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Women's Clinical Preventive Services in the United States: Who Is Doing What?

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A well-woman preventive care visit is a core service supported by the Human Resources and Services Administration,[1] yet it is unclear which preventive services are provided by primary care physicians (PCPs) and which are provided by obstetrician/gynecologists (OB/GYNs).[2,3] We examined patterns of selected age-appropriate preventive care visits across a woman's lifespan, focusing on the wide range of preventive services provided to nonpregnant women.

Methods

The study was considered exempt for institutional review board approval by the Centers for Disease Control and Prevention because these were considered public use data and there were no identifiable data. We used abstracted data from medical records of national representative visits occurring from 2007 to 2010 to office-based physicians collected through the National Ambulatory Medical Care Survey (NAMCS) and visits to outpatient departments collected through the National Hospital Ambulatory Medical Care Survey (NHAMCS).[4] The sample was limited to preventive care visits among nonpregnant women 18 years or older (N = 14 075 visits). Applicable use of preventive services was determined using survey encounter forms; see the Table for complete listing and target population age. Since data collection for contraceptive care counseling was available only for 2009 to 2010, the estimates were excluded from our study.

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Author Contributions: Ms Stormo had full access to all of the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis.

Study concept and design: Stormo, Saraiya, Henderson, Sawaya.

Acquisition, analysis, or interpretation of data: Stormo, Hing.

Drafting of the manuscript: Stormo, Saraiya, Hing, Sawaya.

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Study supervision: Saraiya.

Visits to PCPs (family medicine and/or general practitioners and internists) and general medicine outpatient clinics were grouped to allow comparison with visits to office-based OB/GYNs and obstetrics/gynecology outpatient clinics. Data from the NAMCS and NHAMCS were weighted by inverse of selection probabilities, adjustment for nonresponse, and a population ratio adjustment to produce unbiased annual estimates. Data were combined and averaged across the 4 years of observation. Differences in estimates by specialty were evaluated by *t* tests ($P < .05$).

Results

From 2007 to 2010, an average of 281 406 600 medical visits occurred annually, of which 22.4% (62 933 700) were for preventive care. Of these, 44.0% (27 712 300) were to OB/GYNs and 56.0% (35 221 400) were to PCPs. Women 50 years or older had a higher percentage of preventive care visits to PCPs than younger women ($P < .001$) (Figure). Women 18 to 29 and 30 to 49 years old had the lowest percentages of preventive care visits to PCPs (41.2 and 45.0%; $P < .001$). A higher percentage of visits to OB/GYNs than visits to PCPs included screening for cervical cancer, breast cancer, *Chlamydia*, and osteoporosis ($P < .05$) (Table). Screening for colorectal cancer, cholesterol, diabetes mellitus, and counseling for diet, exercise, and obesity were more commonly provided during visits to PCPs ($P < .01$). About 82% of visits to OB/GYNs and 74% of visits to PCPs did not include counseling.

Discussion

Almost half of all women's preventive care visits were to OB/GYNs, but these visits focused predominantly on reproductive health-related services. Visits to PCPs provided a wider range of services and higher volume of counseling, even among women of childbearing age. Thus, women of reproductive age who see OB/GYNs only for preventive care may not be receiving the full spectrum of recommended screening and counseling. Women aged 18 to 49 years could be at increased risk for missing these services because women in this age group had the lowest percentage of visits to PCPs. The shift with age toward more preventive care visits to PCPs may increase receipt of general preventive health services; however, the overall provision of counseling services to either specialty was low. Because physicians have had little to no incentive in most payment systems to document counseling performed during clinic appointments, counseling services may have been underestimated. The Patient Protection and Affordable Care Act aims to increase access to insurance coverage for recommended clinical preventive services.[5] Uptake of these services, however, may necessitate redefining the role of OB/GYNs and PCPs to coordinate and provide a full spectrum of recommended preventive services across the lifespan.

