

# Are Two Doctors Better Than One? Women's Physician Use and Appropriate Care

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**Abstract** This study examines nonelderly women's concurrent use of two types of physicians (generalists and obstetrician-gynecologists) for regular health care and associations with receipt of preventive care, including a range of recommended screening, counseling, and heart disease prevention services. Data are from the 1999 Women's Health Care Experiences Survey conducted in Baltimore, Maryland, using random digit dialing ( $N = 509$  women ages 18 to 64). Key findings are: 58% of women report using two physicians (a generalist and an ob/gyn) for regular care; seeing both a generalist and an ob/gyn, compared with seeing a generalist alone, is consistently associated with receiving more clinical preventive services, including screening, counseling, and preventive services related to heart disease. Because seeing an ob/gyn in addition to a generalist physician is associated with receiving recommended preventive services (even for heart disease), the findings suggest that non-elderly women who rely on a generalist alone may receive substandard preventive care. The implications for women's access to ob/gyns and for appropriate design of women's primary care are discussed.

**W**omen's primary health care has been described as fragmented.<sup>1</sup> This is because of the frequent separation of reproductive and non-reproductive services in the U.S. health care delivery system and because several types of physicians (family practitioners, internists, and obstetrician-gynecologists) provide primary care services to women.<sup>2</sup> In consequence, women relying on one type of physician for regular care may receive services that are not comprehensive. Women who use more than one health care provider for regular care may receive more services, but their care may not be well coordinated across providers and may be more costly. This study considers how different patterns of physician use affect nonelderly women's receipt of appropriate preventive care.

Women's patterns of physician use have been documented in a number of

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*Several types of physicians provide primary care services to women*

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studies. In 1997–98, according to the National Ambulatory Medical Care Survey, U.S. women ages 15 and over made about 500 million office-based physician visits, of which 25% were in general or family medicine, 18% were in internal medicine, and 18% were in obstetrics-gynecology.<sup>3</sup> Among population-based surveys of health care utilization, only the 1993 and 1998 Commonwealth Fund Surveys of Women's Health measure women's concurrent use of more than one type of physician for routine care. In the 1993 and 1998 surveys, respectively, 37% and 42% of women ages 18 to 64 reported using two types of physicians for regular care: a generalist (family practitioner or internist) and an obstetrician-gynecologist (ob/gyn).

The growth of managed care has facilitated access to ob/gyns and reinforced the pattern of seeing both a generalist and a reproductive health specialist for regular care. Due to consumer demand and efforts to regulate managed care, many states have legislated direct access to ob/gyns in health plans. In 2000, 38 states and the District of Columbia had policies requiring health plans to provide direct access to ob/gyns without a referral from a primary care provider.<sup>4</sup> Not surprisingly, women enrolled in managed care plans (health maintenance organizations [(HMOs) and preferred provider organizations (PPOs)] compared with women in traditional fee-for-service plans and fee-for-service plans with utilization controls, report significantly greater use of two physicians: 49% versus 33% and 29%, respectively.<sup>5</sup>

There is limited research on the consequences of different patterns of physician use for women, in part because few studies examine women's concurrent use of more than one provider. Previous research suggests that women seeing two physicians receive more recommended clinical preventive services than women seeing a generalist physician alone. In one study, women seeing both a generalist and an ob/gyn were more likely to receive Papanicolaou (Pap) tests, cholesterol tests, and screening mammograms (among women ages 50 and over) compared with women who see only a generalist.<sup>6</sup> In the present study, the implications of nonelderly women's concurrent use of two types of physicians for their receipt of services are examined in more detail, with a broader definition of preventive care.

Here, we use a combination of evidence-based guidelines (such as the U.S. Preventive Services Task Force report<sup>7</sup>) and expert opinion on the appropriate content of women's primary care to identify clinical preventive services that women should be receiving in comprehensive, coordinated primary care. These services include screening for specific conditions, including both reproductive and non-reproductive conditions; counseling on a variety of health promotion and disease prevention topics, including both reproductive and non-reproductive topics; and services related to the prevention of heart disease. Because the prevention of heart disease is not typically regarded as being within the scope of practice for ob/gyns, its inclusion in this study provides perhaps the strongest test for the effect of seeing two types of providers. The key hypothesis tested is that nonelderly women who see both a generalist physician and an ob/gyn will receive more of these preventive services than women who see a generalist alone, even when potential confounders of this relationship are controlled.

