



Results of a study to estimate the prevalence and severity of delays in wireless updates of smart-pump drug libraries across a large group of U.S. hospitals are reported” DeLaurentis et al (2018).

Abstract:

PURPOSE: Results of a study to estimate the prevalence and severity of delays in wireless updates of smart-pump drug libraries across a large group of U.S. hospitals are reported.

METHODS: A prolonged smart-pump drug library update may result in patient harm if a pump is programmed with an incorrect limit setting at the time of drug administration. A retrospective study was conducted using smart-pump alert data extracted from the Regenstrief National Center for Medical Device Informatics (REMEDI) database. The study sample consisted of 49 hospitals in 5 states across the Midwest and Kentucky operated by 12 health systems; all the facilities used a specific brand of smart pump (BD Alaris, Beckton, Dickinson and Company) capable of generating alert data and had consistently contributed alert data to the REMEDI database over a 2-year period. An update delay was defined as the interval from the time a drug library version was replaced to the time of the last infusion alert triggered by the previous version during the study period.

RESULTS: Of the 12 health systems, 11 were found to have had drug library update delays during the study period, with delay medians ranging from 22 to 192 days. The overall delay minimum and maximum durations were 0 and 661 days.

CONCLUSION: Substantial delays in completion of wireless updates of smart-pump drug libraries were common across a group of hospitals of various sizes.

Reference:

DeLaurentis, P., Hsu, K.Y. and Bitan, Y. (2018) Prevalence of wireless smart-pump drug library update delays. American Journal of Health-System Pharmacy. June 27th. .

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