

A novel psychiatric registry system and its utilization for clinical and pharmaceutical research

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Abstract

The development of medical IT systems has opened new opportunities and challenges in many fields of healthcare. One goal is to create a "learning health system" that incorporate data from patients, clinicians, laboratories, and many other information sources to translate information to knowledge. There has been a continuously growing demand to create patient registries where the collected data is readily applicable for statistical analysis using both standard and advanced methods, such as machine learning. In spite of the wide-range applicability of registry databases, the development and spread of them is yet highly limited due to the significant additional extra effort needed besides e.g. the daily patient care and other administrative obligations. A possible solution to the problem can be the integration of patient registries with the standard EHR patient administration systems. In this talk we present our experiences through the development of a psychiatric registry and data mining to investigate the negative symptoms of schizophrenia.

Keywords: Registry database, Electronic health records, Medical data mining