## METHODS

### Data Source

Data are from the Women's Health Care Experiences Survey conducted in Baltimore, Maryland in 1999. This survey instrument was developed to provide a more comprehensive description of nonelderly women's health care

access, utilization, and quality than is available in other surveys.<sup>8</sup> The survey was developed through several phases, including a content comparison of national surveys, identification of key domains in women's health care, expert feedback, and cognitive testing of a draft instrument among women with low literacy. A pilot test was conducted by the Battelle Centers for Public Health Research and Evaluation, using random digit dialing (RDD) of women ages 18 to 64 residing in households in the Baltimore metropolitan area. Among age-eligible women, 66% completed the half-hour interview ( $N = 509$ ). According to Battelle, this cooperation rate is comparable to other RDD health-related surveys. The interviews were conducted using computer-assisted technology by female interviewers trained for this project. Interviews were conducted only in English.

## Measures

### *Measures of Physician Use*

The key independent variable in this analysis is the woman's pattern of physician use. Women were asked whether they have a regular health care provider (not limited to physicians), defined as "a person you usually go to first when you need health information, a test, or treatment for a health problem." The specialty of this person was ascertained, and for women who did not mention an ob/gyn, a follow-up question asked, "In addition to your regular health care provider, do you see an obstetrician/gynecologist?" By combining responses to these questions, we were able to categorize women according to whom they perceive to be their regular health care providers. Most regular providers are physicians: only about 2% of women reported a non-physician regular provider, such as an advanced practice nurse, physician assistant, or chiropractor.

### *Dependent Variables*

The dependent variables include three measures of receipt of services in the past year: the sum of the number of screening services received, the sum of the number of preventive counseling services received, and the sum of heart disease-related screening and counseling services received.

The measure of screening services received in the past 12 months is a sum based on a set of seven routine screening tests that are recommended for most women by the U.S. Preventive Task Force or other groups. These services, with corresponding percentages of all women who received them in the past 12 months, are: Pap smear (77%); physical breast examination by a doctor or nurse (76%); high blood pressure screening (74%); blood cholesterol test (50%); mammography (45%); colon cancer screening, including check for blood in stool or sigmoidoscopy (19%); and screening for sexually transmitted diseases (STD) (12%). The values on this variable range from 0 services received (8%) to all 7 received (1%), with a median of 4.

The measure of counseling services is a sum based on a set of 12 topics that were discussed with a health provider in the past 12 months. The selection of topics was based on guidelines such as those in the U.S. Preventive Services Task Force report and on current expert opinion on the components of women's primary care, as described in several recent medical textbooks on women's health.<sup>9</sup> These topics, with the corresponding percentages of women who discussed them in the past 12 months, are as follows: physical fitness or exercise (42%); nutrition or diet (38%); menopause or hormone replacement therapy (HRT) (29%); smoking, second-hand smoke, or quitting smoking (27%); stress management (20%); alcohol or drug use (10%); alternative

therapies (10%); family or relationship concerns (8%); preventing unintended pregnancy (8%); work or financial concerns (6%); violence in the home or workplace (4%); and sexual function (4%). The values on this variable range from 0 topics discussed (24%) to 11 topics (1 respondent), with a median of 2. Only 5% of the sample discussed more than 5 topics with their providers, and 20% discussed only one topic.

The measure of heart disease preventive services is included, because heart disease is the leading cause of death among U.S. women; guidelines for prevention in women are available; and fragmented primary care could detract from heart disease prevention in women who rely on reproductive health specialists for their regular care or who receive uncoordinated care from two physicians. The measure is a sum based on two screening services and four counseling topics related to heart disease prevention in women, according to a recent report by the American Heart Association and the American College of Cardiology.<sup>10</sup> The screening services are blood pressure readings and the blood cholesterol test. The counseling topics are: smoking, second-hand smoke, or quitting smoking; nutrition or diet; physical fitness or exercise; and stress management. (Frequencies for receipt of these services are shown above.) Values range from 0 (14%) to 6 (3%), with a median of 2. Thirty percent of the sample received less than two of these services.

