Editors’ Introduction
Ehealth and the Delivery of Health Care

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Communication is the central social process used to deliver health care and promote public health. Ehealth applications, the use of new information technologies in health care and health promotion, have been developed as new tools for communicating with diverse audiences of health care consumers and providers. The growth of ehealth tools has spurred an information revolution within the modern health care system that hold tremendous promise for enhancing the delivery of care and the promotion of health (Neuhauser & Kreps, 2010). Yet, there is much to learn about the best ways to design and implement health information technologies.

The development, adoption, and implementation of a broad range of new ehealth applications, such as health information websites, online social support networks, interactive electronic health records, health decision support systems, tailored health education programs, health care system web portals, mobile health communication devices, and advanced telehealth applications, all promise to increase consumer and provider access to relevant health information, enhance the quality of care, reduce health care errors, increase collaboration, and encourage the adoption of healthy behaviors. Yet, with the growth of new and exciting HIT opportunities comes the daunting responsibility to design eHealth tools that communicate effectively with a diverse array of health care consumers, providers, and policy makers. These tools must be designed to effectively communicate the right information needed by different audiences at the right time, in the right place, and in the best ways to guide health care and health promotion. Evidence suggests that ehealth tools should be interactive, interoperable, easy to use, engaging, adaptable, and accessible for diverse audiences (Neuhauser & Kreps, 2010).

This special issue of the Journal of Computer Mediated Communication examines the strategic use of ehealth applications to enhance the delivery of health care. The ehealth interventions examined in this special issue are designed for diverse and vulnerable groups of health care consumers (such as patients coping with chronic health care problems, consumers who have low levels of health literacy, and members of marginalized populations who suffer from disparities in health outcomes), health care providers (both formal health professionals and informal caregivers/advocates), as well as health care system administrators and health policy makers.

The special issue begins with an interesting study by Han, Wise, Kim, Pingree, Hawkins, Pingree, McTavish, and Gustafson that examines patterns of online
cancer information seeking by breast cancer patients. They found, contrary to pop-
ular expectation, that lower income, less educated women and those lacking in
information-seeking competence actually use the computer and online services to
the same or a greater degree than more privileged patients if those services are made
available to them. These findings suggest the value of providing low income and
vulnerable health care consumers with access to online health information services.

Balka, Krueger, Holmes, and Stephen report a qualitative analysis of the use of
online health information by young women with breast cancer. They found that these
young women actively sought information about their illness to make health related
decisions and to pursue social support. However, the Internet was only one source of
health information for these young women, among many that they consulted, and
was not necessarily the best or most important information source for them. These
findings suggest that even for a computer savvy population, the Internet can be a
complex and sometimes confusing source for relevant health information.

McDowell, Shaw, Kim, Han, and Gumieny report a study exploring the influence
of training on breast cancer patients’ use of an interactive cancer communication
system, the CHESS system, over time. They found that participating in training was
a significant predictor of high use of the CHESS system. These results underscore the
importance of consumer training as a critical component in effectively implementing
interactive health information systems.

Owen, Boxley, Goldstein, Lee, Breen, and Rowland conducted a secondary analysis
of the California Health Interview Survey to evaluate the prevalence of online support
group use by consumers with chronic health problems. They found that while more
consumers participated in face-to-face support groups than online groups, online
support group use was associated with higher levels of education, higher income, use
of complementary/alternative therapies, and worse health status. This study suggests
that while utilization of online support groups by consumers with chronic diseases
is relatively low, these online services have great potential to increase the reach of
support for those living with chronic conditions.

Chin, Keelan, Pavri-Garcia, Tomlinson, Wilson, and Chignell report a content
analysis examining the use of online videos by anti- and pro-vaccination activists based
on a social network of videos and associated comments posted on YouTube. Study
results showed a cohesive subgroup of anti-vaccination advocates were represented
in discussions around anti-vaccination videos, whereas discussions around pro-
vaccination videos included both anti-vaccination and pro-vaccination advocates.
This case study suggests that the online video representations of pro-vaccination
advocates were infiltrated by anti-vaccination advocates who were more vocal and
active. This may help explain public resistance to the recent H1N1 vaccination effort,
de spite strong evidence of the safety and effectiveness of the vaccine.

Wittenberg-Lyles, Parker Oliver, Demiris, and Baldwin present a new theoretical
framework and strong rationale for the ACTive intervention uses video technology to
facilitate patient and family participation in hospice interdisciplinary team meetings
where plans of care are determined. They report data from a pilot project of the
ACTive intervention exploring participation among family caregivers and the hospice team. Results from the study support the intervention as an effective tool for involving family caregivers as active participants in designing care for their loved ones.

The diverse articles in this special issue clearly illustrate the potential for using ehealth applications to support effective health care. They also suggest new directions for designing ehealth applications to communicate effectively with key audiences. It is our hope that this special issue of the *Journal of Computer Mediated Communication* will encourage scholars to carefully examine best practices for developing humane, powerful, and communicative health information technologies to support the delivery of health care.

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