

## FOREWORD

Like other global inequalities in terms of food security, access to safe water as well as knowledge and information critical for day-to-day life and livelihood, provision of healthcare is marked by a persistent disparity. This is especially true in the case of access to healthcare services. Developing countries are going through a dire health crisis whereby millions of people are underserved in the wake of deficiencies in basic healthcare facilities, access to accurate and timely healthcare, scarce number of health professionals, inadequate health education and awareness, and out of date clinical procedures.

With the emergence of information technologies (IT) in the last century, there has been a growing interest in the role of IT for sustainable healthcare delivery mechanisms. Modern information and communication technologies (ICTs) have been identified as the key components in improving healthcare, and these hold a primary significance in achieving the Millennium Development Goals (MDGs). ICTs have the potential to help improve the standard of health by delivering healthcare information to the healthcare communities, and services to the end-users in developing countries.

Pak-US collaboration in science and technology created the opportunity of training Pakistani doctors in telemedicine applications at state of the art Telemedicine centres of USA in 2003. The idea was to acquire these technologies so that they can be customized to the needs of Pakistan and to produce master trainers for building a human resource in this particular field. Telemedicine/e-health training project was a further continuation of this program in which a model Telemedicine Centre was established at Holy Family Hospital and was linked to a remote hospital in Pindi Gheb. This six months pilot project of US\$ 100 thousand worked as the training ground for medical professionals, and 45 doctors and nurses from Rawalpindi/Islamabad got training in telemedicine applications and are now pursuing telemedicine solutions in their own institutions. Moreover the Centre has conducted telemedicine training of hemophilia patients and paraplegics of earthquake. This Centre was identified as the only Telemedicine Centre in Pakistan to provide medical services through telemedicine in the Asian earthquake of 2005. The Centre has organized 4th APT Telemedicine Workshop in Rawalpindi and has continual collaboration with research institutes of USA, UK, India, Japan and Canada. After the pilot project, a recently approved

project under Pak-US collaboration program is conducting telemedicine training at national level and will provide tele-rehabilitation to earthquake paraplegics of Muzaffarabad.

While considering the role of ICTs in the area of healthcare, however, there are many operational, technological, infrastructural, and financial challenges. Above all, we tend to overlook the real needs of the beneficiaries, which vary greatly due to social, cultural and educational differences. To meet these challenges, the efficient use of clinical and technological resources must be optimized and relevant informational resources and the technologies to deliver it must be effectively channelized. The key is to intelligently use modern day technologies to address specific problems and improve on existing ways of working. The full benefit of information technologies will only be apparent when these meet the real needs and add value to the delivery of healthcare services. It is indeed satisfying to note that COMSATS has been one of the first and very few organizations that took an initiative to alleviate and address the problems of healthcare delivery to rural and remote communities of Pakistan through ICTs.

There are many challenges that are yet to be overcome to change the face of healthcare delivery systems in Pakistan, though the pioneering efforts of COMSATS in the field of telehealth are worthy of mention and serve as a benchmark to others working in the field. This publication is a good effort on the part of COMSATS to present the technical talks delivered at the Seminar on Telehealth, organized by COMSATS on 21st August, 2007, and it presents the views and ideas of subject-experts from the field of healthcare. Generally, it discusses issues that are critical to health and useful strategies through which the developing world can benefit from ICTs in the healthcare arena. I am pleased to note that this book talks about the above stated issues in a very balanced and effective manner.

I recommend this book to governmental and non-governmental officials who keep an eye on healthcare sector and healthcare professionals, including doctors, clinicians, paramedics, as well as medical students. I hope this book will surely encourage and coordinate telehealth development within the developing countries. At the same time I suggest people from other walks of life to read this book as a source to increase their learning and knowledge about telehealth in general.

Finally, I would like to appreciate the efforts of COMSATS' entire team working under the guidance of Dr. Hameed Ahmed Khan, the Executive Director COMSATS, for their bountiful efforts in the developmental sector and wish them all the success in their future endeavors.

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