

Project Funding 2015/16 «CLINICAL DECISION MODELS IN HOSPITAL AND OUTPATIENT CARE»

The award of CHF 50'000.-- is granted to the following project:

«Development and validation of a prediction model to identify complex hospitalized patients»

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Abstract

Background

Complex patients are time and resources demanding by definition. They are also frequent, and expected to increase in number taking into account the socio-demographic changes in the future. However, few is known about the characteristics of the complex patients in the hospital setting, and the multidimensional risk factors need to be better understood. Therefore, we aim to develop a novel prediction model to identify the complex hospitalized patients.

Objectives

1. To derive an innovative complexity prediction score to predict the true complexity of hospitalized patients (i.e. have care that demand more effort and/or time/resources based on physician judgment), relying on variables collected at admission.
2. To develop a complexity score assessment to identify patients who have been complex (i.e. had care that demanded more effort and/or time/resources based on physician judgment), relying on actual parameters collected during the entire hospital stay (all variables available at patient discharge).
3. To assess the accuracy of different complexity measures (PCCL, Charlson index, Elixhauser index) using physician complexity assessment as gold standard.
4. To evaluate the difference in costs of hospital stay between complex and non-complex patients.
5. To determine the main components that make a patient complex, based physician assessment.

Methods

This prospective study will collect data about patient complexity in the division of General Internal Medicine of the Bern University Hospital. The complex patients will be identified based on the physicians (residents) assessment at discharge. Complex patients