Coordinating Complex Care: Mission Impossible?

Adolescent Health & Well-Being

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I walked into the hospital room of a 12-year-old girl with asthma as she and her family were preparing to be discharged from the hospital, approaching them to participate in PolicyLab's IHOPEAsthma research study. As part of our research protocol, I began to ask them questions about their child's care plan. Their child had been diagnosed with mild intermittent asthma just a few months prior. However, after further probing I learned that they weren't sure if their primary care physician had ordered them a prescription for an inhaler. Would their child need a daily controller medication? Unknown. How often would the medication be used? Unknown. Would they be receiving the medication at the hospital or from a retailer? Also unknown.

Unfortunately, this family's story is common and reveals important opportunities to improve discharge transitions for hospitalized patients. While one might expect that the doctor's visit matters more than the events that follow, discharge transitions have dramatic implications for patients' long-term health and risk of hospital readmission. Here at PolicyLab, we're focusing on discovering ways to improve hospital-to-home transitions, specifically on how addressing mental health conditions at the time of hospitalization can improve the transition to home and post-hospital outcomes.

To improve the transition from hospital-to-home, our team is working to uncover reasons why patients may not take their asthma controller medications after hospital discharge. Although physicians typically provide concrete recommendations for when to take an asthma control medication, patients may not follow these recommendations. Adherence to daily asthma controller medications influences long-term asthma care. Asthma controllers prevent unnecessary exacerbation from common triggers (i.e. dust, pollen, cigarette smoke, etc.) or sporadic attacks. Fewer than half of patients across the nation adhere to their daily asthma medications, which is far less than optimal. Reasons for low adherence can vary, and mental health is a factor that can play a role for some patients. In particular, patients with depression and anxiety disorders are at higher risk for low medication adherence.

Approximately 20 percent of children with asthma also have a mental health condition, including disorders like depression and anxiety. Medication adherence can falter as patients and their families manage the complexity of both their child's physical and mental health conditions. In addition, the risk of experiencing mental health conditions such as anxiety and depression increases during adolescence, which is the same time that patients begin to take charge of their own health. This combination can impair an adolescent's ability to adhere to taking controller medications, exacerbating asthma symptoms.

CHOP is researching hospital-based interventions that can positively influence the patient's mental and physical health. The aforementioned PolicyLab study "IHOPEAsthma," funded by the Academic Pediatric Association, is investigating the relationship between depression and anxiety symptoms during hospitalization and asthma medication adherence after discharge. This knowledge will help inform future interventions to coordinate medical and physical health treatments to improve overall wellbeing. Several studies have shown that

collaborative models incorporating both mental and physical health care help keep patients healthy after they leave the hospital. The IHOPEAsthma study's goal is to identify tools to provide coordinated physical and mental health care within the hospital to both increase long-term wellbeing and medication adherence, among other goals.

We want to ensure that that 12-year-old young girl with asthma that I saw — and all patients — leave the hospital with more answers than questions.

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