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Journal Discussion
In the Left Corner: The Starving Endocrinologist
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Levetan CS, Jablonski KA, Passaro MD, Ratner RE. Effect of physician specialty on outcomes in diabetic ketoacidosis. *Diabetes Care*. 1999;22:1790-1795.

Since the time of Hippocrates, physicians have been ethically bound to practice within the scope of their expertise [1]. When a physician is confronted with a patient whose care requires treatment beyond the physician's training, a specialist is summoned to examine the patient more effectively. A physician who specializes in endocrinology is frequently asked to treat patients with diabetes, reproductive complications, or hormone deficiencies. Under the recent pressures of managed care, however, more and more primary care physicians are themselves administering medical treatment previously delegated to endocrinologists [2]. This, along with decreasing enrollment of physicians entering training fellowships in endocrinology, bears the early signs of an ensuing crisis in this area of specialized treatment [3].

Consider a study that sought to determine whether endocrinologists' care of patients hospitalized for diabetic ketoacidosis (DKA) was more cost-effective than care by general physicians. In the US more than 100 000 people are hospitalized every year for DKA, accruing over $65 billion in hospital charges annually. The study investigated 257 DKA patients over a period of 3½ years and logged physician specialty, length of patient stay (LOS) in the hospital, and re-admission rates for each patient treated [4].

Results
The study found that the average LOS for endocrinologist-treated patients was shorter—3.3 days—than the average LOS for generalist-treated patients, which was 4.9 days. The endocrinologist-treated group also had a re-admission rate one third (2 percent) of the rate of the generalists-treated group (6 percent). Since DKA patients treated by endocrinologists had shorter hospital stays they also incurred lower hospital charges (mean $5463) than did patients treated by general physicians (mean $10 109). Therefore, the authors conclude, endocrinologists "provide more cost-effective care than generalists" [5], a fact the authors attribute to the "greater experience, more narrow area of focus, and the time these specialist dedicated to continuing education in the field of diabetes" [6]. The medical implications of these findings were not specifically addressed.

The study controlled for factors—including age, sex, and severity of illness—that might affect a patient's recovery and re-admission rate regardless of treatment.

Shortcomings

The study was conducted in a large inner-city hospital whose patient demographic may not represent that of an average community-based hospital in other parts of the US. Socio-economic factors, such as the employment status or insurance plans of each patient, were not considered and may have influenced the patient's past care and desire to stay hospitalized. Similarly, patient autonomy was not discussed. The study neglected to give possible reasons why a patient might have preferred a general physician over a specialist or the possibility of a patient's having requested or refused additional testing. These are significant contributions to patient outcomes that may not be retrievable from medical records alone.

The study also failed to detail the qualifications, demographics, and treatment patterns of the physicians studied. There are many types of physicians: young, old, those who prefer family or general practices, those with better bedside manners, and so on. Endocrinologists, especially, vary in the type and extent of training they receive in particular disorders and technologies after initial certification. Without specific criteria to clarify the physician's background and training, the researchers risked blurring the distinction made between generalists and endocrinologists—a fundamental aspect of the study.

Yet the greatest weakness of this study lies in the exclusively economic endpoint it chose to consider. The study's primary focus is the financial cost-benefit of treatment by specialists versus treatment by generalists. It does not adequately represent their respective *medical* advantages or disadvantages which, ethically speaking, harbor greater significance.

Implications

Aside from these shortcomings, however, the study highlights a number of important issues facing endocrinologists today. One question that comes to mind is why this group of endocrinologists was inspired to promote their discipline as *financially* friendly. Are endocrinologists feeling threatened within the general medical profession, and are articles like this one trying to counteract this fear? Are general physicians, themselves under the financial constraints of managed care, infringing on the endocrinologists' area of expertise? Why has there been a recent decline in the number of physicians entering training fellowships in endocrinology? Are young physicians faced with other career obstacles that discourage them from further training? Are patients, or their insurance policies, preferring general physicians over specialists these days? These questions, their answers, and their ethical implications apply not only to endocrinologists but to all specialists and generalists alike and will certainly require further discussion by the entire profession.

References

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