Health Informatics: Educational Programs for Clinical and Non-Clinical Workforce

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Abstract

The healthcare industry is in an unprecedented state of transformation. Technology infiltration in numerous areas of health care delivery is a major catalyst for such transformation. The growing volume and complexity of health information has prompted an appeal for a new breed of health care professionals. The dilemma, however, is how to educate the healthcare workforce to take advantage of relevant and integrated patient information in their daily practices and workflow. This study suggests online certificates with distinct, but specific coursework for clinical and non-clinical workers. The objective is to keep up with rapid changes in technology, treatment modalities, and policy and standards while expediting and ensuring skills needed for quality, safe, and cost effective delivery of healthcare.

We argue that differentiating the two classes of informaticians allows for the development of more concentrated and specialized offerings, which consequently leads to most useful and practical approach to train the health workers. We define non-clinical workers as anyone who works “behind the scenes” at a hospital or clinic. For the sake of simplicity, we refer to all non-clinical roles as ‘administrative’. Clinical staff is obviously those workers that are involved directly with patient treatments. Two distinct programs should fulfil the requisite skills needed in two separate, but loosely interdependent areas in the medical field. The diagram above illustrates the general scheme of the proposal.

Both categories rely on technologies, but focus on different platforms to perform different tasks. We further argue the separation of Health informatics into two distinct areas of administrative and clinical would simplify and improve the learning curve of skills required for daily use of both clinical and administrative workers in medical settings. The design of proposed curricula is aimed at perpetual training of health industry workers both clinical and administrative and entails a number of features that responds to the evolving nature of technology and healthcare delivery. The programs are designed not only to be focused and specific, but also flexible, accessible and responsive to changes. These objectives could be achieved through four cohesive courses, that cover the core of modern healthcare informatics education and all have a technology component to comply with informatics and information technology requirements. The study builds upon the experience of the authors in developing a successful online graduate certificate in health care informatics in a Business School and should be of interest to all stakeholders struggling to meet demands for up-to-date informatics skills in health organizations.