Chapter 11
Adoption of ICT in Primary Healthcare in the 21st Century

Quazi Omar Faruq
Victoria University, Australia

Arthur Tatnall
Victoria University, Australia

ABSTRACT

This chapter looks at the use of ICT by medical general practitioners in the Australian eHealth and the Virtual Doctor Program. It discusses introduction, adoption, and use of information and communication technologies in primary healthcare and investigates reasons for adoption, or non-adoption, of these technologies. For a new technology to be put into use, a decision must be made to adopt it, or at least some aspects of it, and this chapter makes use of innovation translation informed by actor-network theory to explain this.

INTRODUCTION: PRIMARY HEALTHCARE

To cover the healthcare needs of the whole community, be it in a small or a large country, is a large undertaking. Many countries have taken initiatives to strengthen primary healthcare (PHC) to ensure quality health to their citizens, but adoption of these systems has been different. Many countries included GPs (Medical General Practitioners) in healthcare while they run isolated solo practices, but in some PHC delivery models GPs are in the central role of a closely integrated team (Macinko, Starfield & Shi, 2003; Atun, 2004). This required reorganisation of doctors’ general practice.

DOI: 10.4018/978-1-5225-7027-1.ch011
The 1978 Alma Ata declaration (World Health Organization, 1978) came from the International Conference on Primary Health Care (PHC) in Almaty, Kazakhstan, and affirmed that health is a state of complete physical, mental and social wellbeing and is a fundamental human right.

In the urban areas of some countries the role of GPs tends to be narrower and focused on the care of chronic health problems, the treatment of acute non-life-threatening diseases, the early detection and referral to specialized care of patients with serious diseases, and preventive care including health education and immunisation. In rural areas of those countries and in most developed countries a GP may be routinely involved in pre-hospital emergency care, the delivery of babies, community hospital care and performing low-complexity surgical procedures. Success of this effort depends on three factors:

- Management of data collected from client services
- Optimum number of human resources (including doctors) to provide service at the clients’ door step, and
- Service quality.

**General Practice Around the World**

Today in Australia a GP has to manage the following activities to effectively fulfil his or her role in the health care team (RACGP, 2014):

1. Client management through history taking, examining, investigating, and providing treatment
2. Using appropriate equipment by understanding the availability of ‘state of the art’ items in the profession, procuring and maintaining it
3. Ensuring physical and mental fitness
4. Record keeping with efficient and quick retrieval system, maintaining privacy and confidentiality
5. Time management by visiting clients in an allocated time
6. Referring clients to other services with updated knowledge about services and adopting easy and quick referring procedures
7. Knowledge gathering and updating – by attending training, seminars and reading references
8. Empowering clients by disseminating knowledge (e.g. handbill, video)
9. Conflict management: to avoid conflict between ethics, profession and business interests
Related Content

Enhancing Understanding of Cross-Cultural ERP Implementation Impact with a FVM Perspective Enriched by ANT

How Using ANT Can Assist to Understand Key Issues for Successful e-Health Solutions
[www.igi-global.com/article/how-using-ant-can-assist-to-understand-key-issues-for-successful-e-health-solutions/95945?camid=4v1a](www.igi-global.com/article/how-using-ant-can-assist-to-understand-key-issues-for-successful-e-health-solutions/95945?camid=4v1a)
Reassembling the Problem of the Under-Representation of Girls in IT Courses
www.igi-global.com/chapter/reassembling-problem-under-representation-girls/50127?camid=4v1a

Efficient Dynamic Memory Management for Multiprocessor Cyber-Physical Systems
www.igi-global.com/article/efficient-dynamic-memory-management-for-multiprocessor-cyber-physical-systems/239866?camid=4v1a