## GUEST EDITORIAL PREFACE

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Long-term and community based care are growing segments of the global health care delivery system. Driven by demographic trends, cost containment policies, improved technology allowing for additional services to be provided outside of the acute care setting, and consumer choice the definition and context of long-term and community care are expanding beyond skilled nursing facilities and home health care agencies to include telehealth based outpatient services, community based public health programming, mobile health units, and on-line or virtual information exchanges. A challenge of health care delivery outside of the acute care hospital is communication between providers and from providers to clients given the geographic dispersion inherent in community based care. Information technology, or e-health, plays an important role in facilitating these communication pathways. However, use of e-health in long-term or community settings is understudied in comparison to acute care environments. The purpose of this issue is to disseminate knowledge and innovation surrounding the use of e-health technology in long-term or community settings, and to address the unique opportunities and challenges of these health services domains. We feel the selected studies contribute to the emerging discussion surrounding use of information technology outside of the hospital setting.

First, Arling et al. examine the use of electronic versus face-to-face communication among a collaborative group of nursing home providers located within fifteen separate nursing facilities participating in a quality improvement (QI) initiative. They found that use of inter-organizational electronic communication in conjunction with face-to face meetings was associated with better quality improvement outcomes. Nursing homes are a complex and challenging environment in which to implement successful quality improvement programs. The findings of this exploratory study indicate that the ability to carry out a QI project as a multifacility collaborative, sharing ideas, advice and resources, was made possible and perhaps enhanced through the use of available communication technology. Authors suggest that nursing home practitioners seeking to collaborate outside of their facility to improve quality should integrate multiple types of communication technology into their inter-organizational communication methods to enhance outcomes.

Next. Sternke et al. describe the use of an electronic communication tool or 'tool kit' to facilitate the communication of evidence-based best practices for stroke care in United States Veterans' Health Administration facilities. Though useful in hospital or acute care settings, the web-based nature of the tool kit has significant implications for care providers in home or community based settings. The webbased tool to disseminate care quality information was perceived to be useful by sampled providers, and could potentially be accessed by providers in remote or isolated locations. Additionally, however, authors suggest that interpersonal communication and marketing through meetings and seminars was needed to inform providers that such electronic tools are available. Similar to the findings of Arling et al., electronic communication was found to be helpful in promoting quality improvement efforts, but did not eliminate the need for non-electronic interpersonal communication to accentuate the potential of such technology.

Use of e-health technology to manage patient information in the community was the focus of Ellis-Griffith et al.'s manuscript The authors describe the use of REDCap software by a mobile rural health clinic in Kentucky. Rural communities are at particular risk for isolation and communication deficits regarding health care information. Authors note that the REDCap tool has the potential to assist researchers and providers to better plan and deliver rural health services. Discussion of the REDCap software as it is currently being used in rural Kentucky provides interesting insight into the availability of electronic data management systems to assist in operational planning of the delivery of community health services.

Dana Burr Bradley and Kelly Fitzgerald expand our discussion of information technology and community health by describing

World Health Organization (WHO) efforts to assist communities in planning for the health needs of their aging population. Specifically, she describes how a medium size city in the central United States is implementing the WHO framework in regards to health care. The health care needs of many communities, in the United States and elsewhere, are changing rapidly as a result of population aging. In order to contribute to the health of their communities, agencies and health care delivery organizations have begun to re-think health services and work collaboratively with civic partners. Dr. Burr Bradley and Dr. Fitzgerald discuss the crucial role that e-health technology and web-based communication can play in these efforts.

Lastly, we close the issue with a manuscript by Fox et al. which explored content from an on-line nursing discussion forum to better understand electronic communications between providers that take place within the virtual community and outside of the structured workplace environment. Authors suggest that electronic communication that occurs within on-line forums may differ from communications taking place between nurses in more formal workplace settings, and may provide useful insights into the work-worlds of health care providers. Availability of technology allows community to emerge among providers who without such technology would not have the ability to communicate, and findings regarding the specific topic of workplace bullying indicate that the discussion among providers differs from that in the academic literature in ways that evoke new research questions.

In summary, long-term and community based settings require the use of technology to manage issues of reimbursement, quality improvement, error reduction, and human resource management. Use of e-heath technology in community settings has received less attention from researchers when compared to hospital or acute care settings. The papers in this issue highlight the use of technology to provide communication opportunities for both providers and patients

who for many reasons such as geographic dispersion, low access to care, long duration of illness, or work place constraints have concerns regarding information exchange and health care delivery. Importantly, these studies have an exploratory focus, opening a conversation about the potential to expand technology within community and long-term care settings.

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Kathleen Abrahamson, PhD, RN is an Assistant Professor in the department of public health at Western Kentucky University in Bowling Green, KY. Her expertise includes quantitative analysis, survey/interview guide development, and qualitative analysis of text data. Abrahamson's research is focused primarily on the domain of long term care. Other areas of research interest include implementation of research evidence into health care organizations, the work worlds of nurses, and management of psychosocial distress for clients with chronic illness. She has over a decade of clinical experience as a registered nurse in acute and long term settings, including experience in both direct care and leadership positions.

James G. Anderson, PhD, FACMI, FCERIA is Professor of Medical Sociology and Health Communication at Purdue University. Anderson's research has addressed the social, ethical and organizational factors that affect the implementation of information technology to deliver health care in the US. Another line of research has dealt with patient safety issues. Anderson's research has been recognized by his election as a Fellow of the American College of Medical Informatics and as a Fellow of the Center for Education and Research in Information Assurance and Security. He also serves on a study section for the Agency for Healthcare Research and Quality (AHRQ).