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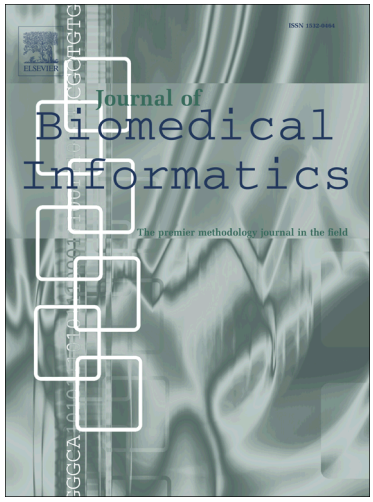

Extraction of Left Ventricular Ejection Fraction Information from Various Types of Clinical Reports

Youngjun Kim, Jennifer H. Garvin, Mary K. Goldstein, Tammy S. Hwang, Andrew Redd, Dan Bolton, Paul A. Heidenreich, Stéphane M. Meystre

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Highlights

• We propose a method to automatically identify heart failure treatment performance measures in clinical notes.

• The predictions from different existing applications are used to improve performance when generalizing to a new corpus on clinical notes.

• The impact of the quantity of training data on the accuracy of the applications has also been studied.

Abstract

Efforts to improve the treatment of congestive heart failure, a common and serious medical condition, include the use of quality measures to assess guideline-concordant care. The goal of this study is to identify left ventricular ejection fraction (LVEF) information from various types of clinical notes, and to then use this information for heart failure quality measurement. We analyzed the annotation differences between a new corpus of clinical notes from

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