Developing the Right Workforce at the Right Time for Big Data Analytics

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The application of data analytics has been in place for many years in industries such as banking, insurance, and others relying on powerful algorithms and data to learn about the past and make decisions about the future. Analytics can have a major impact when utilized in healthcare, including but not limited to helping providers select the most cost-effective outcome-based treatments, early detection of healthcare fraud, and in launching targeted population and individual health interventions based on predictive modeling.

The value story is there, with recent estimates that show applying big data analytics in healthcare can help the US healthcare system save over $300 billion.[1] Despite these numbers, a recent KPMG survey of 270 healthcare professionals found that when asked about data analytics in their business and technology roadmap, only 10 percent of professionals said that their organization is using advanced analytics and predictive capabilities.[2]

One of the biggest challenges healthcare organizations face is finding the right talent, as the competition for the right people is fierce. It is estimated that by 2018, across all industries in the US, we may face a 50 to 60 percent gap between supply and demand in deep analytic talent.[3] It's worth keeping in mind that many companies in competition for this talent have substantial resources, from tech giants like Google to technology and management consulting firms that can often afford to pay much higher salaries than many traditional healthcare providers.

Big Data Presents an Opportunity for Health Information Management Professionals

Health information management (HIM) professionals are uniquely positioned to lead this space. HIM-focused education programs must act quickly to incorporate more data science, analytics, and big data courses within the HIM curriculum. Currently, many programs incorporate advanced statistics and some information technology courses within the curriculum. However, to motivate students to both take interest in and better understand analytics, we must focus on how to use the data to develop useful business intelligence.

HIM professionals and new graduates can lead this exciting initiative within healthcare organizations and find themselves even more valuable than before. With a keen ability to mine, visualize, and interpret data from information-rich technology such as an electronic health record (EHR), HIM professionals can help lead and influence healthcare organizations by using data as a powerful tool for decision making.

Employers Should Consider Fostering Big Data Talent

Hospitals have been struggling to recruit even the technical expertise necessary to lead mandated initiatives such as electronic health record and ICD-10-CM/PCS implementation, as well as staff to run the day-to-day IT operations. In fact, a recent Towers Watson study of more than 100 healthcare providers and hospitals showed that 67 percent are having a difficult time recruiting experienced IT workers and 38 percent reported retention concerns.[4]

Employers should partner with academic programs to provide analytics-focused internship and be more open to hiring new graduates with a high level of interest in developing their skills in the application of advanced analytics. Although big name tech companies with much deeper wallets are also after employees with skills relevant to analytics, many professionals in the healthcare industry (HIM included) are drawn to healthcare because they want to have a positive impact and focus on helping

others. When looking to develop the next generation of healthcare IT leaders within their organizations, healthcare employers should take into account these intrinsic motivations, and take notice of the energy and curiosity of new graduates.

Notes

[1] Kayyali, Basel, David Knott, and Steve Van Kuiken. "The big-data revolution in US health care: Accelerating value and innovation." McKinsey&Company. April 2013. http://www.mckinsey.com/insights/health_systems_and_services/the_big-data_revolution_in_us_health_care.

[2] KPMG. "Only 10 Percent Of Healthcare Organizations Using Data & Analytics To Fullest Potential, KPMG Survey Finds." Press release. April 29, 2015. www.kpmg.com/us/en/issuesandinsights/articlespublications/press-releases/pages/only-10-percent-of-healthcare-organizations-using-data-analytics-to-fullest-potential-kpmg-survey-finds.aspx.

[3] Manyika, James et al. "Big data: The next frontier for innovation, competition, and productivity." McKinsey&Company. May 2011. http://www.mckinsey.com/insights/business_technology/big_data_the_next_frontier_for_innovation.

[4] Towers Watson. *Closing the IT Talent Gap in Health Care*. www.towerswatson.com/DownloadMedia.aspx?media=%7BFDC8826F-9245-40B5-B03E-698F21DBD1D4%7D.

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