The Role of Consumer and Family Reporting of Technology-Induced Error and Adverse Events

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Abstract Worldwide governments have identified that technology-induced errors are a significant issue. Citizens, patients and next of kin have an important role in reporting on technology-induced errors and adverse events involving technology. In this panel we discuss reporting systems, the content of these reports, similarities and differences between reports by patients and next of kin as well as the human factors and socio-technical challenges that arise from patient and family reporting.

Keywords Patient safety, technology-induced errors, adverse events, consumer, patient, next of kin, family, reporting

Introduction

Internationally, governments have noted that technology-induced errors are a significant safety concern. Over the past several years governments and professional organizations have attempted to identify methods for aiding in the report of such incidents at the provincial, state and/or national level [1,2]. Citizens have also been identified as having a potentially significant role in reporting adverse events. With the increasing number of health related software products that are currently being used by citizens, healthcare consumers also need to be able to have a voice in identifying potentially harmful aspects of technology. The purpose of this panel presentation will be to discuss the current state of reporting of technology-induced errors and what can be done to better support consumer (patient and family) reporting.

1. Focus of Speaker 1: Consumer Reporting of Technology-induced Errors

In this presentation, Dr. Borycky will discuss the current state for citizen reporting regarding potential adverse events and technology-induced errors to national bodies that collect this data, report it and issue consumer alerts. More specifically, the speaker

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will discuss the types of events that are currently being reported on by consumers and how they are being addressed. There will be an opportunity to provide an overview of the differing bodies that provide consumers with opportunities to report on adverse events and technology-induced errors as well as participate in addressing patient safety events. Several national level organizations that encourage consumer reporting will be discussed.

**Dr. Elizabeth Borycki, RN PhD**, is an Associate Professor in the School of Health Information Science at the University of Victoria. Elizabeth Borycki received her doctoral degree from the University of Toronto, Department of Health Policy Management and Evaluation. Her current research focus is on the quality and safety of health information systems and devices. She is currently the Chair of the IMIA Working Group on Health Informatics for Patient Safety. She has represented Canada as Canada’s Health Informatics Association Academic Representative to IMIA and North America on the IMIA Board of Directors.

2. **Focus of Speaker 2: Patient, Next of Kin and Health Professional Reporting**

In this presentation, Dr. Saranto will share the experiences of a reporting system developed for patients’ and their next of kin’s use in one university hospital Finland. The portal to report adverse events has existed since 2013. The speaker will highlight the similarities and differences reported by health care professional and patients in the adverse reporting systems as well as discuss the development needs for this kind of reporting system.

**Dr. Kaija Saranto, PhD RN**, is a Full Professor in Health and Human Services Informatics, Department of Health and Social Management, University of Eastern Finland. In the early 2000’s she launched the first master's and doctoral degree programs in Health and Human Services Informatics in Finland, based on IMIA recommendations. Dr. Saranto is co-director of the Finnish Centre for Evidence-Based Health Care: An Affiliated Centre of the Joanna Briggs Institute. Her current research focuses on patient safety initiatives especially on adverse events reporting systems. She was the chair of the scientific program committee of the NI2009 congress sponsored by the IMIA-NI/SIG, which was held in Helsinki. Currently, she is the vice chair for working groups of the IMIA-NI/SIG.

3. **Focus of Speaker 3: Reporting of Technology-induced Errors, Socio-technical and Human Factors Issues**

In this presentation, Dr. Nohr will discuss how adverse events are reported to a national database in Denmark by health care professionals patients and their next of kin. The database has existed for ten years and has been opened for citizen reporting for the last three years. The speaker will present some of the experience with voluntary reporting of technology-induced errors and discuss socio-technical, usability and human factors engineering related issues associated with untoward use of Health IT systems.
Dr. Christian Nohr, PhD is Professor of Health Informatics at Department of Development and Planning at Aalborg University, and Director of the Danish Centre for Health Informatics. He is also member of the Nordic eHealth research group that are conducting national surveys of dissemination and use of eHealth and he is active in OECD task force developing benchmark indicators for eHealth. He has conducted several national and international research projects in health informatics where user participation and human factors have been key issues.

4. Panel Moderator

Dr. Andre Kushniruk, PhD is a Professor at the School of Health Information Science at the University of Victoria in Canada. He was previously Director of the School of Health Information Science and is a fellow of the American College of Medical Informatics. Dr. Kushniruk conducts research in a number of areas including usability engineering, electronic health records, evaluation of the effects of information technology, health informatics education, human-computer interaction in healthcare and other domains as well as cognitive science. His work is known internationally as he has focused on developing methods for the evaluation of health information technology, its uptake and its usability. Dr. Kushniruk will moderate the panel.

References
