## Accepted Manuscript

Using the Electronic Medical Record to Identify Patients at High Risk for Frequent ED Visits and High System Costs

David W. Frost, MD, Shankar Vembu, PhD, Jiayi Wang, B.Sc, Karen Tu, MD, Quaid Morris, PhD, Howard B. Abrams, MD

PII: S0002-9343(16)31308-0

DOI: 10.1016/j.amjmed.2016.12.008

Reference: AJM 13846

To appear in: The American Journal of Medicine

Received Date: 29 July 2016

Revised Date: 2 December 2016

Accepted Date: 2 December 2016

Please cite this article as: Frost DW, Vembu S, Wang J, Tu K, Morris Q, Abrams HB, Using the Electronic Medical Record to Identify Patients at High Risk for Frequent ED Visits and High System Costs, *The American Journal of Medicine* (2017), doi: 10.1016/j.amjmed.2016.12.008.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



## Using the Electronic Medical Record to Identify Patients at High Risk for Frequent ED Visits and High System Costs

David W Frost, MD<sup>a,c,d,j</sup>, Shankar Vembu, PhD<sup>e,j</sup>, Jiayi Wang, B.Sc<sup>e,j</sup>, Karen Tu, MD<sup>b,c,j,k</sup>, Quaid Morris, PhD<sup>e,f,g,h,I,j</sup>, Howard B Abrams, MD<sup>a,c,d,j</sup> <sup>a</sup>Division of General Internal Medicine, <sup>b</sup>Department of Family and Community Medicine and Institute of Health Policy, Management and Evaluation, University of Toronto <sup>c</sup>University Health Network, <sup>d</sup>OpenLab at University Health Network <sup>e</sup>Donnelly Center for Cellular and Biomolecular Research, <sup>f</sup>Banting and Best Department of Medical Research Departments of <sup>g</sup>Medical Genetics, <sup>h</sup>Electrical and Computer Engineering, <sup>i</sup>Computer Science <sup>j</sup>University of Toronto <sup>k</sup>Institute for Clinical Evaluative Sciences

Corresponding author: Dr. David W Frost Toronto Western Hospital New East Wing 8-424 399 Bathurst St. Toronto, Ontario, Canada M5T2S8 Tel 416-603-5800 x 2936 Fax 416-603-6495 Email david.frost@uhn.ca

Disclosures: None.

Funding: This study was funded by an operating grant from "Building Bridges to Integrate Care" (BRIDGES) and supported by the Institute for Clinical Evaluative Sciences (ICES), which is funded by an annual grant from the Ontario Ministry of Health and Long-Term Care (MOHLTC). The opinions, results and conclusions reported in this paper are those of the authors and are independent from the funding sources. No endorsement by ICES or the Ontario MOHLTC is intended or should be inferred. The funder played no role in the design or execution of the study.

Conflict of Interest: None of the authors have any actual or potential conflict of interest

Contributorship statement: All authors had access to the data. Data analysis was performed by SV, JW, and QM. DF drafted the manuscript and all authors reviewed and revised it. All authors approved the final submission

Running head: EMR-based prediction of future high users

Keywords: Electronic medical records, machine learning, high users, frequent ED visits, predictive modelling

Download English Version:

## https://daneshyari.com/en/article/5576647

Download Persian Version:

https://daneshyari.com/article/5576647

Daneshyari.com