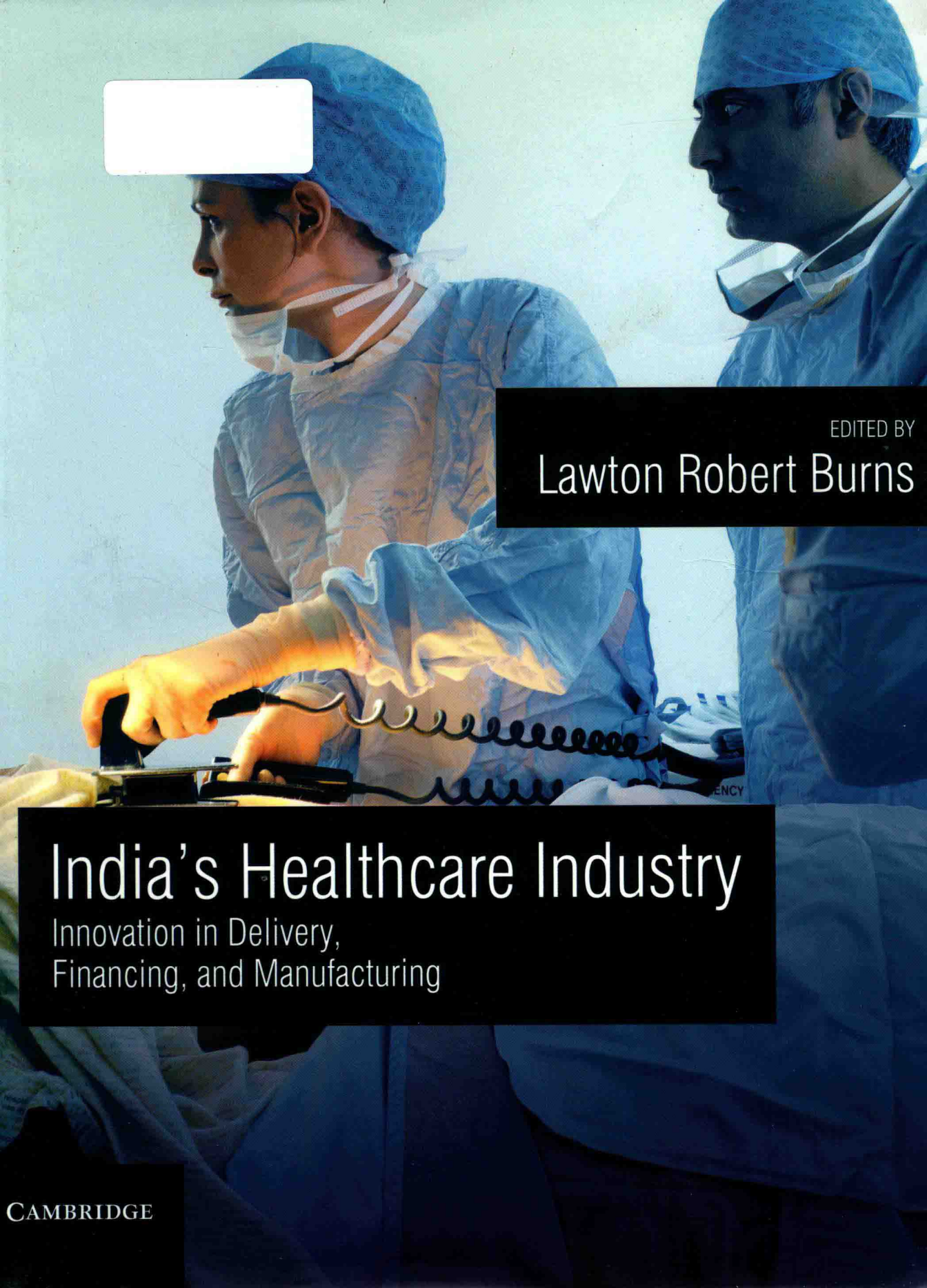

EDITED BY

Lawton Robert Burns

India's Healthcare Industry

Innovation in Delivery, Financing, and Manufacturing

CAMBRIDGE

India's Healthcare Industry

Innovation in Delivery, Financing, and Manufacturing

Edited by
Lawton Robert Burns

CAMBRIDGE
UNIVERSITY PRESS

CAMBRIDGE
UNIVERSITY PRESS

4381/4 Ansari Road, Daryaganj, Delhi 110002, India

Published in the United States of America by Cambridge University Press, New York

Cambridge University Press is part of the University of Cambridge.