### *Covariates*

Other variables included in analyses are respondents' characteristics and attributes of their health plans and providers that might influence the pattern of physicians seen and the services received. The behavioral model of health services utilization<sup>11</sup> was used to identify relevant covariates in three categories: (1) variables that predispose individuals to use health services (e.g., age or life stage, race/ethnicity, educational level), (2) variables that enable or impede access to care (e.g., income, health insurance, caregiving responsibilities for children or elderly family members), and (3) variables that reflect the need for health services (e.g., perceived needs for care, chronic conditions diagnosed by a physician in the past 5 years, perceived health status).

The measure of perceived need for health care is computed by aggregation of specific needs into categories. These needs are important covariates because they may account for women's selection of specific types of physicians or their requests for specific services. Women were asked to report whether they had any specific health problems or health care needs in the past 12 months. The list of needs covered preventive, acute, chronic, mental health, and emergency needs: chronic health problem; minor illness like the flu; injury; depression or anxiety; need for family planning services; pregnancy; menstrual problems; need for tests (such as Papanicolaou test, mammogram, blood test, or vision test); need for surgery; victim of violence or crime; need for medications. The three categories of perceived needs constructed are as follows: (1) reproductive health needs only (defined as pregnancy, family planning, or menstrual problems) *or* chronic, acute, or mental health needs only (defined as chronic health problem, minor illness, injury, depression or anxiety); (2) both reproductive health needs *and* chronic, acute, or mental health needs; and (3) other needs or no needs. The majority of women (62%) reported having either a reproductive health need or chronic, acute, or mental health needs, but not both. Twenty-two percent reported having both types of needs. Only 3% of women reported no needs, and the remaining 13% reported only some other type of need.

The variable measuring chronic conditions is based on respondents' reports of which of the following conditions, if any, were diagnosed by a

physician in the past 5 years: hypertension or high blood pressure, heart disease, high cholesterol, diabetes, depression or anxiety, migraine headaches, arthritis, osteoporosis, obesity, urinary incontinence, cancer, eating disorders, or thyroid problems. The most prevalent chronic conditions reported were obesity (26%), arthritis (23%), depression or anxiety (22%), high cholesterol (22%), and hypertension (20%). Most conditions were reported by less than 10% of respondents. Overall, 36% reported no chronic conditions, 25% reported one chronic condition, and 39% reported two or more conditions.

Perceived health status is measured in response to the question, "Would you say your health, in general, is excellent, very good, good, fair, or poor?" Fourteen percent of women reported that their health is fair or poor, 27% reported good, 37% reported very good, and 22% reported excellent.

## Analyses

We first report sample characteristics and the patterns of physician use. Next, we present multiple linear regression analyses of the outcome variables (clinical preventive services received, counseling received, heart disease preventive services received), with the pattern of physician use included as an independent variable. The objective of these analyses is to ascertain the effect of the pattern of physician use on the outcomes, controlling for relevant respondent and health care factors.

Due to the small overall sample size, it was necessary to theory trim by examining the set of predictor variables for collinearity and by conducting exploratory analyses to identify associations with the pattern of physician use. Some theoretically relevant variables (e.g., managed care, caregiving) were dropped from multivariate models because no associations were observed in any exploratory analyses.

## RESULTS

### Sample Characteristics

Table 1 describes the sociodemographic, health status, and health care utilization characteristics of the sample. Because needs for reproductive and non-reproductive services are expected to be associated with age, we present these results for two age groups: ages 18–44 (the so-called "reproductive years") and ages 45–64 ("midlife"). Midlife women are significantly more likely than younger women to be white, to have lower educations, to have the highest household incomes (\$75,000 or more), and to be caregivers for elderly family members in the home or elsewhere. With respect to health care access, this sample reflects national trends: the women are insured largely through employer-based coverage (either their own or a family member's) and are enrolled in some type of managed care plan (an HMO or PPO). Overall, 11% of women report coverage through public insurance (Medicaid, Medicare, or insurance based on current or past military service). As expected, midlife women report more chronic conditions and poorer overall health status than younger women. Reproductive-age women are more likely to perceive both reproductive and chronic, acute, or mental health needs. These women are also more likely to have had two health care visits in the past 12 months. However, midlife women are more likely to have made 3 or more visits in the past 12 months and report receiving more preventive health care.

