



To analyze cost-effectiveness and to calculate incremental cost-effectiveness ratio of the use of infusion pumps with drug library to reduce errors in intravenous drug administration in pediatric and neonatal patients in Intensive Care Units” Silva et al (2019).

Abstract:

OBJECTIVE: To analyze cost-effectiveness and to calculate incremental cost-effectiveness ratio of the use of infusion pumps with drug library to reduce errors in intravenous drug administration in pediatric and neonatal patients in Intensive Care Units.

METHODS: Mathematical modeling for economic analysis of the decision tree type. The base case was composed of reference and alternative settings. The target population was neonates and pediatric patients hospitalized in Pediatric and Neonatal Intensive Care Units, comprising a cohort of 15,034 patients. The cost estimate was based on the bottom-up and top-down approaches.

RESULTS: The decision tree, after RollBack, showed that the infusion pump with drug library may be the best strategy to avoid errors in intravenous drugs administration.

CONCLUSION: The analysis revealed that the conventional pump, although it has the lowest cost, also has lower effectiveness.

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Reference:

Silva, R.C.L.D., QuinellatoLouro, T., Peregrino, A.A.F., Silva, C.R.L.D., Marta, C.B. and Itria, A. (2019) Cost-effectiveness of infusion pumps to reduce errors in a Pediatric ICU. Revista Brasileira de Enfermagem. 72(3), p.617-623. doi: 10.1590/0034-7167-2018-0526. .

