CONFERNECE ABSTRACT

Preventing the September Epidemic through a Multi-Faceted Approach

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Background: The “September Epidemic” is a well-known phenomenon: there is an increased likelihood of asthma exacerbations among children during the first month of school. Likely triggers include a combination of factors such as the stress of starting a new school year, the exposure to classrooms and respiratory viruses from fellow classmates, and concurrent weather patterns due to a change in season.

Furthermore, as many children with a known history of asthma experience a decrease in symptoms during the preceding summer, there has been some concern that children and families are less aware of their likely triggers and less likely to be prescribed and to purchase their preventive therapy (controller medication).

Clalit Health Services (CHS), a payer/provider health service organization servicing over 4 million members, in concert with the Clalit Research Institute which accesses the CHS database that coordinates the comprehensive and universally adopted medical record system of CHS, set about to develop a program that would integrate two otherwise independent components: a child’s electronic medical record (including diagnoses, admissions, and pharmacy records) that indicated a child is at risk and the CHS community health outreach infrastructure (newsletters to parents, nursing coordinator outreach, district level medical director) that could schedule appointments for consideration of controller medication.

Methods: We identified the precise weeks during which the September Epidemic was most severe over the past five years. Then, we analyzed and described an annual effect that patients with moderate asthma were unlikely to use preventive therapy in the weeks and months preceding September. We identified which children had not purchased preventive therapy as of the end of July 2015, and implemented a simultaneous outreach at three levels: responsible guardian with a registered email, nursing coordinator outreach, district level medical director. A short memo was sent to each of the three levels, describing the phenomenon, the risk factors, and the possible avenues for intervention. A list of children was provided to the nursing coordinator for direct contact to responsible guardian and to the medical director for distribution to the responsible clinicians. Primary care providers were encouraged to review their children’s medical records and consider prescribing controller medication for initiation prior to the start of the new school year (September 1st).
Conclusion: A payer/provider system is well positioned to use data-driven findings to inform and drive a targeted invention. Designating how to measure and evaluate the impact and outcomes of the intervention is an important and complex stage in the planning process, especially when common signs of health care use (like physician visits) can be signs both of the intervention (increase in preventive visits) and of the outcome (decrease in emergency visits). The results from the success of the implementation of this intervention and the impact it has on patient outcomes and health care utilization will be of critical importance when advocating for support from key-stakeholders for future iterations of such a model.

Keywords: translational policy; research into practice; case study; data-driven models