

To the Editor: Dr. Samuelson correctly points out a limitation of this study. The Indian Health Service (IHS) Diabetes Audit does not exclude women who have had hysterectomies. The prevalence of surgical menopause in American Indian women aged 45 to 74 years varies by region. For North and South Dakota it is 29%.¹ The states in our study, North Dakota, South Dakota, Iowa, and Nebraska, are in the Aberdeen Area IHS (AAIHS). Some of the difference in cervical cancer screening in the IHS areas could partially be related to difference in hysterectomy rates. The IHS should consider excluding women who have hysterectomies for benign cause from calculation of Papanicolaou smear screening proportions.

Some patients, especially in urban areas, might obtain cancer screening from alternate sources, and this information might not be available at the time the charts are audited. In the four facilities in the AAIHS where we compared screening rates in diabetic and nondiabetic women, we carefully reviewed alternative sources of care and found that results of nearly all mammograms and Papanicolaou smears obtained by other providers were filed in the IHS records. So although we also were concerned that information on care received elsewhere might not be recorded in the IHS charts, our investigation showed that this was seldom a problem. There are differences in availability and access to care between IHS areas; therefore, as stated in the results section: "These findings are specific to the Aberdeen Area IHS and are not generalizable to IHS Areas." For other facilities serving American Indian or Alaska Native patients to know whether their audit of breast and cervical cancer screening rates are accurate, they would need to assess where else women were receiving treatment and evaluate whether this information was being recorded in their medical charts.

There are a variety of reasons why IHS women have not been screened, including that some providers might chose not to comply with the IHS standards. Because of high national American Indian and Alaska Native cervical cancer mortality rates, IHS standards currently require annual Papanicolaou smears from age 18 years or from onset of sexual activity. The IHS Diabetes Audit is designed to measure compliance with IHS guidelines. This IHS standard does differ from standards required by other organizations. Further studies should be conducted to reassess the rationale and advisability of continuing the IHS standard that requires annual Papanicolaou smears for all women, regardless of the number of normal Papanicolaou smear results and hysterectomy status.

The main purpose of the IHS Diabetes Audit is to provide information for action at the local level for quality improvement. The audit protocol established a method of selecting sample size and randomly picking medical charts. Although the IHS Diabetes Audit was not designed to ascertain regional breast and cervical cancer screening rates among American Indian or Alaska Native women, the data from the audit were the most accurate estimate of national screening rates at the time this study was done, and we believe the methodology of the audit is adequate for the purpose of this study.

In 1995, at the time of our study, American Indian and Alaska Native women in the AAIHS had the highest cervical cancer and second highest breast cancer mortality rates of all IHS areas.² Breast and cervical cancer screening for women in the AAIHS was limited. The states comprising the AAIHS were some of the last in the nation to implement the CDC Breast and Cervical Cancer Early Detection Program. This study was done in response to these high mortality rates and limited opportunities for screening in AAIHS. By publishing screening rates in women with diabetes, we hoped that providers in each area would assess their accuracy, promote systems that reduce the missed opportunities for cancer screening, and thereby reduce cancer mortality.

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Future of Generalism

To the Editor: Edmund Pellegrino has written a thoughtful and troubling essay on the future of generalism in the 21st century.¹ His arguments are compelling. I believe, however, they represent a perspective not necessarily transferable to other industrialized nations. Further strengthening of the role of the generalist might well result from current initiatives toward health service integration.

An Australian health care experiment is beginning to show the benefits for such a strategy. The Divisions of General Practice Program has, since 1992, facilitated the development of 123 regionally based organizations consisting of between 50 and 400 family doctors. These Divisions of General Practice have allowed family doctors to form links with other practices, health providers, and the community to upgrade the quality and continuity of community health care.² After years of exclusion, general practitioners have been invited back into teaching hospitals, sharing care with specialists before, during, and after patient admission. Although there is much to be done and evaluations are incomplete, evidence is accumulating that the Divisional experiment is helping disparate health groups work together.³ Similar experiments have commenced in Great Britain, New Zealand, and Canada.

