negotiation with community leaders. The evidence presented in this volume effectively demonstrates the agency of participants at all levels and exposes the narrowness of those accounts which focus on the directives and activities of the few at the top.

Expunging variola is also notable for the attention it gives to another hitherto neglected aspect of smallpox studies—what Bhattacharya describes in chapter 5 as the "integral component" of the smallpox eradication programmes—"vaccine development and deployment". The technological aspects of vaccination had a significant impact on the organization of the programmes and, here again, Indian agency is highlighted. For example, despite the WHO's objections to the use of wet vaccine (with its attendant problems of storage and transportation), its substitution by freeze dried vaccines was resisted in order to protect Indian technological autonomy.

The efficacy of vaccines and the nature of the operation itself had an obvious impact on the take-up of vaccination. As Bhattacharya points out, civilian resistance to the vaccination procedure stemmed as much from these factors as it did from cultural opposition. Vaccination was intrusive and painful, and moreover carried a risk of infection. The rotary lancet, in common use, was described as a "mediaeval vaccination torture device" by one WHO official. However, attempts to standardize techniques and impose uniformity came up against existing wide-ranging variations in administrative attitudes and field practice.

Based on previously unused archival and private papers, this book eschews simplistic accounts of the WHO eradication campaigns and exposes the full complexity of the processes of decision-making and policy implementation. Its emphasis on the significance of vaccination technology is long overdue. In its unravelling of the complexities of the eradication programmes, it serves as a model for historical analysis. It could also be read with profit by those now actively engaged in such ventures. It illustrates perfectly the futility of trying to impose overarching

structures on human agency, whether attempted by historians or by those they write about.

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Margaret Pelling and Scott Mandelbrote (eds), The practice of reform in health, medicine, and science, 1500–2000: essays for Charles Webster, Aldershot, Ashgate, 2005, pp. xv, 376 (hardback 0-7546-3933-9).

Published thirty years after The great instauration, Charles Webster's groundbreaking study of the seventeenth-century political and scientific revolution, The practice of reform is a tribute to Webster from his colleagues, former students and professional historians whom he has influenced and guided. Drawing their inspiration from the questions Webster's body of work has raised, the eighteen authors examine the effects that demands for social, political and religious reform had on medical and scientific theory and practice, and on the structure of healthcare. Following the main thrust of Webster's research, the volume spans the Renaissance to the present, although it is the early modern period and the twentieth century that dominate. Margaret Pelling's detailed essay on medical practitioners and office holding is the only chapter that straddles both periods in its examination of how medical practitioners were marginalized from the normal structures of male authority at a local, regional and national level. Other essays equally point to the importance of national, regional and local contexts or, as in the case of Linda Bryder in her comparative assessment of infant welfare services in New Zealand and England, Stefano Villani in his essay on the battle between innovators and conservatives in seventeenth-century Italy, and Anne Marie Rafferty in her essay on the Colonial Nursing Association (CNA), to international contexts and the exchange of knowledge.

In loosely examining the idea of "reform", the essays broadly emphasize the importance of religious and political ideologies and pedagogy in the early modern period, and the impact of professional concerns, voluntary bodies, and the politics of welfare and resources in twentieth-century healthcare and public health. The political dimension is highlighted in Scott Mandelbrote's nuanced micro-study of how the case of Anne Greene was used and interpreted, and by Pietro Corsi in his essay on how political considerations influenced linguistic and scientific innovations in Revolutionary France. If Corsi emphasizes politics and the plurality of actors, standpoints and styles of research, other essays draw attention to the "afterlife of reforming concepts" (p. xi) as evident in Jonathan Barry's richly layered analysis of John Cary, poor relief and radical politics in Bristol. Many of the essays also tackle the importance of local and regional differences. This is ably illustrated by Mordechai Feingold in his re-examination of the origins of the Royal Society and the role of Oxford, by Colin Kidd in his essay on race and medicine in Enlightenment Scotland, and by John Stewart in his eloquent analysis of Scottish hospital planning in the early years of the NHS.

Whereas the first chapter describes the shift in theological thinking that occurred as Renaissance notions about the improvement of man in God's image opened a space for innovation and progress, later chapters dissect how Protestantism and the social changes it encouraged opened the way for developments in science, theology and medicine. Following Webster, both Antonio Clericuzio and Penelope Gouk examine the nature of Paracelsian medical thought. In his essay, Clericuzio addresses the neglected topic of chemical medicine and Paracelsian thought in Italy, while Gouk in her lively and persuasive account explains how music came to play a role in Paracelsianism and helped to harmonize Paracelsian thinking with established systems of medical and scientific thought. Lauren Kassell picks up on the theme of magic evident in Gouk's essay and describes the trade in medical objects in

early modern England, while Robert Crocker turns to questions of spirit and body in Henry More's views of faith healing.

