Children's Hospital of Philadelphia
PolicyLab

Preventing Asthma Hospital Readmissions: Start with the Basics

Population Health Sciences

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Asthma is a leading cause of pediatric hospitalization and readmission. Nearly 150,000 children are hospitalized for asthma in a given year and about 20% of those children will have a second hospitalization in the same year. That's why in a recent study, we set out to investigate whether filling prescriptions for three classes of asthma medications recommended at hospital discharge (beta agonists, oral steroids, and inhaled steroids) was associated with lower readmission risk.

We found that filling prescriptions for beta agonists and inhaled steroids was associated with a diminished risk of readmission within 14 days. For inhaled steroids, this effect persisted up to 90 days. The effect was greater for those who filled a combination of prescriptions, with those who filled all three medications having a 69% reduction in readmission risk compared to those who filled none. In addition, we found that less than 60% of families filled a beta agonist or oral steroid prescription and less than 40% filled an inhaled steroid within 3 days of discharge.

Few interventions have been shown to reduce hospital readmissions. Current strategies involve identifying groups at particularly high risk and providing intensive, and often expensive, case management support. The findings from this study suggest that filling basic recommended discharge care prescriptions leads to lower readmission risk. So while we cannot be sure that patients will take the medications they are prescribed at hospital discharge, efforts to assure that they fill these prescriptions are crucial.

In honor of National Asthma and Allergy Awareness Month, hospitals, payers, and policymakers should take steps to promote the practice of filling recommended asthma medications at discharge. Hospitals and providers could make sure that patients have their discharge medications in hand at the time of hospital discharge, either provided through inpatient pharmacies or by facilitating fills through hospital outpatient pharmacies. Insurance companies could incentivize hospital provision of asthma discharge medications by providing additional reimbursement for hospitals who provide these medications or including medication fills in a bundled payment. Lastly, because some state policies limit the provision of outpatient prescriptions from inpatient pharmacies, policymakers can ensure that existing regulations allow for common sense exceptions, such as the case with evidence-based asthma discharge medications.

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