It furthers the University's mission by disseminating knowledge in the pursuit of education, learning and research at the highest international levels of excellence.

www.cambridge.org
Information on this title: www.cambridge.org/9781107044371

First published 2014

Printed in India Shree Maitrey Printech Pvt. Ltd., Noida

A catalogue record for this publication is available from the British Library
Library of Congress Cataloging-in-Publication Data
India's healthcare industry : innovation in delivery, financing, and manufacturing / [edited by] Lawton Robert Burns.
p. ; cm.
Includes bibliographical references and index.
Summary: "Describes the three sets of institutions that deliver healthcare services in India, finance these services, and manufacture the products used in these services"--Provided by publisher.
ISBN 978-1-107-04437-1 (hbk.) -- ISBN 978-1-107-62234-0 (pbk.)
I. Burns, Lawton R., editor of compilation.
[DNLM: 1. Delivery of Health Care--India. 2. Biomedical Technology--India. 3. Health Care Sector--India. 4. Health Services--India. W 84 JI4]
RA529
362.10954--dc23
2013030728

ISBN 978-1-107-04437-1 Hardback

To Lee, Alex, and Bud

with love

&

To God Almighty

with many thanks

Preface

This volume grew out of an experiment at the Wharton School's MBA program: to have Wharton faculty teach global modular courses (GMCs) to Wharton students on specific topics all around the world. The idea of the GMCs is to provide students with a unique combination of local immersion, course concepts, and understanding of emerging business issues. The topics and locations of these courses are chosen to give students first-hand exposure to business challenges and opportunities in regions undergoing rapid change – for example, energy and infrastructure in Brazil, global supply chain management in China, and marketing in emerging economies such as India and China.[1]

The first such course offered was HCMG 890, "Innovation in the Indian Healthcare Industry." Wharton faculty and students developed the content for the course in collaboration with industry experts from across India. Their collective effort is presented here. This volume seeks to describe the current state of India's healthcare system ranging from the parties that *pay* for healthcare (individuals who pay out of pocket, insurance companies, community insurance schemes, government ministries), the parties that *provide* healthcare (hospitals, physicians, and diagnostic laboratories), and the parties that *produce* the products used in healthcare delivery (pharmaceuticals, biotechnology, and medical devices). The volume also includes discussion of innovative efforts to raise capital for the development of these sectors (e.g., private equity and venture capital), to deliver care to those at the "bottom of the pyramid," to balance the population's ability to pay with their desire for access to modern care and technology, and to deliver care to foreign tourists. As such, this represents an effort to capture the components of the "value chain" of healthcare in India. In prior works, Wharton faculty have captured portions of the US healthcare value chain; this represents our first effort to go global.[2]

At first, it seems daunting (and perhaps presumptuous) to attempt to describe the healthcare system of a foreign country that one has never lived in. I have spent over 30 years studying and conducting research on my own country's healthcare system, beginning during my doctoral student days in the late 1970s. I have taught an introductory course on the US healthcare system since the early 1980s, and taught the required first-year core course to all entering MBA

healthcare majors at Wharton since the late 1990s. In that course, we explicitly cover the payers, providers, and producers of healthcare – from a domestic angle as well as an international angle – all, by necessity, in 14 weeks. The Wharton students are increasingly drawn from a global pool, are the brightest and most demanding students I have ever had the privilege to teach, and historically have been more interested in the product side of the industry (pharmaceuticals, biotechnology, medical devices) than the payer and provider side (where most faculty like myself trained and have field experience). After more than 30 years of considerable effort, I feel I am beginning to understand how it all works (or doesn't) and just how "systemic" it really is.

Thus, despite my lack of sustained exposure to and formal training in other healthcare contexts, I have had to confront how other countries finance and deliver healthcare to their populations. I have also had the privilege of training (and working on research projects with) an increasingly international student body, and learning from them as I go. When the Wharton School asked me to travel to the Indian School of Business (ISB) to teach a course on India's healthcare system to ISB and Wharton students, I suspected that some (though not all) of the learning gathered on how systems work in the US might be transferable, but that I might also be able to discern important differences. After all, India has many states and a central federal government that split financial responsibility for healthcare, as in the US. India also has an entrepreneurial class of physicians (many of them western trained) and for-profit hospital executives who are pursuing many of the innovative strategies observed in the US system. At the same time, India has historically lacked the wealth of the US and has thus developed innovative financing and delivery systems that balance cost and access better than their counterparts in the US.

After several visits to India and other Asian countries (such as China, where I now teach a second GMC on their healthcare system at Guanghua School of Management at Peking University) to study their healthcare systems and talk with academics and industry experts, I have confirmed that the similarities outweigh the differences. I have concluded that governments around the world grapple with a similar set of issues in financing and delivering healthcare: how to balance the ultimate goals of improving health status, financial risk protection, and consumer satisfaction (the WHO model) or improving the experience of care, improving the health of populations, and reducing per capita costs of healthcare (the "triple aim" pursued in US healthcare reform).[3] The frameworks used to analyze national healthcare systems and engineer their goals (policy levers and intermediate outcomes) are also broadly applicable (e.g., to countries like India and China). Finally, I have concluded that these countries face many of the same concerns and problems, utilize many of the same strategies to address these issues, and possess many of the same dynamics between major players on the financing, delivery, and product development sides.

