Feasibility of Implementing a Web-based Tool Built from Pharmacy Claims Data (e-MEDRESP) to Monitor Adherence to Respiratory Medications in Primary Care

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Abstract

Objectives: e-MEDRESP is a novel web-based tool that provides easily interpretable information on patient adherence to asthma/chronic obstructive pulmonary disease medications, using pharmacy claims data. This study investigated the feasibility of implementing e-MEDRESP in primary care. Materials and Methods: In this 16-month prospective cohort study, e-MEDRESP was integrated into electronic medical records. Nineteen family physicians and 346 of their patients were enrolled. Counters embedded in the tool tracked physician use during the follow-up. Patient/physician satisfaction with e-MEDRESP was evaluated though telephone interviews and online questionnaires. The capacity of e-MEDRESP to improve adherence was explored using a pre–post analysis. Results: Overall, 252 patients had at least one medical visit during follow-up. e-MEDRESP was consulted by 15 (79%) physicians for 85 (34%) patients during clinic visits. Seventy-three patients participated in telephone interviews; 84% reported discussing their medication use with their physician; 33% viewed their e-MEDRESP report and indicated that it was easy to interpret. The physicians reported that the tool facilitated their evaluation of their patients' medication adherence (mean ± standard deviation rating: 4.8 ± 0.7, on a 5-point Likert scale). Although the pre–post analysis did not reveal improved adherence in the overall cohort, adherence improved significantly in patients whose adherence level was <80% and patients prescribed inhaled corticosteroids (26.9% [95% CI 14.3%–39.3%]) or long-acting muscarinic agents (26.4% [95% CI 12.4%–40.2%]). Conclusions: e-MEDRESP was successfully integrated in clinical practice. It could serve as a powerful tool to help physicians monitor their patients' medication adherence.

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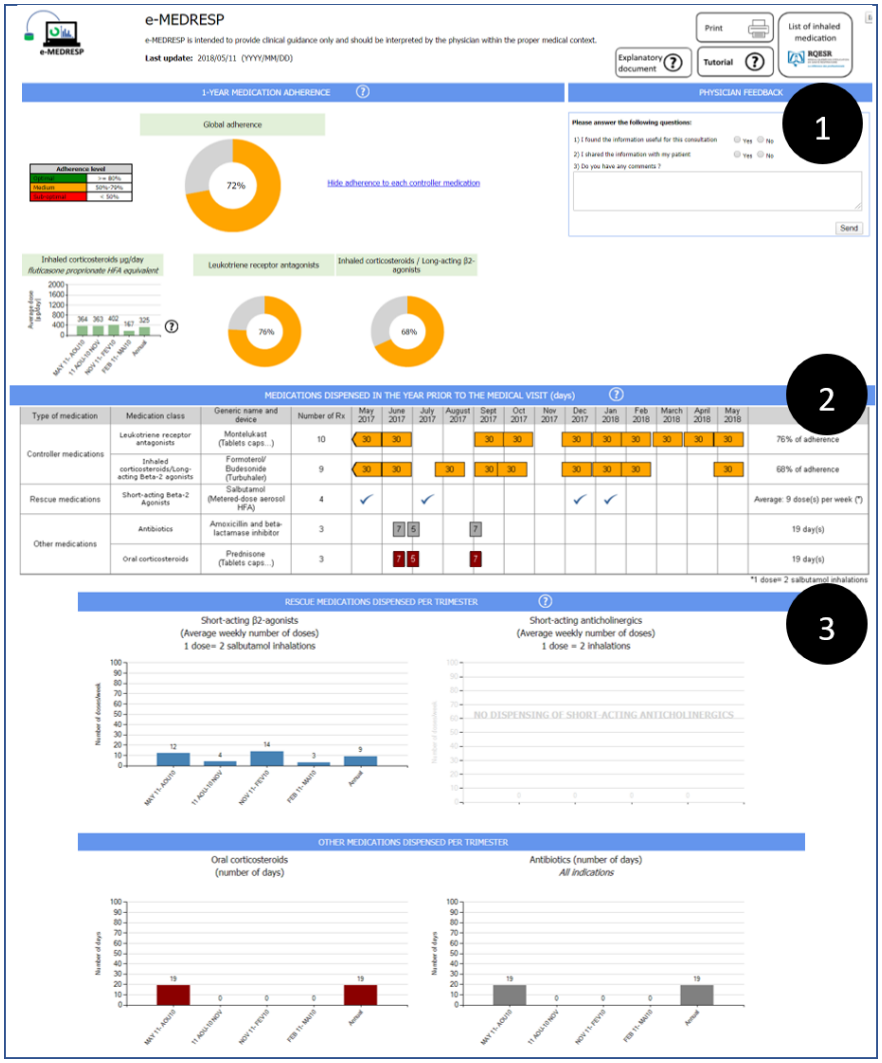

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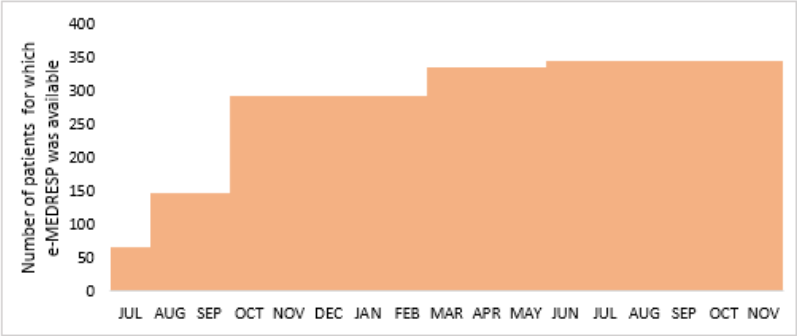

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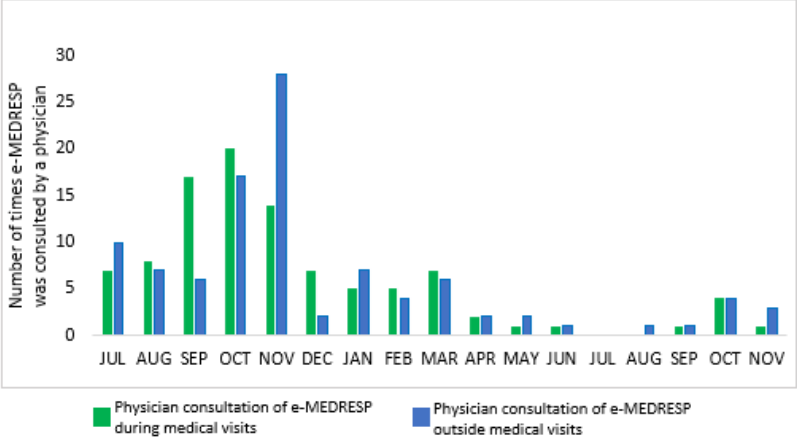

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