

The Journal welcomes Letters to the Editor, if found suitable, they will be published as space allows. Letters should be typed double-spaced, should not exceed 400 words, and are subject to abridgment and other editorial changes in accordance with journal style.

ETHICS AND RESOURCE ALLOCATION

To the Editor:

Ganiats and Schneiderman (*Ganiats TG, Schneiderman LJ: Principles of cost-effectiveness research* 1988; 27: 77-84) only hint that the ethics used in the application of cost effectiveness are different for acute care than for preventive care. They gave the example of the young girl trapped in a well who might receive millions of dollars for medical care but who later in life may have trouble obtaining prenatal care and vaccinations. Their point was to illustrate the inconsistency in use of medical resources caused by sentiment.

But this example can also be used to illustrate the different ethical hats a family physician must wear depending on the condition of his patient. If the patient is in distress, the family physician as patient advocate must treat the acute condition and let others worry about cost effectiveness. In prevention, however, the ethics are different. The patient is not suffering. In fact, the focus must be on all the patients in the practice, not just one. The family physician must allocate limited time and resources to the interventions that yield the greatest good for the greatest number. (The limits on family physicians' time have been well documented by a number of studies showing our poor compliance with current standards of preventive care.¹) Consequently, screening interventions must compete with each other. Family physicians should not confuse accepting priorities in preventive care with submitting to "rationing" of acute medical care. (Our current noncompliance with unrealistic standards is a haphazard "rationing" of sorts.)

The best measure of the greatest good for the greatest number in setting preventive care priorities is the cost per year of life saved. Those involved in setting standards for screening should standardize themselves: Their supporting data should be expressed in this increasingly used measure of cost effectiveness.²⁻⁷ The meaningful comparisons between proposed interventions will allow family physicians to give their patients the most bang for the prevention buck.

John M. Lee, MD
Merrithew Memorial Hospital
Martinez, California, and the
Department of Family Practice,
University of California, Davis

References

1. Norman LA: Evolving principles of office quality assurance. *West J Med* 1988; 149: 230-233
2. Kinoshian BP, Eisenberg JM: Cutting into cholesterol. Cost-effective alternatives for treating hypercholesterolemia. *JAMA* 1988; 259:2249-2254
3. Mandelblatt JS, Fahs MC: The cost-effectiveness of cervical cancer screening for low-income elderly women. *JAMA* 1988; 259:2409-2413
4. Oster G, Epstein AM: Cost-effectiveness of antihyperlipemic therapy in the prevention of coronary heart disease. The case of cholestyramine. *JAMA* 1987; 258:2381-2387
5. Oster G, Huse DM, Delea TE, Colditz GA: Cost-effectiveness of nicotine gum as an adjunct to physicians' advice against cigarette smoking. *JAMA* 1986; 256:1315-1318
6. Weinstein M, Statson WB: Cost-effectiveness of interventions to prevent or treat coronary heart disease. *Annu Rev Public Health* 1985; 6:41-63
7. Eddy DM, Hasselblad V, McGivney W, Hendee W: The value of mammography screening in women under age 50 years. *JAMA* 1988; 259:1512-1519

The preceding letter was referred to Drs. Ganiats and Schneiderman, who respond as follows:

We thank Dr. Lee for his comments. Dr. Lee's view that "in prevention, the ethics are different" seems at odds with his professed value judgment that the family physician should act to provide "the greatest good for the greatest number." Ideally, all medical acts are consistent with maximizing good. Indeed, the reason why we treat a patient with acute illness is because we believe in the immediate and likely efficacy of our treatment. We will even modify our general care schedule, if necessary, taking time away from other patients. When we discover otherwise, we change our treatment. The same is true not only for the acutely ill person, but for the possibly-ill-to-be person, a larger population to which all of us in one form or another belong. Efficacy and cost-effectiveness issues apply to both ends of the treatment spectrum.

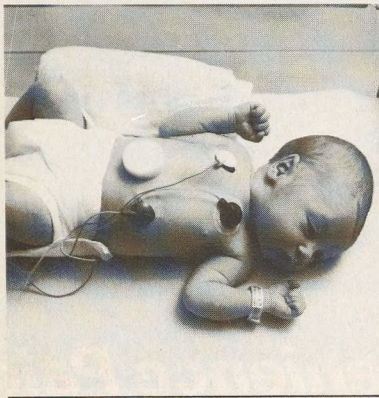
In addition, Dr. Lee describes "cost per year of life saved" as the "best measure of the greatest good for the greatest number." We do not believe the question is quite that simple.