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*Midlife women . . . made  
3 visits in past 12  
months and receive more  
Preventive health care*

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**Table 1. SOCIODEMOGRAPHIC, HEALTH STATUS, AND HEALTH CARE UTILIZATION CHARACTERISTICS OF THE SAMPLE, BY AGE GROUP**

	<i>Reproductive Age</i> Ages 18–44 (N = 281)	<i>Midlife</i> Ages 45–64 (N = 228)	<i>p value*</i>
<i>Sociodemographics</i>			
Race/ethnicity (%)			
White, non-Hispanic	62	73	.011
Black, non-Hispanic	29	24	NS
Hispanic	4	2	NS
Other	5	2	NS
Education (%)			
Not high school graduate	6	14	.006
High school graduate	24	28	NS
Some college	36	25	.014
College graduate	34	33	NS
Employed for pay (%)	78	68	.030
Household income (%)			
\$15,000 or less	13	14	NS
\$15,001–\$35,000	26	24	NS
\$35,001–\$50,000	22	19	NS
\$50,001–\$75,000	20	17	NS
\$75,001 or more	19	27	.036
Caregiver for sick or disabled elderly family member (%)	8	22	.001
<i>Health care access, utilization, and need</i>			
Source of health insurance (%)			
Employer-based	78	80	NS
Medicaid	5	1	.022
Medicare	1	4	.042
Other†	6	5	NS
None	10	9	NS
Uninsured at any time, past 12 months (%)	13	5	.006
Type of health plan, among insured (N = 461; %)			
HMO/PPO	75	72	NS
Fee-for-service	21	26	NS
Don't know	4	2	NS
Number of health care visits in past 12 months (%)			
None or one	16	10	.045
Two	12	6	.018
Three or more	73	85	.001
Reported health care needs (%)			
Reproductive or Chronic/Acute/Mental health	56	70	.001
Reproductive and Chronic/Acute/Mental health	31	12	<.001
None or other	14	18	.167
Pregnancy, past 12 months (%)	18	0	<.001
One or more diagnosed chronic conditions‡ (%)	54	76	<.001
Perceived overall health status fair or poor§ (%)	11	20	.002
<i>Dependent Variables</i>			
Number of routine preventive services received   (mean)	3.08	4.07	<.001
Number of counseling topics discussed¶ (mean)	1.84	2.37	.000
Number of heart disease related preventive services received# (mean)	2.27	2.81	<.001

\**p*-values for associations with age groups are based on chi-square or paired *t*-tests, as appropriate. *p*-values equal to or greater than .05 are noted as “NS” (not significant).

†Includes military, TriCare Standard, and VA insurance.

‡Based on a list of 13 chronic conditions: hypertension, heart disease, high cholesterol, diabetes, depression/anxiety, migraine headaches, arthritis, osteoporosis, obesity, urinary incontinence, cancer, eating disorders, and thyroid problems. Reports of diagnosis in the past 5 years.

§Percent of women responding fair or poor to the following question: “Would you say your health, in general, is excellent, very good, good, fair, or poor?”

||Screening services included are: colon cancer screening, mammogram, Pap test, breast exam, blood cholesterol test, high blood pressure, and screening for sexually transmitted diseases. Range of the sum is 0–7.

¶Counseling topics included are: smoking, second-hand smoke, or quitting smoking, nutrition or diet, alcohol or drug use, physical fitness or exercise, menopause or hormone replacement therapy, violence in the home or workplace, work or financial concerns, family or relationship concerns, stress management, preventing unintended pregnancies, and using alternative therapies, such as herbs or acupuncture. Range of the sum is 0–12.

#Heart disease prevention services included are: blood cholesterol test, check for high blood pressure, counseling about smoking, counseling about nutrition and diet, counseling about fitness and exercise, and counseling about stress management. Range of the sum is 0–6.

**Table 2. TYPES OF REGULAR PROVIDERS, BY AGE GROUP**

	Total Sample (N = 509)	Reproductive Age Ages 18–44 (N = 281)	Midlife Ages 45–64 (N = 228)	p-value*
Generalist physician† and ob/gyn	58%	55%	60%	NS
Generalist physician only	14%	11%	19%	.006
Other provider‡	11%	13%	7%	.028
No regular provider of any kind	17%	20%	13%	.034

ob/gyn = obstetrician-gynecologist.

