Chapter 8
Primary Care through a Public–Private Partnership: Health Management and Research Institute

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ABSTRACT
The primary care delivery model developed by the Health Management and Research Institute (HMRI) in India, integrates innovative technical solutions and process-oriented operations for the provision of healthcare services, while supporting the public health system. Through a public-private partnership with the state government of Andhra Pradesh, HMRI has a unique base to pilot large scale health interventions. The HMRI Model includes components such as a medical helpline, rural outreach health services, a disease surveillance program, a blood bank application, and telemedicine projects. Both clinical and non-clinical procedures are strengthened by technology that enables research, tailored and evidence-based interventions, as well as improves efficiency and quality of healthcare delivery. Health management and decision-making is assisted by the organization’s large database of electronic medical records. Challenges to implementation include implications of large government contracts, funding issues, as well as technical constraints and human resources issues. This chapter describes the Model’s various components and its contextual framework with enabling and constraining factors. HMRI has developed a unique system for preventive and primary care that can serve as a model for low, middle, and high income countries, though external evaluations are critically needed for further assessment of best practices.

INTRODUCTION
The paradox of the Indian healthcare system lies in the startling gap between its world-class medical systems, outreach, and delivery mechanisms. India’s scientific and technical prowess seems inadequate when confronted with disturbing maternal mortality rates and limited healthcare access. Concerned state and central governments, committed public-private partnerships,
and technology initiatives are, however, helping to narrow this gap through efficient healthcare delivery systems that focus on comprehensive healthcare services.

This chapter takes a closer look at the collaborative initiative between the state government of Andhra Pradesh and the non-profit organization, the Health Management and Research Institute (HMRI). The aim is to further investigate HMRI’s healthcare delivery model (the “HMRI Model” or the “Model”), the technology solutions incorporated therein, its functions, and the possibility of its large scale implementation. This chapter is not intended to present an assessment of cost-effectiveness or to evaluate the delivery model, but will provide insights into its various components. It presents HMRI’s innovative solutions in harnessing technology and human resources solutions, as well as discusses possible implications, challenges to implementation, and benefits of this particular primary care delivery model.

Since its inception, HMRI has focused on augmenting public health delivery systems with the use of information and communication technologies and supporting the public health system to improve the access and quality of services to vulnerable sections of the society. The aim of the organization is to expand the reach of out-patient care to a larger population by providing three times the primary care services at ten per cent of the costs of the government provided services. While technology is not the sole solution to the delivery of quality primary care, the HMRI Model serves as an example of how technical solutions can support the management and provision of services.

**BACKGROUND**

**Primary Care in India**

The contextual picture of health care in India is the challenge to provide health services to a population of more than 1.16 billion people, the majority of whom, 71 per cent, live in rural areas. The country has a heavy burden of disease and an evolving epidemiological transition is shifting the burden of disease toward non-communicable diseases. India has one of the lowest healthcare expenditures in the world; in 2006 it was only 3.6 per cent of the GDP (WHOSIS, 2009). At the same time, the proportion of private spending on health in India is one of the highest in the world (Government of India, 2008). This context highlights the need for innovative approaches to the design and implementation of healthcare delivery models in order to meet India’s shifting healthcare needs. To fill the gaps of the public health sector, the private sector has been recognized for innovative approaches that could strengthen the quality and scope of healthcare delivery in the country. The two sectors have different strengths that should not go unnoticed; the government on one hand has an advantage in creating scale through access to funds, while the private sector has provided many efficient healthcare delivery solutions. HMRI is an example of a public-private partnership where the strengths of the private sector are amplified and brought to scale with government funding. On the same note, it is recognized that India is establishing new global standards for delivery of low-cost, quality health care through its breakthrough innovations. It has been stated that the private sector in India is driving the evolution of an ecosystem of innovations for world-class healthcare delivery (Prahalad, 2006).

**Barriers to Health Care**

Reliable provision of primary care is not a given in many parts of the world, including India, due to many barriers to delivery. Barriers include, but are not limited to, access, availability, affordability, and quality of care, and are further exacerbated by a dearth of appropriately skilled human resources.

Obstacles related to Access include individual geographic and financial factors. In addition, pre-existing inequalities as well as social and