### References

- Nguyen KX, Marinac JS, Sun C. Aspirin for primary prevention in patients with diabetes mellitus. Fam Med 2005;37(2):112-7.
- Rolka DB, Fagot-Campagna A, Narayan KMV. Aspirin use among adults with diabetes. Diabetes Care 2001;24:197-201.
- Krein SL, Vijan S, Pogach LM, Hogan MM, Kerr EA. Aspirin use and counseling about aspirin among patients with diabetes. Diabetes Care 2002;25:965-70.
- Gilchrist VJ, Stange KC, Flocke SA, Mc-Cord G, Bourguet CC. A comparison of the National Ambulatory Medical Care Survey (NAMCS) measurement approach with direct observation of outpatient visits. Med Care 2004;42:276-80.
- Stange KC, Zyzanski SJ, Smith TF, et al. How valid are medical records and patient questionnaires for physician profiling and health services research? A comparison with direct observation of patients' visits. Med Care 1998;36:851-67.

## **Authors' Response:**

We appreciate the opportunity to respond to the letter of Mainous et al. The purpose of our research was NOT to provide exact or precise point estimates or variances. The purpose of our research was to describe associations, odds ratios, and trends. The National Hospital Ambulatory Medical Care Survey (NHAMCS) database uses a complex sample design. However, not accounting for the impact of the complex sample design can lead to an underestimate of the sampling variance associated with an estimate. So while standard software packages such as SAS (SAS Institute, Inc) can generally produce an unbiased weighted survey estimate, it is quite possible to have an underestimate of the precision of such an estimate when using one of these packages to analyze survey data. Again, since we were looking at associations, and our sample size is 3 million visits, the variability in any precision is neither clinically nor statistically relevant.

The NAMCS record contains a single weight, which is called Patient Visit Weight. The same is true for Emergency Department records, such as we used for our study. The weight is used for both visits and drug mentions. The National Center for Health Statistics (NCHS) has provided curve coefficients from generalized variance curves, such as we used, which researchers use to calculate standard errors. Only recently have masked design variables been available for public use. This was because of confidentiality issues with the data. According to the Centers for Disease Control, "A method for calculating variances for NAMCS and NHAMCS estimates, which does not require using SUDAAN or similar software, is to use a generalized variance curve as described in the public-use file documentation."1 Again, we are not stating prevalence rates or precise estimates, only associations and trends between variables. Empirical evaluations (using national survey data such as the Current Population Survey and the National Health Interview Survey) have shown little difference in the estimates of the variance using the different approaches.

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## Reference

 National Center for Health Statistics. Ambulatory health care data. Accessed at www. cdc.gov/nchs/about/major/ahcd/faq/htm. Accessed May 10, 2005.

# Another Use of Papaya as a Teaching Model

## To the Editor:

How timely that *Family Medicine* published the article "Papaya: A Simulation Model for Training in Uterine Aspiration"<sup>1</sup> the same month that the *New Yorker* carried Jerome Groopman's piece "Can You Simulate a Medical Education?" As teachers of manual vacuum aspiration (MVA) for completion of missed abortion and for elective terminations, we too have discovered distinct advantages to using papaya models as simulators to introduce residents to MVA training. While we have looked at expensive pelvic models on exhibit at medical meetings, we have found the papayas to be a more affordable alternative for our urban residencies on a limited budget.

MVA simulation allows trainees to become familiar with the name, order, and handling of the instruments, as well as the sterile "no touch" technique, before performing a procedure on a woman. Using the papaya models allows us to instruct first-time trainees aloud and allows the trainee to ask questions during the procedure, without the constraints of patients' ears or the pressures of patient discomfort and/or the need to complete the procedure quickly.

Papayas realistically simulate much of the anatomy and manual feel of the uterine aspiration procedure. We have our trainees work through the constraints of a speculum that is held around the soft papaya neck, which represents the cervical os. They are able to dilate through the neck of the papaya into the central seed cavity, which has a resistance and give similar to the uterus. After inserting the cannula and applying the aspirator, they are then able to see seeds being evacuated under suction. In adding the training on the papaya prior to actual MVAs, we have noticed that trainees are more comfortable, skilled, and quicker with transitions during the procedure, allowing them to begin the important (but challenging) step of interacting with the patient at the same time.