\*p-values for associations with age categories are based on chi-squared tests.

†Generalist physicians are family practitioners (66%) or internists (34%).

‡In this category (N = 55), 29 women reported that their regular provider is an ob/gyn; 13 women reported that their regular provider is some other physician specialist; 10 women reported that their regular provider was a nurse practitioner, a physician's assistant, or a chiropractor; and 3 women reported that they had a regular provider, but did not specify the type of provider.

### Patterns of Physician Use

Table 2 shows the regular physicians reported by women in the total sample and by age group. The majority of women in both age groups reported seeing both a generalist physician and an ob/gyn as their regular providers; midlife women are as likely as women of reproductive age to rely on these two types of physicians. This contradicts the conventional wisdom that use of ob/gyns for regular care declines after reproductive age. However, midlife women are significantly more likely than younger women to report having only a generalist physician as the regular physician, and they are significantly less likely than younger women to rely on other providers for their regular care. (Too few women reported seeing only an ob/gyn to include this as a separate category.) Other variables associated with seeing two types of regular physicians (data not shown) are race/ethnicity (white, non-Hispanic women are significantly more likely than other women to see two doctors) and type of health insurance (privately insured women are more likely than publicly insured and uninsured women to see two doctors).

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*Seeing two physicians  
(generalist and ob-gyn)  
is associated with  
more . . . clinical  
preventive service*

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### Determinants of Services Received

The effects of types of physicians seen on services received were examined using multiple regression analyses of three outcomes. Table 3 shows the results of multiple linear regression analyses of the determinants of screening services received, counseling services received, and heart disease-related preventive services received. For all of these outcomes, seeing two physicians (a generalist and an ob/gyn) is significantly associated with receiving more services, compared with seeing only a generalist physician, controlling for predisposing, enabling, and need variables. For screening, seeing another type of provider is also significantly associated with more services received compared with a generalist physician, but not as strongly.

Other significant predictors of receiving more screening services are being in midlife (ages 45 to 64) compared with reproductive age, having more health care visits, being nonwhite, having private health insurance (compared with no insurance), and having a chronic condition. Other significant predictors of receiving more counseling services are being in midlife, having some college education (compared with high school or less), and having a chronic condition. Compared with having both reproductive and chronic/acute/mental health perceived needs, women with other or no perceived health needs report less counseling. Other significant predictors of receiving more heart disease prevention services are more health care visits, having some college education

**Table 3.** DETERMINANTS OF SCREENING, COUNSELING, AND HEART DISEASE-RELATED PREVENTIVE SERVICES ( $N = 500$ ; UNSTANDARDIZED LINEAR REGRESSION COEFFICIENTS AND  $P$ -VALUES)

	Screening*	Counseling†	Heart disease prevention‡
Regular provider			
Generalist only	Reference	Reference	Reference
Generalist + ob/gyn	1.20 (<.001)	0.69 (.004)	0.43 (.026)
Other	0.87 (.001)	0.50 (.124)	-0.10 (.692)
None	0.35 (.155)	0.42 (.163)	-0.34 (.154)
Age			
18–44 years	Reference	Reference	Reference
45–64 years	0.78 (<.001)	0.45 (.010)	0.26 (.068)
Household income			
Less than \$35,000	Reference	Reference	Reference
\$35,001 or more	0.02 (.913)	-0.14 (.501)	0.02 (.897)
Refused	-0.35 (.137)	-0.43 (.126)	-0.11 (.631)
Education			
High school or less	Reference	Reference	Reference
Some college	0.16 (.328)	0.49 (.016)	0.38 (.019)
College graduate	0.20 (.255)	0.37 (.083)	0.07 (.676)
Race/ethnicity			
White, non-Hispanic	Reference	Reference	Reference
Other	0.35 (.022)	0.33 (.070)	0.34 (.024)
Health insurance			
Private insurance	Reference	Reference	Reference
Public insurance	0.22 (.391)	0.34 (.278)	0.12 (.631)
Uninsured	-0.43 (.031)	-0.11 (.653)	-0.09 (.633)
Number of health care visits in past 12 months			
None or one	Reference	Reference	Reference
Two	1.18 (<.001)	0.23 (.505)	0.58 (.044)
Three or more	1.53 (<.001)	0.52 (.049)	0.79 (<.001)
Perceived health needs			
Reproductive <i>and</i> chronic/acute/mental health	Reference	Reference	Reference
Only reproductive <i>or</i> only chronic/acute/mental health	0.15 (.354)	-0.08 (.683)	0.14 (.400)
None or other type of need	0.40 (.095)	-0.87 (.003)	-0.34 (.145)
Chronic conditions:			
None	Reference	Reference	Reference
One or more	0.64 (<.001)	0.64 (<.001)	0.86 (<.001)
Perceived health status (fair/poor)	-0.20 (.316)	0.45 (.071)	0.49 (.014)
Model Intercept	-0.77	-0.42	0.06
Adjusted R-squared( $p$ -value for F-test of model significance)	0.321 (<.0001)	0.136 (<.0001)	0.246 (<.0001)

