PATIENT REPORTED OUTCOMES AND STANDARDIZATION OF CARE: AN ANALYTICAL FRAMEWORK

With the advancement of technology, the evolution of health informatics systems and information technology are changing healthcare programs and organizations across the world. As more and more healthcare organizations adopt electronic health records (EHR) and look to integrate various other systems into it, there is huge and enormous amount of data that is being generated. One such example is the integration of patient reported outcomes (PRO) instruments into EHR. As health systems adopt a patient centered care, the implementation of PROs in a clinical setting is growing astronomically. The data generated from the PROs provides valuable information on a patient which otherwise could not have been captured. This information about a condition from a patient perspective helps healthcare providers to not only to understand the condition of the patient but also aid in improving the quality of life of the patient by providing clinical interventions in a timely manner. To assist the healthcare providers in better decision making, it is very essential to make the data presentable and meaningful. The very purpose of this paper is to establish an analytical framework that aids in data analysis not only at a patient level but also from a population level. Having such well-defined population metrics at the fingers tips of the healthcare providers, it helps them to make decisions that improve the outcomes of the patient. A case study example will be discussed to show the analytical framework in use. An analytical framework that incorporate the use of PRO data in a clinical setting can be used to inform patient-care decisions both within and across disciplines. The multidisciplinary aspect of this work encourages spread of the right information at the right time to the right providers, which traditionally has been challenging for health systems to do.

Biography

Pavan K Chundi is a Senior Analyst at the James M Anderson Center for Health System Excellence, Cincinnati Children's Hospital Medical Center. He graduated from University of Cincinnati with a Master’s degree in Business Analytics and holds a Master’s degree in Biomedical Engineering from University of Surrey, UK. His areas of specialization are Healthcare Analytics, Healthcare Outcomes and Improvement, Data Visualization and Business Intelligence. He has been instrumental in the development of the analytical framework and interactive dashboards that have helped clinical divisions to provide patient centered care. His expertise on time series modeling is evident from his recent publication in JAMA Pediatrics.