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STAR protocol for critically ill patients in Malaysia : ICU staff survey and human factor assessment (Article)

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Abstract

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Since 2001, various glycemic control (GC) studies have been conducted to reduce dysglycemia in critically ill patients. To prove their effectiveness, each proposed GC approach requires not only patient clinical results, but also users assessments. This paper presents International Islamic University Malaysia Medical Centre intensive care unit (ICU) staff perceptions and assessments of human factors of Stochastic Targeted (STAR) protocol usage based on a Malaysian pilot trial to analyze the users responses to the protocol in the Malaysian set-up. STAR protocol is a model-based and automated GC that accounts for the individual patient s metabolic variability. The ICU staff feedback on STAR trial was based on 13 survey questions. The survey demonstrated that 87.5% of ICU staff agreed that STAR protocol improved patient s outcome, and is user friendly. Human factor assessment quantifies the different interventions recorded from STAR historical and manual bedside records for a total of 31 diabetes mellitus (DM) and non-diabetes mellitus (NDM) patients. During a total of 6168 hours in ICU stays, the percentage of compliance in blood glucose (BG) measurements, insulin infusion, and nutrition administered for DM and NDM cohorts were 97.3%/97.2%, 74.1%/70.3% and 65%/71.2%, respectively. © 2019 Institute of Electronics and Information Engineers. All rights reserved.

SciVal Topic Prominence

Topic: Hypoglycemia | Glycemic Control | Insulin Replacement Therapy

Prominence percentile: 96.963

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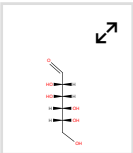

Author keywords

Diabetes | Glycemic control | STAR protocol | Survey

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