DEVELOPMENT OF A NATIONAL CORE DATA SET FOR THE IRANIAN ICU PATIENT OUTCOME PREDICTION

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ABSTRACT

Introduction: To define a core data set for ICU patients outcome prediction in Iran. This core data set will lead us to design ICU outcome prediction models with the most effective parameters.

Methods: A combination of literature review and expert consensus meetings were used. First, a literature review was performed by a general search in PubMed to find the most appropriate models for intensive care mortality prediction and their parameters. As the next step, in a national survey, experts from medical centers in all parts of Iran were asked to comment on a list of items retrieved from an earlier literature review study. In the next stage, a central committee of experts was installed. In four meetings the central committee discussed the newly suggested items and other parameters, which were known necessary by at least one-third of the experts. Each data item was examined separately and included/excluded by committee consensus.

Results: The combination of the literature review findings and experts’ consensus resulted in a draft data set, including 26 data items. Ninety-two percent of data items in the draft data set were retrieved from the literature study, and the others were suggested by the experts. The final data set of 24 data items covers patient history and physical examination, chemistry, vital signs, oxygenations and some more specific parameters.

Conclusion: This data set was defined designed to develop a nationwide prognostic model for predicting ICU mortality and patients’ length of stay. This data set opens the door for creating standardized approaches in data collection in the Iranian intensive care unit estimation of resource utility.

KEYWORDS: Minimum data set, Scoring system, Intensive care unit