

## Foreword

*Let us not go over the old ground, let us rather prepare for what is to come.*

*—Marcus Tullius Cicero*

Improvements in the health status of communities depend on effective public health and healthcare infrastructures. These infrastructures are increasingly electronic and tied to the Internet. Incorporating emerging technologies into the service of the community has become a required task for every public health leader.

The revolution in information technology challenges every sector of the health enterprise. Individuals, care providers, and public health agencies can all benefit as we reshape public health through the adoption of new information systems, use of electronic methods for disease surveillance, and reformation of outmoded processes. However, realizing the benefits will be neither easy nor inexpensive.

Technological innovation brings promise of new ways of improving health. Individuals have become more involved in knowing about, and managing and improving, their own health through Internet access. Similarly, healthcare providers are transforming the ways in which they assess, treat, and document patient care through their use of new technologies. For example, point-of-care and palm-type devices will soon be capable of uniquely identifying patients, supporting patient care, and documenting treatment simply and efficiently.

Although technology offers great hope and promise for innovation in health care and public health, it is by no means certain that every investment in innovative technologies will yield improved health outcomes. Exciting technologies will not be enough by themselves. They must be understood and managed by those committed to improving community health status. Public health officials will have to understand basic principles of information resource management in order to make the appropriate technology choices that will guide the future of their organizations. Basing technology deployment decisions on well-informed assessments of value and cost must become a standard of practice for public health managers.

Experience shows us that developing and implementing new information systems is a risky business. This was true in the introduction of the telegraph (the “Victorian Internet”) and is true today. New system development efforts frequently fail because they are poorly conceived, poorly managed, underfunded, or simply take too long to deploy. Organizations often fail to conceptualize or state explicitly the characteristics they need in the system and also do not quantify the benefits they seek to realize from their investment. Insufficient attention is given to preparing personnel to adopt and use new systems.

Public health now confronts an unprecedented era of accountability. The Internet has provided every citizen with a

means of gathering information (and misinformation) on a vast spectrum of diseases, treatments, and threats to health. The communications superhighway provides new means for monitoring governmental programs, understanding policies and laws, and influencing cultural practices.

The US Department of Health and Human Services (DHHS) has articulated the importance of the Internet and interactive technologies for health improvements, and the rationale for quality standards for Web sites, in *Wired for Health and Well-Being*, the final report of the Science Panel for Interactive Communication and Health. DHHS' commitment to improving the quality of health Web sites is reflected in a national "Healthy People 2010" objective calling for an increase in the number of health Web sites that disclose quality standards information. Information to be disclosed to users includes the identity of the Web site developers and sponsors; how to contact the owners/developers of the site; potential conflicts of interest or biases; explicit purpose of the site, including commercial purposes and advertising; original sources of content; how the privacy and confidentiality of personal information is protected; how the site is evaluated; and how content on the site is updated. The goal is to promote the development of a consistent, comprehensive approach to identifying high-quality sites that consumers will find reliable and easy to use.

This book marks the first systematic effort to provide informatics principles and examples of practice in a public health context. In doing so, it clarifies the ways in which newer information technologies will improve individual and community health status. Public health executives, program managers, and technology experts all will find this book of great use. We commend the authors for their contributions and the editors for their drive in bringing this important work to completion. We think this text is essential reading for managers and leadership throughout the diverse disciplines of public health.

**David A. Ross, ScD**

Director, All Kids Count

Decatur, Georgia

**Alan R. Hinman, MD, MPH**

Principal Investigator, All Kids Count

Task Force for Child Survival and Development

Decatur, Georgia

**Kristin Saarlal, MPH**

Deputy Director, All Kids Count

Atlanta, Georgia

**William H. Foege, MD, MPH**

Senior Advisor to the Bill and Melinda Gates Foundation

Presidential Distinguished Professor, Rollins School of Public Health

Emory University

Atlanta, Georgia

Public Health Informatics and Information Systems

O'Carroll, P.W.; Yasnoff, W.A.; Ward, M.E.; Ripp, L.H.;  
Martin, E.L. (Eds.)

2003, XXVII, 792 p. 55 illus., Hardcover

ISBN: 978-0-387-95474-5