The final six chapters address the twentieth century and the history of state welfare policy, nursing and public health in Britain. Both Stewart and John Welshman address different sides of hospital planning and resource allocation, with Stewart drawing attention to questions of governance and expenditure in Scotland and the conflicts they created. If Welshman points to the importance of passive officials in shaping regional experiences, Virginia Berridge in examining the history of Action on Smoking and Health (ASH) and its part in shaping the new public health agenda shows how in the 1970s media-savvy individuals could play an important role. Both Rafferty and Jane Lewis tackle nursing: Rafferty from a colonial perspective through the work of the CNA; Lewis by addressing questions of professional status and regulation in nursing and medicine in the 1970s. If Lewis unsurprisingly concludes that nurses, with their lower status, were in a weaker position when it came to controlling regulation, she reminds historians of the importance of the relative power of professional groups and the relationship they were able to carve out with the state.

In putting together the volume, Pelling and Mandelbrote hope to remind historians that scholarship in the history of medicine and science remains vibrant and is "both intelligible and relevant to the generalists" (p. xi). Although they are largely successful in this, the essays by Howard Hotson on the improvement of man in God's image and by Crocker on faith healing are perhaps too narrowly focused. Although experts on the early modern period will find these essays rich in their use of sources, more general readers might find it difficult to disentangle the detailed cases being presented and see the wider points. In addition, the volume would have benefited from a more systematic historiographical engagement with the idea of reform. Notwithstanding these minor criticisms, Pelling and Mandelbrote should be congratulated for putting together a coherent and at times provocative volume that provides

a composite picture of the interaction of religion, politics, medicine and professional concerns in western Europe. In doing so, they have provided a fitting tribute to Webster and his work.

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James B Waldram, D Ann Herring, and T Kue Young, Aboriginal health in Canada: historical, cultural, and epidemiological perspectives, second edition, University of Toronto Press, 2006, pp. xii, 367, £45.00, \$70.00 (hardback 978-0-8020-8792-8); £20.00, \$29.95 (paperback 978-0-8020-8579-8).

This is an important contribution to the study of Canadian Aboriginal health and health care. It has its limitations, however. Any attempt to generalize about "Aboriginal people" (Indian, Inuit and Métis) in Canada is fraught with difficulty since there are hundreds of communities, thousands of kilometres apart, with vastly different cultural and linguistic traditions. The authors recognize these limitations, but maintain that there is a place for a national examination of health and Aboriginality.

This multi-authored volume is intended as an entry point to issues surrounding Aboriginal health in Canada; as such it is based solely on published literature. Undergraduates in health sciences, Native studies, and anthropology searching for an introduction to the field will be thankful for this book, as will administrators and planners in health care delivery. It is organized into ten chapters that reflect the subtitle-historical, cultural, and epidemiological perspectives of Aboriginal health. The multi-disciplinary approach is the book's greatest contribution, and allows the authors to examine historical as well as contemporary issues, although the links between the perspectives are not always satisfactorily drawn.

The authors are all trained as anthropologists (T Kue Young is also a public health physician)

and this is reflected in their approach to the material. The first three chapters are the strongest. Chapter one outlines how Aboriginal peoples of Canada are defined, which is less straightforward than it may at first appear; chapter two examines the state of pre-contact health and disease, and effectively dispels the popular notion of a disease-free continent; chapter three then carries this examination into the contact period and engages the ubiquitous notion of massive demographic collapse from imported epidemic disease. The authors are careful to make the point that ecological disruption from the importation of plants, animals, and microbes to the Americas was but one of several fundamental challenges accompanying immigration. Never denying the important role of disease in population declines, the authors argue that social, military, cultural, and economic interference by settlers, missionaries and government was equally devastating. Chapter four continues the rough chronology by examining what the authors call the health transition, from epidemic infectious disease to chronic disease, in the post-Second World War period. Diabetes, cancer, and hypertension join with persistent and emerging diseases such as tuberculosis and HIV/AIDS.

The book's organization moves abruptly from this epidemiological perspective to an examination of Aboriginal medical and healing traditions where the authors note that despite attempts by government and missionaries to subvert their medical foundations, Aboriginal healing continued well into the modern era. The following two chapters then examine the development of government health services for Aboriginal people. These are the only chapters that are strictly historical, which is disappointing because the links between historical developments and contemporary concerns are often lost. For instance, the authors note "European colonization remains the most significant historical fact in our analysis" (p. xii), but this "fact" is never clearly drawn. The authors' decision to examine epidemiology in a chapter separate from its historical context undermines their argument.