It seems bizarre that where these nations are taking active steps to strengthen the links between primary care and the wider health system, the reverse seems to be

happening in the United States. Pellegrino's assertion that generalist's functions will be seriously threatened by "commercial and economic pressures" seems doubly ironic in view of North American research on the importance of primary care to effectiveness and efficiency of a healthy system.⁴ The evidence seems yet to reach those administering managed care organizations in the United States. Sadly, the editorial appears substantially, but uniquely, relevant within the borders of a one-time health superpower.

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Vaginal Cuff Testing

To the Editor: Videlefsky et al¹ address a common clinical question confronting primary care providers and their female patients: is routine vaginal cuff sampling indicated in a woman who has undergone a hysterectomy for a benign condition? As the authors note, there is lack of consensus from specialty organizations and guideline panels regarding the answer to this question, though retrospective analyses such as their own^{1,2} show a limited yield to this clinical practice.

To determine how common vaginal cuff sampling is within the authors' study population, it would be instructive to perform a chart review of patients who had undergone hysterectomy for benign reasons but had not obtained follow-up vaginal cuff sampling during the same study period (April 1987 - July 1996). One could then randomly select and review the same number of patient charts ($n = 220$) to determine whether vaginal cuff sampling had not been performed because of physician recommendation, patient preference, or lack of follow-up. By examining both patient cohorts (those receiving and those not receiving vaginal cuff sampling), one could compare practice patterns among obstetrician-gynecologists, family physicians, and mid-level providers. It is worth noting that the necessary exclusion of women who have not undergone vaginal cuff sampling introduces an inherent selection bias into such a retrospective analysis. If it were to be discovered that a substantial number of women had not obtained vaginal cuff sampling because of a lack of follow-up, as is the case for cervical dysplasia, might this be a marker for increased

risk for vaginal dysplasia? Although Videlefsky et al did not find women with pre-hysterectomy cervical dysplasia in their study to be at increased risk for post-hysterectomy vaginal dysplasia, one should examine those women who had not undergone vaginal cuff sampling and determine whether there was a higher prevalence of pre-hysterectomy cervical cytologic abnormalities.

To add to the seven cases of patients who had positive findings on vaginal cuff sampling in the authors' study, I report on a case of vaginal dysplasia that was detected following routine vaginal cuff sampling. The patient was a 45-year-old gravida 4, para 4 woman who underwent vaginal hysterectomy in 1991 secondary to uterine prolapse. Cervical histologic findings at the time of her hysterectomy showed focal squamous metaplasia. She had two episodes of "cellular atypia" 4 years before her hysterectomy, after which she had four normal Papanicolaou smears. Her baseline health was good. She had three lifetime sexual partners. She had a family history of ovarian cancer involving her paternal grandmother, and she was without a history of sexually transmitted disease or tobacco use. After her hysterectomy the patient was lost to follow-up for 4 years, at which time she had a normal findings from a gynecological examination and vaginal cuff sampling. She was subsequently lost to gynecological care for an additional 4 years, at which time I saw her, 9 years after her hysterectomy. She had no genitourinary complaints. She had grossly normal findings on a gynecological examination, but her vaginal cuff sample was remarkable for a high-grade squamous intraepithelial lesion-moderate dysplasia. She was subsequently referred to a gynecologic dysplasia clinic for biopsy of an acetic-acid positive section in the mid vagina, which showed moderate dysplasia with koilocytosis. The patient subsequently underwent laser vaporization of the involved area and has subsequently had uneventful recovery. There has not been a sufficient time lapse at present for follow-up examination and vaginal cuff sampling.

Such a case causes me to agree with the authors. Although there is limited yield of vaginal cuff sampling within the stated study population, further investigation should be performed in an effort to determine risk factors for vaginal dysplasia after a hysterectomy for benign conditions so that the patient reported here will not have undetected lesions. Currently, my own practice pattern is to counsel patients who have had pre-hysterectomy cervical abnormalities, who have had multiple sexual partners, who are immunocompromised, or who have a family history of cancer to undergo periodic vaginal cuff sampling.

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