This volume represents my effort to demonstrate these contentions. More importantly, it is intended to educate practitioners and executives who operate and/or do business in India in order to provide them with a "system view." I have learned through several decades of experience studying the US system that parties occupying one part of the *value chain* (payers, providers, producers – and the intermediaries who separate them) rarely understand the motivations and strategies of the others, which leads to enormous conflicts and misalignment of incentives.

Such a value chain (or system) view is not presented in other recent texts on India's healthcare industry.[4] This volume is designed to educate all parties about one another.

Notes

1. For more information, see: http://www.wharton.upenn.edu/global/gmc.cfm. Accessed October 13, 2011.
2. Lawton Robert Burns. *The Business of Healthcare Innovation*. Cambridge, UK: Cambridge University Press (2012); Lawton Robert Burns and Wharton School Colleagues. *The Health Care Value Chain*. San Francisco, CA: Jossey-Bass (2002).
3. Donald Berwick, Thomas Nolan, and John Whittington. "The Triple Aim: Care, Health, and Cost." *Health Affairs* 27(3) (2008): 759–769.
4. Brijesh Purohit. *Health Care System in India*. New Delhi: Gayatri Publications (2010); Kabir Sheikh and Asha George. *Health Providers in India*. New Delhi: Routledge (2010); Girish Kumar. *Health Sector Reforms in India*. New Delhi: Manohar Publishers (2009).

Acknowledgments

This book is the serendipitous result of interest on the part of individuals at both Wharton and the Indian School of Business in studying the vibrant healthcare industry in India. At Wharton, Harbir Singh, Vice Dean for Wharton's Global Initiatives, encouraged me to teach the Global Modular Course (GMC) on India's healthcare industry. Anjani Jain and Ziv Katalan, both on Wharton's faculty, were deeply involved in the Global Initiatives and spurred me to develop a course in tandem with ISB. Anjani and Ziv handled much of the logistics involved in putting on a course such as this. I am so grateful they accompanied me to Hyderabad during its first iteration at ISB as I became acclimated to "The Indian Way." As the healthcare program in Mohali took off, Jagmohan Raju lent invaluable help in navigating the interstices between Wharton and ISB.

To develop the content for such a course was a daunting task for someone unfamiliar with the country and its healthcare system. In fashioning the course curriculum and lecture material, I necessarily relied on a lot of people who had studied the topic for some time. These included my Wharton teaching assistants, most of whom were Indian and had worked in the industry, or had studied various sectors in India: (in alphabetical order) Sarah Frew, Prashanth Jayaram, Kalyan Pamarthy, Neil Parikh, Vimala Raghavendran Aditi Sen, Vishwas Seshadri, and Bhuvan Srinivasan. They also included my Wharton colleagues, like Jitendra Singh who gave me the book he coauthored on *The India Way* just as I set off to teach in India for the first time. I have also learned a considerable amount from the healthcare industry executives who came to speak to my ISB class or sent me a considerable amount of background reading material (again, in alphabetical order): Pervez Ahmed, Ashok Alexander, Ajay Bakshi, Sofi Bergkvist, Ashoke Bhattacharjya, Shefali Chhachhi, Amita Chebbi, Deepanwita Chattopadhyay, Krishna Ella, Zeena Johar, Ashok Kakkar, Deepa Krishnan, Preetha Reddy, Suneeta Reddy, Varaprasad Reddy, Varun Sahni, Devi Shetty, Shivender Singh, A. Vaideesh, and Vishal Vasishth, and the CEOs of LV Prasad Eye Institute and Gandhi Government Hospital in Hyderabad. Finally, I wish to thank some of my friends in the consulting and investment communities who shared with me presentations on India's healthcare industry: Jay Desai, Karl Kellner, Paul Mango, and Ajit Singh.

Indian School of Business Dean Ajit Rangnekar and Deputy Dean Savita Mahajan graciously hosted the Wharton Global Modular Course at the Hyderabad campus in January 2010 and 2011 and even allowed ISB students to enroll in it. Special thanks go to Ashalata Devi, Associate Director at ISB. She has served as my main point of contact these past 3 years and solved all of my course issues.

I gratefully acknowledge the support of Analjit Singh, Founder and Chairman of Max India Limited, who spearheaded the development of a healthcare management program at ISB's new campus in Mohali. It was Analjit who catalyzed my decision first to teach at the campus in Hyderabad, and later to serve as the program's first area leader. Analjit's generosity has made all of the above possible.

Every author knows the singular importance of a good editor and editorial help. Many thanks to Chris Harrison at Cambridge University Press for adroitly seeing the potential of a volume like this, and to Suvadip Bhattacharjee and Ranjini Majumdar for seeing it through with alacrity. My administrative assistant, Holly Cronin, did excellent work in editing this entire volume. I hired her almost entirely for this task and she has exceeded all of my expectations.

Finally, I want to thank my wife, Alexandra, who initially suggested to me that I ought to get more "global" in my research and consider countries like India. Like many husbands, I heeded her suggestion a bit later than I should have, but here I am at last.

Contents

List of Figures