

MEDICINE

Trailblazer for Patient-Centered Care

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Once in a generation or so, someone makes a fundamental discovery that, although obvious in retrospect, was met by successive stages of disinterest, resistance, and finally acceptance as a contribution that forever changed our view of the world. In medicine, through his discovery and thorough explication of ubiquitous small area variation, John Wennberg became one such individual.

In *Tracking Medicine: A Researcher's Quest to Understand Health Care*, Wennberg (Dartmouth Medical School) chronicles his journey for a wide readership. For the uninitiated, the book will serve as a primer on some of the most important work in the science of health care delivery. For those already familiar with Wennberg's work, the book offers a useful compendium of the evolution of his

inauspiciously sandwiched between a report on the influence of birth order on intelligence and a news item on the Watergate tapes. Their paper, a long time coming and having a somewhat critical view of clinical practice, had been previously rejected by many of the premier medical journals. With this contribution, modestly titled "Small area variations in health care delivery," the authors pioneered a field of research that has since transformed our views of the medical profession and health care delivery systems. In *Tracking Medicine*, Wennberg takes us along on his journey from his early revelation of inexplicable differences in the use of health care among regions in close proximity and with similar populations to his current research and views that are now influencing health care reform.

The book is elegant and disruptive. Wennberg highlights the power of enlightened observation as he identifies Vermont as the perfect laboratory in which he would demonstrate the frequently illogical nature of the delivery of health care. He describes populations that receive markedly different types of care despite similar characteristics and similar degrees of illness. He reveals that the likelihood of children undergoing a tonsillectomy was dictated by the doctor who treated them, a circumstance that in turn was based on the area where the children lived. And the differences he uncovered were not small. Wennberg relates how there could be as much as a threefold difference in rates between adjoining school districts. His work showed that although residents of Randolph and Middlebury were very similar and contacted their physicians at much the same rate, hospitalization and surgery rates were 66% higher (and Medicare spending 53% higher) for patients living in Randolph. Wennberg postulated that supplier-induced demand was responsible for these differences, and he went on to extend his work across conditions and regions to support his thesis. He comments that "variations that cannot be attributed to illness or access to care should be interpreted as an indication of variation in professional opinion, and the remedy for that variation ought to be outcomes research."

Wennberg also describes his work cham-

pioning the democratization of the patient-doctor relationship. He holds that "[i]t should be considered a serious form of medical error when surgeons operate on patients who would not have wanted the procedure had they been fully informed and empowered to participate in a meaningful way in the choice of treatment." His research exposed the shortcomings of approaches to health care in which the power resides solely with the physician. He

has shown the extraordinary effect of engaging patients with critical information. He describes his framework of preference-sensitive care, in which decisions for discretionary tests and procedures reflect not only the evidence for benefit but the patient's preferences. Wennberg comments that a "distinguishing feature of our

approach to outcomes was the insistence we placed on obtaining information about *all of the outcomes that matter to patients.*"

The author does not share his experiences on a personal level but rather as a recollection of an intellectual journey. Nevertheless, readers will feel his determination, creativity, disappointment, defiance, and confidence. Given the accomplishments it records, the book could easily be considered a capstone to a career—but I suspect that Wennberg is not finished.

Wennberg is generous to individuals who preceded him and to those with whom he collaborated. However, his account includes little description of the contemporaneous research performed outside his circle beyond that for purposes of contrast (as he does with the views of Robert Brook of RAND) or defense (as he does with the views of Peter Bach of Memorial-Sloan Kettering). This circumscribed focus is less a weakness than it is the expression of a sole author's detailed and unique narrative. Rather than offering a comprehensive history of the field, the book describes the steps and insights of its influential author. Nearly 40 years ago, Wennberg's keen observations about the delivery of health care in the United States launched a revolution in American medicine. *Tracking Medicine* tells the story that precipitated that revolution and should be required reading for anyone interested in how we can better provide health care—and how research can influence practice and policy.

References

1. J. Wennberg, A. Gittelsohn, *Science* **182**, 1102 (1973).

Tracking Medicine

A Researcher's Quest to Understand Health Care

by John E. Wennberg

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Listening to the patient.

thinking and the development of the research over his career. For both these audiences as well as readers who are already experts in outcomes research, Wennberg's account provides an inspiration about how outstanding research is conducted and a reminder of the persistence that is required to introduce new ideas and overcome conventional wisdom. At times technical, *Tracking Medicine* challenges readers to follow the author's trail, understand and interpret the details, and appreciate the meaning of his observations (including the graphical presentations of data that are sprinkled throughout the book).

In 1973, Wennberg and biostatistician Alan Gittelsohn published a remarkable research article in *Science* (1), which appeared

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