\*Screening services included are: colon cancer screening, mammogram, Pap test, breast exam, blood cholesterol test, high blood pressure, and screening for sexually transmitted diseases. Range of the sum is 0–7.

†Counseling topics included are: smoking, second-hand smoke or quitting smoking; nutrition or diet; alcohol or drug use; physical fitness or exercise; menopause or hormone replacement therapy; violence in the home or workplace; work or financial concerns; family or relationship concerns; stress management; preventing unintended pregnancies; and using alternative therapies, such as herbs or acupuncture. Range of the sum is 0–12.

‡Heart disease prevention services included are: blood cholesterol test, check for high blood pressure, counseling about smoking, counseling about nutrition and diet, counseling about fitness and exercise, and counseling about stress management. Range of the sum is 0–6.

(compared with high school or less), being nonwhite, having a chronic condition, and perceiving fair or poor health status. Having a chronic condition is the only variable other than physician type that is associated with all three measures of preventive services received.

## DISCUSSION

### Key Findings

Seeing two physicians for regular care (a generalist and an ob/gyn), compared with seeing a generalist alone, is consistently associated with nonelderly women's receipt of more recommended clinical preventive services. In this study, we were able to examine receipt of a wider range of clinical preventive services than previously studied, including screening services, counseling on a variety of topics, and services related to prevention of heart disease. The relationship between the pattern of physician use and preventive health care received persists when controlling for the number of health care visits women make, the types of health care needs they perceive, and their health status.

Because seeing an ob/gyn in addition to a generalist physician is associated with receiving more preventive services (even for heart disease), the findings suggest that nonelderly women who rely on a generalist alone may receive substandard preventive care. This is supported by the finding that women who see a generalist alone do not receive significantly more preventive services than women who have no regular physician. The finding with regard to ob/gyns suggests that ob/gyns may be especially sensitive to women's health care needs, including nonreproductive health issues. For example, heart disease prevention may be addressed by ob/gyns in the context of a discussion of HRT use.

It is also possible that the ob/gyns are more likely to be female and might have heightened awareness of women's health issues. However, among women with two physicians, seeing a female ob/gyn (43% of ob/gyns seen) was not significantly associated with receiving more preventive services (results not shown). Therefore, the preventive health care benefit of seeing an ob/gyn in addition to seeing a generalist can be attributed to characteristics of the specialty rather than an ob/gyn gender effect.

Women's use of two types of physicians for regular health care is greater in this Baltimore sample (58%) than in a recent national sample.<sup>5</sup> This could reflect the fact that urban populations in general would be more likely to report seeing two types of physicians, since specialists including ob/gyns are more heavily concentrated in urban areas. Alternatively, the finding could reflect something unique about health care delivery patterns in Baltimore. Practice styles may vary geographically: in some areas it may be customary for generalists to refer patients to ob/gyns for routine gynecologic care, whereas in other areas it may be more common for generalists to provide routine gynecologic care. In Baltimore, several major health plans require women to select two primary care providers, one a generalist and one an ob/gyn; 28% of the insured women in this sample reported that their health plan requires this. These phenomena would account for a higher level of use of two physicians in this sample.

Interestingly, in multivariate models, having a regular physician and the type of regular physician are more consistent determinants of receiving services than having health insurance. Being uninsured reduced the number of screening services received, controlling for other variables, but not the number of counseling or heart disease prevention services received. This is consistent with some previous research on the importance of having a regular physician among the nonelderly.<sup>12,13</sup> Establishing a relationship with a regular physician—and possibly with two physicians—appears to be a more important factor in nonelderly women's receipt of clinical preventive services than having health insurance or the type of health insurance (private or public).

