

MIT Open Access Articles

Barbara Bridgman Perkins. Cancer, Radiation Therapy, and the Market. New York: Routledge, 2017. vi + 243 pp. ISBN 1-138-28524-2, \$149.95 (hardcover).

The MIT Faculty has made this article openly available. **Please share** how this access benefits you. Your story matters.

Citation: Scheffler, Robin W. 2019. "Barbara Bridgman Perkins. Cancer, Radiation Therapy, and the Market. New York: Routledge, 2017. vi + 243 pp. ISBN 1-138-28524-2, \$149.95 (hardcover).."
Enterprise & Society, 21 (1).

As Published: <http://dx.doi.org/10.1017/eso.2019.19>

Publisher: Cambridge University Press (CUP)

Persistent URL: <https://hdl.handle.net/1721.1/123862>

Version: Author's final manuscript: final author's manuscript post peer review, without publisher's formatting or copy editing

Terms of use: Creative Commons Attribution-Noncommercial-Share Alike



Barbara Bridgman Perkins. *Cancer, Radiation Therapy, and the Market*. New York, Ny.: Routledge, 2017. vi + 243 pp. ISBN 1-138-28524-2, \$149.95 (hardcover).

For traditional histories of American medicine, the 1970s market a pivot towards commercial dominance. The decade witnessed activism that framed the patient as a consumer, policy changes which cast the doctor as entrepreneur, and the elevation of the market as an arbiter for care. For critics of medicine today, viewing controversies over insurance charges, medical training, or drug pricing, it is tempting to imagine a halcyon time prior to this turn when medicine and the market were not locked in a tight embrace.

However, as a growing number of medical and business historians are recognizing, this narrative obscures a much more complex set of historical relationships between therapeutic innovation, patient care, and market organization. Barbara Bridgeman Perkins argues that market considerations have long shaped the decisions of doctors, hospitals, and insurers. The important question is not if there is or is not a market for medical services, but what kind of marketplace it is and how it was developed. Building on approaches outlined in her prior study of medical care, *The Medical Delivery Business* (Rutgers University Press, 2003), Perkins argues that the development of radiotherapies for cancer drew as much from concepts of industrial specialty organization and the imperatives of capital investment as from technological developments and therapeutic efficacy.

Cancer, Radiation Therapy, and the Market traces the development of radiotherapy for cancer through three eras. Throughout, the development of radiotherapy responded as much to the logic of the market as the imperatives of medicine. The first era, from 1895-1945, began with the discovery of X-rays and radium. Both of these sources of therapeutic radiation were expensive, and their production forged close ties between radiologists, the nascent electronics and chemicals industries, hospitals, and Gilded-age philanthropists. The second era, from the 1940s to the 1970s, witnessed a technological and economic boom, as universities, hospitals, and private companies raced to develop and promote ever more powerful radiotherapy devices. Prior generations of machines had dispensed radiation in the kilovolt range, but now companies and hospitals chased megavoltage. For administrators versed in business organization theory, radiotherapy facilities were lucrative profit-centers. The rapid expansion of government funding for cancer research under the “Atoms for Peace” program of the Atomic Energy Commission and later the War on Cancer heavily subsidized this expansion. The third era, from the late 1970s to the present, covers the “financialization” of radiotherapy. As hospitals turned to markets for capital, radiotherapy presented venture capital investors with a high-cost and high return specialty medical field. Hundreds of millions of dollars were expended on the development of proton therapy centers, a procedure of untested therapeutic benefit.

Perkins’ long view of radiotherapy allows her to draw out a few paradoxical findings regarding the relationship between markets and medicine. While not denying that there have been improvements in cancer treatment, Perkins highlights the fact that these advances have been confined to particular cancers, not cancer writ large. While markets might claim to operate as a way of matching supply with demand, most radiotherapy facilities aimed to match demand with supply. In a story familiar to business historians, the expense of establishing specialized

radiotherapy units came to dominate decisions regarding how aggressively it should be used. Soon, there were many more radiotherapy spaces in many markets than patients who required treatment. In order to keep spaces full (and paying), hospitals touted the power of their devices, even if its therapeutic benefits were uncertain. For many areas this created an upward spiral of expensive competition, as hospitals sought to capture a limited number of patients by financing and constructing more powerful devices. Even federal efforts to constrain needless competition, such as the Certificate of Need program, had the ironic consequence of entrenching this technological imperative after radiotherapy device manufacturers obtained prominent roles in this process of supervision. Given these economic and organizational pressures, the adaptation of new devices far outpaced assessments of its efficacy, as Perkins demonstrates in a section on controversies over efforts to apply randomized clinical trials to the evaluation of different radiotherapy regimens. The intriguing interrelationship between the business imperative of increasing radiotherapy's power and medical assessments of its efficacy, while vital, is somewhat obscured by the organization of this section into several brief chapters.

Perkins concludes with a powerful caution against the idea that market-driven innovation can address societal health needs. In a world where government and insurance companies are capable of controlling increases in price, providers may easily substitute innovation inflation for cost inflation. Hospitals and radiologists find themselves trapped between the disillusionment fostered by previous rounds of hype and the need to cover the costs of constructing radiotherapy units. Promising new generations of even more powerful machines presents the only way out of this trap, creating a cycle that now extends globally in its search for more customers.