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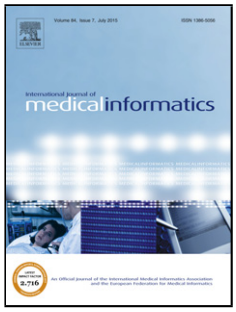

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PII: S1386-5056(18)30436-2
DOI: https://doi.org/10.1016/j.ijmedinf.2018.06.002
Reference: IJB 3710

To appear in: *International Journal of Medical Informatics*

Received date: 18-12-2017
Revised date: 27-4-2018
Accepted date: 3-6-2018

Please cite this article as: Tvardik N, Kergourlay I, Bittar A, Segond F, Darmoni S, Metzger M-Hélène, Accuracy of Using Natural Language Processing Methods for Identifying Healthcare-associated Infections, *International Journal of Medical Informatics* (2018), https://doi.org/10.1016/j.ijmedinf.2018.06.002

Accuracy of Using Natural Language Processing Methods for Identifying Healthcare-associated Infections

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Highlights

- This study confirmed the feasibility of using natural language processing for detection of healthcare-associated infections (HAI)
- The performances of HAI detection were satisfactory: overall sensitivity of 83.9% and specificity of 84.2%
- The most frequent cause of medical record misclassification was an inaccurate temporal labeling of medical events
- Improvements in semantic analysis algorithms would increase the detection performance
- NLP could offer a new standardized case-finding process for the HAI monitoring in hospitals