

Knowledge-Driven Online Multimodal Automated Phenotyping System

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Abstract

An important step towards realizing the full translational potential of EHR is to efficiently and accurately assign phenotype information for individual patients. Furthermore, developing generalizable pipelines for high throughput EHR phenotyping faces additional challenges due to data sharing constraints. The objective of this study was to develop a knowledge driven online multimodal automated phenotyping (KOMAP) system that can train accurate phenotyping algorithms using only summary level EHR data without requiring any gold standard labels.

Keywords: Electronic health record, Feature selection, Automated phenotyping