



Quality Reporting Micro Case Study

Preventive Pediatric Care: Giving Practices an Easier Way to Track Immunizations and Interventions

The Problem

In practice, preventive care has a lot of pain points. How do physicians and practices maintain immunization schedules of thousands of patients to ensure they are vaccinated on time? How are obese children identified and tracked to make sure long-term health risks are proactively reduced? How can practices ensure proper care guidelines are being followed for children with ADHD?

All these preventive measures can get complicated to organize, maintain, and track, especially in a healthcare model that expects patients to actively seek visits rather than relying on doctors to proactively schedule visits with high-risk patients. While EHR (electronic health record) decision support systems, for example, can alert doctors to needed immunizations during a visit, the patient must visit the doctor before the reminder can be useful. Pediatric practices need to understand how they are doing on preventive care measures so that their patients do not slip through the cracks.

The Solution

Recombinant has developed a series of quality reporting utilities that use EHR data to track and manage pediatric preventive care procedures, including pediatric immunizations, obesity management, and ADHD care guidelines to support quality improvement initiatives.

Pediatric immunization. While Centers for Disease Control (CDC) immunization guidelines are well-documented, they are difficult to follow in practice because of their frequent updates and their complex schedules and dependencies, including how old a child needs to be to receive a shot, what to do when a patient has missed a shot, how to track the combinations in vaccines that administer multiple vaccines simultaneously like Pediarix, and when new shots like HPV are added to the schedule each year. They also are difficult to adhere to because the EHR clinical decision support reminder systems that present physician information while viewing each patient's record work well only if a patient comes in on time and a shot is administered. Unfortunately they are often cluttered with other reminders for the day-of visit, and workflows often do not offer views to support how outreach is done to bring at-risk patient populations that missed visits or services into the office.

Recombinant has developed a rules-based reporting system that models the logic of each vaccination series and categorizes patient status for each vaccine based on the CDC schedule into a set of simple classifications (Not Yet Due, Not Applicable, Due, Overdue, Vaccinated Late, or Vaccinated on Time). Using this system, reports are generated that identify patients who need to be scheduled for visits to receive shots not yet scheduled or missed. While some records systems are incomplete regarding patient history, the reports rapidly highlight which patients may have gaps in documentation to ensure that their full history can be recorded. Reports also use the ideal administration schedules to show the performance levels of individual pediatricians and the practice as a whole for on-time immunizations for improved immunization management and performance. The reporting system is practical given the complexity of the process and includes a feedback system for pediatricians to make comments in the reports for special cases such as missing documentation, vaccine refusals, and planned schedules outside the standard guidelines.

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Obesity management. Since many long-term chronic care conditions are a result of obesity – diabetes and coronary artery disease (CAD), for example – pediatricians play a significant role in early intervention that can result in a lifetime benefit from the preventive care. The challenge, however, is that it is difficult to define and track which children in a population are “obese.” Body mass index (BMI) is not straightforward with children, since there are many factors to consider, including gender and age, to calculate BMI and determine which patients are in upper percentiles. Recombinant has developed a quality reporting utility that takes into consideration the last height and weight reading and the age and the gender of the patient during that measurement to output an accurate pediatric BMI percentile on reference growth charts published by the CDC. Providers are then delivered reports relating to progress for the group above the 90-95 percentile to track both individual intervention activities like nutrition and exercise counseling as well as to review progress of the at-risk population as a whole.

ADHD prescribing follow-up care guidelines. Another area of interest to pediatric practices is to ensure follow-through on care guidelines for ADHD patients who have been prescribed a stimulant. A follow-up visit is required within a month of prescribing a psychoactive drug, which can run the risk of adverse reactions if doses and responses are not monitored. Pay-for-performance measures are often tied to this area to reduce the risk to patients who have adverse reactions to the medications. Recombinant has created a reporting utility that identifies patients who have been diagnosed with ADHD and who have been prescribed a stimulant as well as whether a follow-up visit has been scheduled and/or occurred. This report allows practices to track their performance improvements and ensure that patients who are overdue for the follow-up visit are contacted and scheduled for that visit.

Population-based clinical decision support systems offered through Recombinant can help pediatric practices more easily support preventive care measures, especially those with high complexity. Subscriptions to Recombinant’s Report Central report library can also efficiently and effectively respond to frequently changing care guidelines including changes in the CDC immunization schedules.

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