Before selecting the measure of cost effectiveness, one must determine the perspective and goal of the analysis. Our article assumes the societal perspective, for this perspective seems the best for policy formulation. Other possible perspectives include the hospital, the insurance company, and the patient. The analysis perspective determines which costs and health effects should be measured. For example, the dollar costs covered by an insurance company are not part of a cost analysis from a patient perspective.

After the perspective of a cost-effectiveness analysis is chosen, the

continued on page 142

We want to take heart defects out of the nursery.



It almost breaks your heart to see it. She's two days old and there's a question about a hole in her heart. She's fortunate. Something can be done about it. Each year, 25,000 infants are born with heart defects which can disable them for life.

The American Heart Association is fighting to reduce this form of early death and disability with research, professional and public education, and community service programs.

But more needs to be done.

You can help us save young lives by sending your dollars today to your local Heart Association, listed in your telephone directory.



**American Heart
Association**

WE'RE FIGHTING FOR YOUR LIFE

LETTERS TO THE EDITOR

continued from page 140

terms for the numerator and denominator must be selected. Our article, like most cost analyses, chose the dollar as a monetary numerator, but this is not mandatory. In our article we point out that our society has not yet limited the health care budget, and a case can be made that the most limiting resource should be the one measured. For example, one could state that other medical resources are limited, such as kidneys for transplant operations, counselors for smoking-cessation or diet-change clinics, or, as Dr. Lee suggests, practitioner time. In this latter case an appropriate cost analysis may be stated in terms of "physician visits per year of life saved" or "home visits per year of life saved."

A more important principle involves the other element of the cost-effectiveness expression, the denominator. If the goal is to maximize a year of life, then a year of life saved is an appropriate measure. We still contend, however, that the goal of medicine is not solely to prolong life: 10 years of life in coma should not necessarily be valued more than 9 years of fully functioning life. More than just length of life, then, is quality of life. While we favor the well-year or quality adjusted life year, measures derived from a health status index, there are other methods for determining patient utilities such as the time-tradeoff method, the standard gamble (basic reference gamble), and willingness-to-pay.¹

Dr. Lee's preference for a standard measure for screening tests is well taken. That the several authors he cites have opted for the easier "cost per year of life saved" does not justify this as the standard. We continue to prefer, as do others,² a utility statement that takes into account patient preferences for both time and quality of life.

Theodore G. Ganiats, MD
Lawrence J. Schneiderman, MD
Division of Family Medicine
University of California, San Diego

References

1. Weinstein MC, Fineberg HV (eds): *Clinical Decision Analysis*. Philadelphia, WB Saunders, 1980, pp 253, 217-218, 251-252
2. Russell LB: *Evaluating Preventive Care*. Washington, DC, The Brookings Institution, 1987, p 73

PARADIGMS AND FAMILY MEDICINE

To the Editor:

I very much enjoyed reading Dr. Ruane's guest editorial, "Paradigms Lost: A Central Dilemma for Academic Family Practice" (*J Fam Pract* 1988; 27:133-135) and Dr. Phillips' "Disciplines, Specialties, and Paradigms" (*J Fam Pract* 1988; 27:139-141).

In response to Dr. Ruane, I am convinced that our "science" is not in standardizing a "case" or problem to a preexisting theory, but is in developing theories derived from careful listening to and observation of the patient. These theories may be reductionistic or expansionistic, but they derive from observation and experience and benefit from good records that allow retrieval and analysis of the data that may or may not support the theory.

In response to Dr. Phillips, I believe any paradigm we develop for family medicine and practice must be understood in light of a new societal paradigm that must be developed and that must provide the basis for more of our decision making and actions.

