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Synopsis

Education and Consumer Informatics – the need for collaborative tools

Pervasive access to modern communication technologies provides new opportunities for learning, both for health professionals and healthcare consumers. Not surprisingly, simply placing vast amounts of information online serves neither the clinician nor the patient. The need is for the right information at the right time. In general, more information online makes retrieval less specific.

Although there is abundant evidence that citizens are turning to the Internet for health information, there is little evidence that health information seekers are finding the information they need. The article by Zeng et al (1), focuses on how healthcare consumers access information. Their study shows how poorly standard medical terminologies support consumer's needs. The authors identify mismatches at the lexical, semantic and mental model levels that indicate new classes of tools are necessary for consumer access to information written and indexed for the health professional.

Consumer Health Informatics is a newly emerging branch of informatics that: analyzes consumer's needs for information; studies and implements

methods of making information available to consumers; models and integrates consumer preferences into clinical information systems; and combines health communication and education, behavioral medicine and social network concepts and theories (2).

The article by Neafsey et al (3) shows how a specifically designed computer-based Personal Education Program using some of the strategies outlined above can improve the knowledge of seniors about their medications. These researchers also showed that better knowledge translates into fewer adverse medication behaviors.

Beyond the interaction of the individual with technology (4), the newer approaches emphasize collaboration between two or more stakeholders. This approach which we have termed Collaborative Healthware (5) seeks to support the relationship between health care provider and patient by engaging the patient and their families as full partners in the health care process. In a collaborative partnership, patients expect that their clinicians will provide information and guidance. Patients expect that their clinicians will educate them and their

families on illnesses, available therapies, potential outcomes and complications, so that decisions can be made based on the patient's individual preferences.

The article by Kamin et al (6) clearly supports the added dimension of virtual collaboration for case-based learning. Here the authors compared students with classroom-style text-based learning with online interactive cases and virtual discussion groups. Students who participated in virtual discussion groups displayed the highest levels of critical thinking.

Medical education remains a challenge on a global scale. Can resources developed at Kamin's medical school be used elsewhere? Can medical schools pool resources and support distant education? The article by Harden and Hart (7) describes approaches to new learning technologies that have the potential of changing higher education. Fifty leading medicals from around the globe are collaborating to design and implement the International Virtual Medical School (IVIMEDS) curriculum. While the paper only describes a feasibility study, this global

collaboration and pooling of resource is an important development to watch.

This section highlights four articles that focus not only on the individual's interaction with informational resources, but also on the benefits of collaboration. Students and citizens will both benefit from research and advances in the new field of Consumer Health Informatics. Both need adaptive and intuitive interfaces to information and knowledge. Both need the right information at the right time. And most importantly, to become full participants each needs to be able to collaborate with peers, mentors, coaches and experts. Collaborative solutions allow the development of prescribed health-

care communities that facilitate effective connectivity among participants. These solutions provide better access to information for patients, better distribution of expertise throughout the healthcare system, improved collaboration and coordination of care, and improved quality of care.

References

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