



New York State Uses Antibiotic Prescribing Data to Focus County-level Intervention Efforts

Background



The New York State Department of Health (NYSDOH) identified antibiotic overprescribing for respiratory tract infections as an important issue based on an analysis of New York State Medicaid claims data which showed that 45% of adult patients seen in outpatient settings for acute respiratory tract infections, for which an antibiotic is not usually indicated, filled a prescription following the visit. The NYSDOH Get Smart: Know When Antibiotics Work campaign used this data to target outpatient healthcare providers by presenting the relevant data and engaging them in reducing unnecessary antibiotic use.

What Was Done



NYSDOH analyzed statewide outpatient Medicaid claims and pharmacy data from 2013 to assess antibiotic prescribing for upper respiratory infections (URI). The rates of potentially avoidable antibiotic prescribing were mapped by the county of visit after adjusting for differences in age group (18–24, 25–34, 35–44, 45–64), principal diagnosis (acute bronchitis vs. cold/acute URI), and visit type (ED, Institutional Outpatient, Professional Outpatient).

Initial outreach concentrated on outpatient providers likely to see patients with acute URI in high prescribing counties. A letter was sent to providers explaining the analysis and results and offered materials and resources to promote appropriate antibiotic use.

NYSDOH informed local health departments of the analysis, results, and targeted outreach efforts, which led to additional collaborations with local health departments to promote appropriate use of antibiotics and CDC’s Get Smart campaign materials. NYSDOH and the local health departments have implemented interventions in pediatric offices, outpatient clinics, urgent care clinics, and schools. Many materials from CDC’s Get Smart program were adapted for various settings, including posters and brochures on appropriate antibiotic prescribing, as well as viral prescription pads to provide suggestions for symptomatic treatment.

How It Was Accomplished



Medicaid data were available for analysis based on a Data Use Agreement between the Office of Quality and Patient Safety and the NYS Office of Health Insurance Programs, both within the health department. Healthcare providers were identified using publicly available lists from the NYS Medicaid Delivery System Reform Incentive Payment (DSRIP) Program. Individual providers were identified and verified as practicing within the county of interest using licensing information. NYSDOH staff directly mailed the majority of the materials to healthcare providers. Additionally, care was taken to ensure the message to providers was aimed at improving awareness of the problem across the state rather than targeting individual performance.

Impact



NYSDOH is currently determining the impact of this initiative, including how materials are being used. From August 2015 to April 2016, NYSDOH distributed more than 10,500 pieces of Get Smart collateral. NYSDOH has found that school nurses in local jurisdictions have been essential partners in this process and the county level data provided a way to engage local health departments.

Future analyses will include multiple years of prescribing data to identify whether any change in prescribing occurs over time and explore prescriber antibiotic selection for various diagnoses in both adults and children.

