GIS and wireless technology: The positive impact on healthcare quality

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In the United States, the use of GIS and Wireless technology are proving essential to improving healthcare quality. These technologies are providing the system infrastructure necessary to support future innovations in healthcare. GIS and Wireless technology provide an indispensable service to healthcare delivery. Data shows that the need for these systems is growing to meet technological and workload demands. Additionally, GIS and Wireless technology provides the system infrastructure necessary to support clinical healthcare information systems such as the Electronic Health Record. At the policy level, there is growing use of GIS technology to ensure the appropriate allocation of scarce healthcare resources across geographic areas to best meet patient’s needs. This includes hospital infrastructure, emergency medical services and disaster medical response. The use of GIS mapping will replace the fragmented, overwhelmed system we have today with a coordinated, regionalized healthcare system capable of delivering lifesaving healthcare treatment. The use of Wireless technology allows providers to adapt to the changing healthcare environment by reducing medical errors and increasing time for patient interaction. Advancements such as wireless capsule endoscopy provide innovative solutions to patient treatment. Additionally, RFID systems for patient tracking and the allocation of high value medical equipment improve the quality and value of healthcare services. The benefits of a wireless infrastructure are significant. However, leadership must consider the financial cost and problems associate with implementing wireless technology. From a strategic planning perspective, healthcare leadership should foster an environment of innovation as they try to redesign the future process for healthcare delivery.

Biography

Jeffrey P Harrison is a Chair of the Department of Public Health at the University of North Florida. He has received his PhD in Health Services Research from VCU, MBA from William and Mary and his MHA from the Medical College of Virginia. He is a Professor in Health Administration and teaches Strategic Planning. He has 25 years’ experience in health care and is an international speaker on a wide range of topics. He has published extensively in the areas of strategic planning, change management and healthcare technology. He has authored 39 professional articles and three book chapters. In 2015, he has completed the second edition of his book: “Essentials of Strategic Planning in Healthcare” published by Health Administration Press. He is a certified Healthcare Executive and a Fellow in the American College of Healthcare Executives. He was selected as one of the “Top 100 Health Administration Professors”, in 2013.

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