## Limitations

Because all data are self-reported, there may be some inaccuracy of respondents' reports of their health care providers' specialties and of the characteristics of their health plans. This is a limitation of all community-based surveys in which health care variables cannot be verified. In addition, the external validity of the study is limited by the relatively small sample drawn in one metropolitan area. Replication in other geographic areas is recommended. Finally, the cross-sectional design precludes causal claims and limits our ability to disentangle the effects of women's self-selection to specific patterns of physician use from the effects of physicians' behavior. Nevertheless, the observed associations between use of two physicians and receipt of preventive services, which are consistent across outcome variables and with previous studies, demonstrate a link between utilization patterns and services received.

## Policy Implications

The findings reported here raise some important questions about appropriate health policy for women. Women use a variety of types of health care providers for basic health care needs, and there is evidence that who women see makes a difference in services received. Therefore, policy attention to women's access to appropriate providers is important. Women's direct access to ob/gyns within health plans has been a key policy issue that has received attention at the state and national levels and is a component of the proposed patients' bill of rights currently being considered in Congress.<sup>14,15</sup> The findings reported here clearly indicate that nonelderly women's ability to see both a generalist physician [who usually are designated as **primary care providers** (PCPs) in health plans] and an ob/gyn yields benefits in terms of the number of clinical preventive services of different types that women receive. These results support efforts to ensure access to both generalists and ob/gyns for all women, regardless of insurance coverage.

But, is it good policy to encourage women to see two types of physicians for routine primary care? Does the use of two physicians for regular care represent efficient resource use? Does it represent a fair burden on women, in terms of financial and nonfinancial costs to them (including burdens on their time)? Does it improve outcomes of care, as well as receipt of preventive services? These are not questions that can be answered by our data, but they are important questions to raise in a policy context.

Coordination of information across providers and the benefits of continuity in health care may be compromised when two providers are seen for regular care. If a value judgment were made that it is not appropriate for women to have to see two physicians in order to optimize regular preventive health care, there are a number of alternatives. One would be for health plans to require that any family practitioner or internist credentialed to serve as a PCP for women provide routine gynecologic care (including the screening and counseling services that are part of routine gynecologic care) as part of primary care. Similarly, ob/gyns serving as PCPs should be required to provide the range of clinical preventive services recommended for women, including cholesterol screening, immunizations, and other services that might be assumed to be outside the scope of practice of obstetrics-gynecology. Training programs for generalist physicians and ob/gyns currently include options for expanded content in women's primary care. Another alternative is the use of team practice, including collaborative practice between physicians and advanced practice nurses, to ensure comprehensive preventive services in primary care visits for women without expecting women to make multiple visits to more than one PCP. Contemporary primary care women's health centers, such as the clinical centers of the 14 National Centers of Excellence in

Women's Health, attempt to provide more comprehensive primary care services by using multidisciplinary approaches to women's health care across the life span.

The proposal for a new medical specialty in women's health also would be expected to reduce the need for women to see two physicians for regular care. A women-centered medical specialty would combine reproductive and non-reproductive expertise in one practitioner, who could care for a wider range of women's health needs than many providers now serving as PCPs. While this is not a short-term solution to the problem of fragmentation in women's health care, the proposal for a new specialty serves to focus attention on the content of comprehensive care for women and on the potential benefits to women of care that is coordinated over time by one provider. Although our findings demonstrate a preventive service benefit, complementary studies are needed to assess levels of coordination and continuity of preventive health care when two providers are seen for regular care.

## Conclusion

This study of nonelderly women shows that a substantial proportion of women use both a generalist physician and an ob/gyn for regular care. In addition, using two physicians is associated with receiving more clinical preventive services—including screening tests, counseling on a variety of topics relevant to women's health, and heart disease-related preventive services—controlling for sociodemographics and other covariates. These findings support efforts to ensure women's access to both generalist physicians and ob/gyns and to identify the types of practice arrangements that facilitate comprehensive, coordinated primary care for women. In the current health system context, access to both types of providers for primary care could be viewed as a structural measure of quality in women's health care.

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