Intersection of Information Technology and Patient Empowerment
An Ongoing Study

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Modern health care is dependent on many forms of information technology and is impacted by patients' use of technology. In addition to systems that directly support visits, diagnoses, and treatments, patients also use technology to supplement the opinions of their caregivers. For instance, patients seek health-related material from web-based sources which may not always contain up-to-date or accurate information. Likewise, they develop expectations from social media use and expect similar technology to enhance and facilitate communications with physicians, nurses, pharmacists and others. To deal with these emerging realities, health care providers have started to change the way they deliver information. Likewise, new decision-making models and information-delivery methods motivated by patient empowerment seek to enhance patient outcomes in imaginative and collaborative ways. This TREO talk describes a recent project that brought together a team comprising physicians and information systems researchers to assess and document how information technology impacts patient care and empowerment. The project focused on several areas which included: (1) technology impact on empowerment, focusing on cutting edge topics such as gamification, simulation, big data, and deep learning; (2) case studies focused on patient empowerment through technology; and, (3) ways underserved populations view technology as both promising and threatening to their empowerment. The project was further informed through interviews and discussions with practicing physicians and their experiences dealing with patients during regarding technology. The project resulted in the publication of an edited book but is still ongoing (McHaney, Reychav, Azuri, McHaney, & Moshonov, 2020). We believe much more remains to be learned. We know that patient empowerment is desirable and can be enhanced with appropriately deployed technology. We also know that modern healthcare must coexist with personal technologies, ubiquitous access to information and widespread communication capabilities. Research shows that enhanced empowerment can lead to better health outcomes, particularly when aligned with patients' preferences and values, and that a strong, communicative relationship between physicians and patients is important. Much work remains to be done in this area specifically considering big data, mobile technologies, deep learning, gamification, social media, medical websites, video conferencing, and other technologies. We seek your opinions on the intersection of empowerment, healthcare, and technology and hope our call to action results in much needed additional research.

References

McHaney, R., Reychav, I., Azuri, J., McHaney, M., & Moshonov, R. (Eds.). (2020). *Impacts of Information Technology on Patient Care and Empowerment*. Hershey, PA: IGI Global. Retrieved from https://www.igi-global.com/book/impacts-information-technology-patient-care/225849