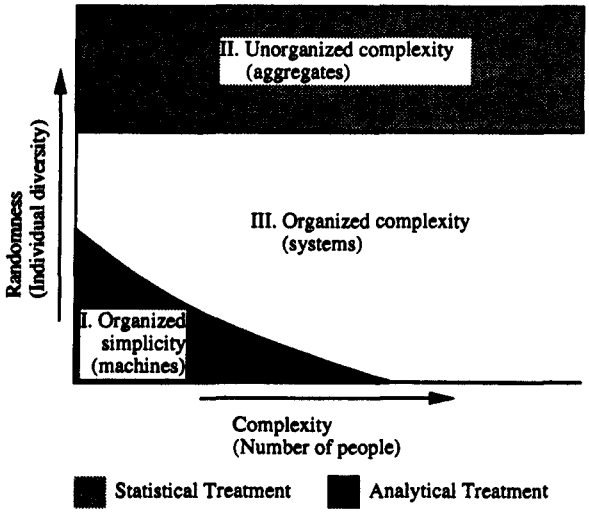

Figure 1. Types of systems with respect to medical thinking. Reproduced with permission from John Wiley & Sons.[2]

and random to conform to the assumptions of statistics, as depicted in Figure 1.[2] Outcome research deals with phenomena in real-world systems and is usually best understood as system analysis. As such, its conclusions apply only to the system under study. This is good news, indeed, because it means that health care delivery systems are not constrained by unbending laws of nature but can change and improve. Tools such as the MedisGroups data base can be used to detect subsystems achieving high quality and efficiency, whatever the specialty or geographic location; in turn, these high-quality subsystems can guide the rest of us.

In response to Dr. Bertakis's discussion of outcome measures, I would point out that I reported not only mortality but also the MedisGroups second in-hospital morbity review, which I termed MedisGroups major morbidity classification. There was a statistically significant difference between groups for only one of the 15 DRG-severity groups studied, as described in the Results section (but not listed in a table). In addition, I would submit that especially for the elderly, hospital length of stay is not only an indicator of process quality — rapidly increasing if quality variations occur — but also a component of outcome quality. The quicker the frail elderly get out of the acute hospital, the better for their function and overall well-being and the better they like it. In this pilot study, family physicians had a shorter length of stay for 9 of 14 DRG-severity groups and lower standard deviations for 11 of 14. These comments in no way diminish Dr. Bertakis's main point that outcome research is only as good as its outcome measurements.

Dr. Gillette's "soft observations" about family physicians' reduced admission rate and higher severity for medical back pain are valid. These observations strengthen the conclusion that Region 5 family physicians' practice style was associated with reduced cost for equal or superior outcome.

Dr. Armour raises the question of the proper relationship between family physicians and subspecialists in delivering hospital care. In the past, there have been those who would have denied family physicians any role in hospital care. Studies such as this support Dr. Armour's view that, quite the contrary, family physicians should "coordinate and facilitate" hospital care. I respond to Dr. Armour's other questions that family physicians never have sought to be "sole managers" of care. This study suggests that neither should subspecialists stake themselves out as "sole managers." I hypothesize that optimal care results precisely from the harmonious collaboration between generalists and subspecialists, such as those presumably treating patients in the family physician group in this study. To that end, in my opinion, family physicians have not only the prerogative but the duty to restrict utilization of resources suggested by subspecialists, particularly for those elderly patients for whom ethical, social, functional, or practical considerations make unrestrained use of technology unwise.

By means of putting all these thoughts in perspective, I liken the MedisGroups data base to a microscope's low-power lens, which will guide the observer to a field of interest. Once identified, the field is further examined with higher power lenses to give more detailed information. Let us get on with scanning under low power, keeping in mind the limitations.

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References

1. Bertakis KD. Cost-effectiveness of care by family physicians. J Am Board Fam Pract 1993; 6:609-12.
2. Weinberg GM. An introduction to general systems thinking. New York: John Wiley & Sons, 1975:18.

Correction

Hypothermia and Cardiorespiratory Arrest

In the Article "Severe Hypothermia Associated with Prolonged Cardiorespiratory Arrest and Full Recovery" by Cynthia Soghikian Wolfe, MD, (Volume 6 Number 6, p 594) Figure 1 (Electrocardiogram with Osborne waves) was printed upside down. *JABFP* regrets the error.