This issue of the *Bulletin* contains a suite of articles grounded in the emerging field of health informatics. While an earlier issue of the *Bulletin* contained a definition and introduction to the field (www.asis.org/Bulletin/Jun-11/JunJul11_Dalrymple.pdf), this issue’s articles illustrate specific aspects of this large domain having to do with human health and disease, its etiology and treatment. Clearly, such an undertaking is challenging in scope and complexity and is well beyond the resources of a single issue of the *Bulletin*. Thus, this collection of articles is indicative, rather than exhaustive. Its intent is to pique the interest of the *Bulletin*’s readers, to provide illustrative and informative examples of the diversity of approaches within health informatics, to describe a few of the challenges in the field and to indicate where appropriate relationships exist among information sciences, information technology and informatics.

The issue opens with a discussion by Patricia Schwirian of the historical evolution of controlled vocabularies in nursing. Nursing care is frequently invisible, included as part of organizational overhead. In the past, nursing notes have frequently been stripped from records before they are archived for storage. Yet it is estimated that well over three-quarters of a nurse’s time is spent in documenting care. Nurses are taught: “If it isn’t documented, it isn’t done.” As more and more healthcare organizations adopt electronic health records, the opportunity to represent and document the care delivered by nurses moves from potential to reality. Controlled vocabularies in nursing (referred to as standardized nursing terminologies or SNTs) have been included in the UMLS (Unified Medical Language System) and are now often included in commercial EHR systems, thus enabling the extraction and analysis of nursing activities. Schwirian, one of nursing’s informatics pioneers discusses what this change means for the development of nursing informatics and the nursing profession.
Mary White’s introduction to public health informatics defines and describes the application of informatics at the population level. She distinguishes it from the application of informatics techniques in managing the care of individual patients, noting that in public health the focus is on the health of populations, including the social problems associated with the burdens of chronic illness. Awareness of public health issues is relevant to all members of society, whether or not they are health professionals, particularly in an increasingly global and interconnected world. She offers suggestions on how readers may learn about this intriguing field.

The role of the patient in health informatics has increased rapidly in the past few years. The term *e-health* is often used to denote consumer and patient perspective, whether it refers to the personal health record or to access to the medical record created by the health team during the course of care. Once almost impossible to obtain without a lengthy wait and without paying for copying charges, one’s own medical record in electronic form is potentially only a few clicks away. Isto Huvila and his colleagues describe the early phases of DOME, a Swedish initiative that is studying a current program to provide patients access to their electronic health records. He provides a balanced view of the benefits and challenges of this program, noting that the findings of the research team currently studying this initiative will have far-reaching implications.

The issue concludes with articles that illustrate two different research approaches. In the first, Timothy Schultz presents examples of the application of big data technology across the pharmaceutical life cycle – from genomics and drug development through clinical monitoring, and finally pharmacovigilance, the detection, assessment and prevention of the adverse effects of drugs. In his explanation, he also cautions that the simple brute force application of computational power is insufficient to solve the complex problems in health care, and he argues for greater attention to data quality on the input side and data visualization on the output side. While Schultz’s article provides insight into big data applications in the pharmaceutical domain, clearly data analytics of all types are central to advancing our understanding of many aspects of health, particularly in an era when full adoption of electronic health records is becoming a reality.

In the second, Diane Sonnenwald describes a novel technique called visioning studies, which facilitate early-stage understanding of the potential impact of future technology in complex contexts, such as emergency medicine. A visioning study consists of two complementary techniques. One investigates task performance using an experimental design involving task simulation, observation, questionnaires and interviews. The other explores domain implications using a qualitative design, including video depicting the technology vision and semi-structured interviews. She describes how this technique can inform the design of new technology, enhance its adoption and reduce unintended negative consequences. It can also uncover potential conflicts with current social structures, facilitating the identification of enhancements to social structures and/or practices needed to derive additional benefits from the technology. This article discusses a visioning study focused on 3D telepresence technology in emergency health care.

In an era in which the acquisition, processing, retrieval and analysis of data, information and knowledge are as essential to optimal treatments as pharmaceuticals and X-rays, I hope that you will find these articles not only informative, but a springboard toward your own observation of health informatics applications in action.