6 (13)	0.009	1.0 referent
Hindu	30	8 (27)		0.8 (0.2–3.6)	92	5 (3)		0.1 (0.0–0.6) <sup>g</sup>
Muslim	23	6 (39)		2.4 (0.4–15.2)	74	3 (3)		0.2 (0.0–1.0) <sup>g</sup>
Catholic/Orthodox	44	7 (18)		0.4 (0.1–1.9)	90	2 (3)		0.1 (0.0–0.8) <sup>g</sup>
Protestant, evangelical	12	1 (7)		0.1 (0.0–1.1)	26	2 (4)		0.2 (0.0–4.0)
Protestant, non-evangelical	25	3 (14)		0.4 (0.1–2.2)	70	1 (<1)		0.0 (0.0–0.2) <sup>g</sup>
Other religion	14	1 (2)		0.0 (0.0–0.3) <sup>g</sup>	35	4 (10)		0.7 (0.1–4.3)
Intrinsic religious motivation <sup>f</sup>								
Low	50	13 (26)	0.10	1.0 referent	153	10 (6)	0.44	1.0 referent
Medium	39	12 (25)		1.2 (0.3–4.0)	115	4 (4)		0.5 (0.1–1.9)
High	77	7 (11)		0.4 (0.1–1.2)	167	9 (3)		0.5 (0.1–2.2)
Attendance at religious services <sup>f</sup>								
Never	16	6 (38)	0.08	1.0 referent	52	7 (13)	0.02	1.0 referent
≤Once a month	78	12 (13)		0.06 (0.01–0.29) <sup>g</sup>	237	6 (2)		0.1 (0.0–0.7) <sup>g</sup>
≥Twice a month	72	14 (19)		0.22 (0.05–0.98) <sup>g</sup>	146	10(5)		0.4 (0.1–2.0)

<sup>a</sup>Percentages reflect survey-design-adjusted estimates. Denominator for column 2 ("Have had conflict") is respondents who have worked in a religious hospital (n=177), while for column 3 ("Believe doctors should provide") it is all respondents (n=446). Example interpretation: after adjusting for survey design, 14% of male physicians (n=14) report having experienced conflict with religiously based institutional policies, and 5% (n=16) believe physicians should provide an indicated treatment despite hospital policy prohibiting it. In multivariate analysis, men have 0.5 times (95% confidence interval=0.1–2.1) the odds of having experienced conflict compared to women.

<sup>c</sup>See Appendix, question 23b

<sup>d</sup>See Appendix, question 22

<sup>e</sup>Multivariate model controls for specialty, demographics (sex, age, geographic region, immigration history), and religious characteristics (religious affiliation, intrinsic religious motivation, attendance at religious services, and identification as religious/spiritual)

<sup>f</sup>Multivariate model controls for specialty and demographics

<sup>g</sup>p<0.05

physician-hospital conflicts on patients' access to services. It does, however, suggest that patients cared for in a religious hospital or practice who seek time-sensitive but restricted interventions—such as emergency contraception—may face delays as their physicians transfer or refer them to non-religious institutions.<sup>25</sup> Whether these delays are seen as harmful to the patient depends on one's beliefs about the intervention itself; even among the authors of this paper, judgments vary.

Our findings also draw attention to a lacuna in the recent federal regulations written to protect individual providers and health care institutions from discrimination based on their religious beliefs. Namely, such policies do not address the

relatively common problem of conflicts between physicians and religious institutions.

This study's strengths include a nationally representative sample of primary care physicians and adequate inclusion of minority religions. The religious characteristics and moral beliefs of our sample are similar to those reported in previous surveys of US physicians.<sup>9</sup> However, the study has several important limitations. Questionnaire items on physician-hospital conflict were not formally pilot-tested prior to the study, so their reliability is not established. Survey questions and responses used to characterize physician religiosity reflect those used in related research.<sup>9,22,26,27</sup> The failure to see directional trends where they might be predicted (for

example, we might have expected more frequent attendance at religious services to be associated with a lower odds of conflict with religious hospital policies than infrequent attendance) may be due to chance given the small sample size for sub-group analysis. However, this failure may call into question the usefulness of these results. Limited survey space prevented us from seeking richer, qualitative descriptions of the conflicts physicians experienced, so physician motivation, patients' roles, and clinical details of the conflicts remain open areas for future research. Our response rate was 51%, and we lack information about non-respondents, who may differ from respondents in ways that could bias the findings. African-American and Latino physician numbers were small. Furthermore, while this study describes primary care physician experiences working at religiously affiliated hospitals and practices, it does not compare these to experiences working in non-religiously affiliated sites. Finally, the opinions and experiences of specialist physicians, hospital staff, and patients are not represented in this study. Future work will examine the experiences and beliefs of obstetrician/gynecologists, the specialty perhaps most likely to encounter religious prohibitions on procedures within its scope of practice.

Notwithstanding these limitations, these results suggest that a significant minority of primary care physicians working in religiously affiliated health care institutions has faced conflict over religious policies for patient care. Hospital administrators may wish to better involve physicians in the policy-making process, communicate policies more clearly, and develop means of hearing and accommodating physician concerns in order to reduce conflict and its impact on patient care.<sup>28</sup> Physicians should also consider informing patients about religiously based institutional policies if an admission is not urgent and other hospital choices are available. Policy-makers may find physicians' experiences reported here useful in addressing the role of religious institutions in the delivery of health care.

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