The new societal paradigm must evaluate actions and things in relation to sustainability of life in its diverse forms on this, our complex and fragile, but tough, planet. It requires individuals to think ecologically. Family physicians and all physicians do and must think in ecological terms, as we care for the complex and fragile, but tough, human organism, which exists in the context of family and community and whose long-term survival is dependent upon how we as a species use and protect this planet.

continued on page 145

continued from page 142

Family medicine and practice derived not only from general practice, but also from internal medicine (with emphasis on accurate diagnosis and follow-up); pediatrics (with emphasis on prevention, developmental stages, and the child in the context of family and community); psychiatry (with its concepts of individual family and group interrelationships and function), sociology and anthropology (with emphasis on relationships of people, communities, and culture); social work (with emphasis on family counseling and use of community resources and support systems); and general practice (with emphasis on care of the individual regardless of age, sex, or disease).

General practice is our origin historically, but these other specialties and disciplines add to that origin and help make us a new specialty.

*Eugene S. Farley, Jr., MD, MPH
Professor and Chairman
Department of Family Medicine
and Practice
University of Wisconsin-Madison
Medical School*

PREVENTION OF BREAST CANCER

To the Editor:

Bourguet et al reported an audit of family physicians' behavior with respect to screening mammography (Bourguet CC, Gilchrist VJ, Kandula M: *Correlates of screening mammography in a family practice setting. J Fam Pract* 1988; 27:49-54). Implicit in their methodology is the premise that this technology should not be universally applied, but rather applied to subpopulations at higher risk, thus increasing the test's predictive value. This notion is laudable, rational, and concordant with principles of prevention previously stated in this journal.¹

Our concern with the report stems from their implication (Table 2) that cigarette smoking is a risk factor for breast cancer. While the data are sometimes conflicting and no meta-analysis exists, a simple "vote count" of existing studies shows either no correlation or perhaps a negative one. Indeed, recently the theoretical underpinnings of a negative correlation have received considerable attention.²

Lest our location in the tobacco belt suggest provincial interests, we do not advocate smoking as protection against any form of cancer. Instead, a negative correlation would lead us to propose that resources might be more effectively directed toward health behavior modification than screening mammography in women smokers.

*Robert H. Funke, MD
Michael J. Costa, MD
Department of Family Medicine
East Tennessee State College
of Medicine
Kingsport, Tennessee*

References

1. Frame PS: A critical review of adult health maintenance: Prevention of atherosclerotic disease. *J Fam Pract* 1986; 22:341-346
2. Khaw KT, et al: Cigarette smoking and levels of adrenal androgens in post-menopausal women. *N Engl J Med* 1988; 318: 1705-1710

The preceding letter was referred to Drs. Bourguet et al, who respond as follows:

We appreciate the comments of Drs. Funke and Costa in clarification of our article. As they correctly point out, the weight of the evidence is that smoking is either inversely associated or unassociated with breast cancer. Consequently, smokers would certainly not define an appropriate group for screening mammography. We chose to include smoking in Table 2

because this table represented patient characteristics that were correlated with ordering a screening mammogram. We regret any possible misinterpretation of the table.

We agree that appropriate use of screening requires that the disease have a relatively high prevalence in the target population, thus increasing the positive predictive value of the screening test. As our study was limited to women aged 50 years and older, all study members were high risk and recommended for screening.¹⁻³

We feel that the primary message of these data is that the level of referrals for mammography is quite low among a group of women who are high risk by virtue of their age. We concur with the recommendations of the American Cancer Society and the Canadian Task Force on the Periodic Health Examination⁴ that all women older than 50 years should be screened for breast cancer regardless of the presence or absence of additional risk factors.

*Claire C. Bourguet, PhD
Northeastern Ohio Universities
College of Medicine,
Rootstown, Ohio
Valerie J. Gilchrist, MD
Family Practice Center of
Aultman Hospital
Canton, Ohio*

References

1. Frame PS: A critical review of adult health maintenance. Part 3: Prevention of cancer. *J Fam Pract* 1986; 22:511-520
2. Frame PS: A critical review of adult health maintenance. Part 4: Prevention of metabolic, behavior, and miscellaneous conditions. *J Fam Pract* 1986; 23:29-39
3. Eddy D: Guidelines for the cancer-related checkup. Recommendation and rationale. *CA* 1980; 30:193-240
4. Canadian Task Force on the Periodic Health Examination: The periodic health examination: 2. 1985 update. *Can Med Assoc J* 1986; 134:724-727