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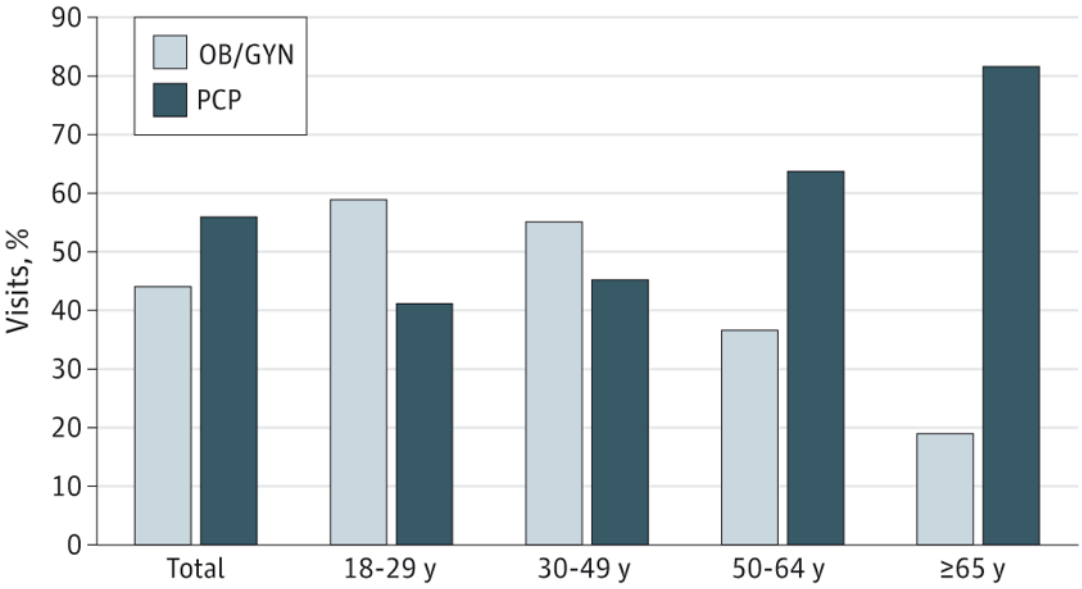

Figure. US Preventive Care Visits by Nonpregnant Women 18 Years or Older, by Patient Age Group, and Clinician Specialty: NAMCS/NHAMCS, 2007 to 2010

Obstetrician/gynecologist (OB/GYN) includes visits to OB/GYN clinics and office-based OB/GYNs. Primary care physicians (PCPs) include visits to office-based internists, family medicine and/or general practitioners, and hospital general medical outpatient clinics. All differences in estimates were evaluated by *t* tests at the $P < .05$ level. Differences by specialty within patient age groups were significant. Weighted denominators were 62 933 700 for all visits. Weighted denominators for patient age groups were as follows: 12 848 300 for 18 to 29 years; 21 533 400 for 30 to 49 years; 16 694 400 for 50 to 64 years; 11 857 500 for 65 years or older. NAMCS/NHAMCS indicates National Ambulatory Medical Care Survey/National Hospital Ambulatory Medical Care Survey.[2]

Table

Preventive Care Visits by Nonpregnant Women 18 Years or Older That Included Age-Appropriate Recommended[a] Screening and Counseling, by Specialty, NAMCS/NHAMCS, 2007 to 2010[b]

Type of Service	%			*P* Values for Specialty Differences
	Total	OB-GYNs	PCPs	
Test and procedures				
Blood pressure screening	89.5	88.9	89.9	.56
Cervical cancer screening with the Papanicolaou test alone, 21–64 y	39.4	56.2	23.0	<.001
Cervical cancer screening with Papanicolaou test plus HPV testing, 30–64 y	3.6	5.8	1.7	.001
Breast cancer screening with mammography with or without a clinical breast examination, ≥40 y	28.7	49.0	17.9	<.001
Breast cancer screening with mammography alone, ≥40 y	8.6	9.2	8.2	.62
Breast cancer screening with mammography and clinical breast examination, ≥40 y	20.1	39.8	39.8	NA
Colorectal cancer screening, 50–75 y	6.1	3.9	7.2	.01
Cholesterol, ≥45 y[c]	25.2	5.4	34.5	<.001
Cholesterol, 20–44[c]	11.9	3.0	24.3	<.001
Diabetes	14.5	5.2	21.8	<.001
Chlamydia testing, 18–24 y	12.3	15.3	8.0	.008
Bone mineral density, ≥65 y	6.8	12.9	5.4	.01
Depression	3.4	3.9	2.9	.47
Counseling				
Obesity	6.0	4.2	7.5	<.001
Exercise	12.3	9.9	14.3	.005
Diet	16.2	12.4	19.2	<.001
Tobacco use or exposure	3.1	2.6	3.4	.16
None of the 4 counseling services provided	77.0	81.5	73.5	.02
≥1 Counseling service provided	11.6	9.9	12.9	.001
≥2 Counseling services provided	11.4	8.6	13.6	<.001

Abbreviations: HPV, human papillomavirus; NA, not applicable; NAMCS/NHAMCS, National Ambulatory Medical Care Survey/National Hospital Ambulatory Medical Care Survey; OB/GYNs, obstetrician/gynecologists; PCPs, primary care physicians, family medicine and/or general practitioners, and internists.

[a] Preventive services recommended for nonpregnant women by the US Preventive Services Task Force (USPSTF) specified in guidelines supported by the Health Resources and Services Administration.

[b] Denominators vary depending on the age group for which each specific service is recommended.[2]

[c] Since screening for cholesterol abnormalities was a grade A USPSTF recommendation for women 45 years or older and a grade B USPSTF recommendation for women younger than 45 years, separate analyses were performed for each age group.