MVA simulation training with papayas as models has become a valuable component of our reproductive health procedure training of family medicine residents in New York City. In addition, it offers an excellent hands-on way to introduce the MVA technique during family medicine interest group sessions or at Medical Students for Choice meetings. We agree that simulated training for procedures improves competency and decreases risk to patients and are fortunate to have found a low-cost model for our urban residencies. *Louisa Hann, MD* 

Montefiore Residency in Social and Family Medicine Linda Prine, MD Ginger Gillespie MD Beth Israel Residency in Urban Family Practice

#### Reference

 Paul M, Nobel K. Papaya: a simulation model for training in uterine aspiraton. Fam Med 2005;37(4):242-4.

# **New Research**

# Patients' Initiation of Advance Care Planning Discussions With Their Family Physician

## To the Editor:

The lack of communication between physicians and their patients regarding the appropriateness and purpose of advance directives (ADs) may explain why AD completion rates are so low. Patients believe it is the physician's responsibility to initiate a discussion about ADs, whereas most physicians believe the responsibility rests with the patient.<sup>1,2</sup> As a result, one of the most frequently cited barriers to completing an AD is the patient's expectation that the physician will take the initiative in the discussion.<sup>3</sup>

This study was designed to explore whether patients could be empowered to take the lead and raise the topic with their physician. Specifically, the study addressed whether viewing an informational video would encourage patients to initiate a discussion about advance care planning (ACP) with their family physician.

## Methods

Prior to subject recruitment, we conducted a baseline survey of physicians (n=20) at an academic

family medicine outpatient clinic that revealed that less than 1% of clinic patients initiate ACP discussions with their physician. We also produced a video that emphasized the importance of ACP discussions and described the functions of the associated statutory documents (ie, living will and durable power of attorney for health care).

A research assistant approached adult patients in the exam rooms and obtained informed consent. Subjects then viewed the 5-minute video while they waited to be seen by their physician. Immediately following the physician visit, the research assistant reentered the exam room and asked subjects to respond to questions regarding ACP. Subjects also were contacted by telephone 3 months after their office visit.

## Results

Eighty-seven subjects (mean= age 54.7 years, age range=21-88 years, 56% female, 82% Caucasian) were included in the analysis. Eight subjects (9.2%) reported that they had initiated an ACP discussion with their physician during the office visit (one-sample test, z =2.7, P < .01) and that their discussions lasted from 2 to 10 minutes (mean=4.9). At 3-month follow-up, three additional subjects reported initiating an ACP discussion. Five of the 11 subjects (45.5%) who initiated a discussion with their physician were under the age of 65 (range=44–64 years). Nearly all subjects (97%) felt that discussing the topic with their physician was a good idea, and more than half indicated that they were likely to have a discussion about ACP with their physician in the near future.

## Discussion

The introduction of the topic of ACP and ongoing discussions between patients and physicians are critical for physicians to develop a true understanding of their patients' values and beliefs as they relate to patients' desires for future medical care. As such, the results of our exploratory study are encouraging. The brief informational video appears to be a means of introducing the topic of ACP into the physician-patient relationship by prompting patients to initiate the discussion.

Further, the fact that a number of non-elderly subjects (age <65 years) initiated these discussions suggests that it may be beneficial to direct efforts that are designed to promote ACP toward a broader audience. Recent Florida patient self-determination litigation involving 41-year-old Terri Schiavo reinforces the merit of ACP at younger ages.

The longitudinal nature of the relationship between family physicians and their patients is an ideal context for ongoing dialogue about ACP. With minimal effort and resources, family physician offices could show a brief ACP video to patients in the exam room, a patient education room, or even in the reception area to increase the number of patients who explicitly discuss their desires for future medical care with their physician.

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#### References

- Doukas D. Advance directives in patient care: if you ask, they will tell you. Am Fam Physician 1999;59(3):530-3.
- Johnston SC, Pfeifer MP, McNutt R. The discussion about advance directives: patient and physician opinions regarding when and how it should be conducted. Arch Intern Med 1995;155(10):1025-30.
- Emanuel LL, Barry MJ, Stoeckle JD, Ettelson LM, Emanuel EJ. Advance directives for medical care—a case for greater use. N Engl J Med 1991;324(13):889-95.