

Pharmacists' considerations on non-medical switching at the hospital: a systematic review of the economic outcomes of cost-saving therapeutic drug classes.

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Abstract

Purpose: The aim of this review was to give a state of the art regarding the economic outcomes resulting from the use of NMS strategies and to discuss whether they would be implementable in a hospital inpatient setting.

Methods: A systematic literature search was conducted in Medline, Embase, and ScienceDirect. Studies published between 1988 and 2018 were included if they evaluated the economic impact of NMS strategies or if they performed an economic evaluation between two drugs. Studies regarding antineoplastic agents, endocrine therapies and immunostimulants or immunosuppressants and biosimilars were excluded.

Results: Fifty (69%) studies assessing an NMS strategy and 22 (31%) studies comparing two medicines were allocated to four categories: prospective studies (n = 8, 11%), retrospective chart reviews (n = 29, 40%), retrospective claims analysis (n = 13, 18%), and retrospective data analysis (n = 22, 31%). Hypercholesterolemia, peptic ulcer and gastroesophageal reflux diseases, diabetes mellitus and venous thromboembolism were the most prevalent diseases in studies evaluating an NMS strategy. Sixty-eight percent of the included papers reported a reduction in costs with no significant changes in health outcomes and eight percent reported a deterioration in health outcomes and/or increased costs.

Conclusion: Regardless of the exclusion of studies regarding biologics or medicines used in oncology, the review highlights that NMS strategies with medicines whose management do not require a thorough clinical assessment were associated with reduced costs and no significant changes in patients' health outcomes, in the inpatient setting. NMS strategies targeting medicines that require an extensive clinical assessment should be evaluated using hospital-specific effectiveness and/or utility data prior to their implementation.

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