Background

The Illinois Department of Public Health (IDPH) launched the ongoing statewide campaign, Precious Drugs & Scary Bugs, in March 2015 to promote appropriate antibiotic prescribing in outpatient settings. The campaign goals and objectives are to promote appropriate antibiotic use, increase provider and patient knowledge, improve attitudes toward antibiotic prescribing, and provide resources to support responsible prescribing practices, particularly for acute respiratory infections (ARI).

Several factors influenced the development of this campaign. First, at least 30% of antibiotic prescriptions in the outpatient setting are unnecessary, and based on Illinois Medicaid claims in 2012, antibiotics were prescribed for 30% of office and ER visits made for acute ARIs and earaches. Rates of antibiotic prescribing for these conditions were particularly high for adults (42% of visits) and rural health clinics (39% of visits). Additionally, local outpatient prescribing practices contribute to local antibiotic resistance patterns. Finally, a study conducted by researchers from the University of Southern California (USC), found that use of a poster-sized letter signed by the clinician committing not to prescribe antibiotics inappropriately reduced inappropriate prescribing for ARIs by 19.7% in five outpatient primary care clinics. This study sparked the idea to launch a poster-based antibiotic stewardship campaign in Illinois.

What Was Done

The Precious Drugs & Scary Bugs campaign targeted outpatient providers in primary care, urgent care, and community health centers. These providers were asked to do the following: complete baseline and follow-up surveys on antibiotic prescribing attitudes, practices, and challenges, display a poster-sized letter to the patient, personalized with providers’ names and photographs, stating the providers’ commitment to appropriate antibiotic prescribing for ARIs; participate in two educational webinars and the statewide Illinois Summit on Antimicrobial Stewardship, and track and share aggregate antibiotic prescribing data with IDPH.

To inform campaign planning and implementation, IDPH convened a workgroup that included representation from medical groups, professional societies, payers, and academia, including researchers from USC, who conducted the poster-based study that inspired this campaign. To facilitate provider engagement and help standardize poster roll-out at facilities, IDPH developed the Precious Drugs & Scary Bugs Implementation Guide, a “how-to” document that describes campaign activities and provides implementation tip sheets, email templates for communicating with providers, and select patient/provider resources. IDPH also developed a campaign website including archived presentations and other resources.

To assess changes in provider attitudes and practices around antibiotic prescribing for acute respiratory tract infections, a pre-/post-survey is being used. To assess antibiotic prescribing, IDPH has invited facilities to share summary pre-/post-data with IDPH using a simple reporting template developed for this purpose. Facilities have been asked to track oral antibiotic prescribing rates for (1) all conditions overall; (2) acute upper respiratory infection (acute URI of other multiple sites, acute URI not otherwise specified, and acute nasopharyngitis); and (3) acute bronchitis or bronchitis not specified as acute or chronic. Facilities already tracking Healthcare Effectiveness Data and Information Set (HEDIS) measures of care related to antibiotic use have also been encouraged to share the summary data with IDPH including appropriate testing for children with pharyngitis (NQF 0002), appropriate treatment for children with upper respiratory infections (NQF 0069), and avoidance of antibiotic treatment in adults with acute bronchitis (NQF 0058).

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**How It Was Accomplished**

IDPH developed this campaign through Epidemiology and Laboratory Capacity cooperative agreement funding from the CDC Get Smart program. A workgroup was formed to help guide campaign planning and implementation.

Provider champions, who were part of the workgroup, helped spread the message to peers via presentations, meetings in downstate clinics, and webinars hosted by IDPH. Outpatient healthcare facilities were recruited through presentations and emails targeting medical directors. Campaign sign-up required completion of commitment forms at the facility and individual provider levels.

The commitment poster was developed with CDC and the campaign workgroup, which included researchers from the behavioral nudge study out of USC. Posters were also offered in Spanish with assistance of translation services at IDPH. IDPH customized, printed, and distributed the posters so facilities had a minimal time commitment. Facilities were instructed to hang the posters in exam rooms. Provider interviews were conducted to evaluate how the posters were being used. Using two tiers of engagement: both at the facility level (commitment form by leadership) and at the provider level (commitment form, review of the commitment poster, and baseline survey), IDPH tried to limit the provider’s time commitment and followed up with a point of contact (usually medical director or QI representative) at the clinic to help keep the facility motivated, on track, and to coach them on how to keep their providers engaged in the campaign.

**Impact**

As of August 2016, 55 outpatient practices signed up to participate in the campaign, representing 389 providers. Ninety-four providers completed the commitment form and 59 completed the baseline survey. Over 600 commitment posters were printed and distributed. Over half of baseline survey respondents believed that patients would be dissatisfied if they did not get antibiotics for a cough, cold, or flu. A sample of eight providers at two participating facilities were interviewed to obtain qualitative feedback on how the poster campaign influenced their prescribing. Interviewees stated that the poster increased provider-patient communication, addressed patient expectations regarding antibiotics for ARIs, and reinforced a uniform message.

Building relationships with key stakeholders through the campaign workgroup helped to secure facility buy in; however, engaging individual providers in campaign activities, such as completing the baseline survey, has been a challenge. Displaying a personalized commitment poster is a promising, low cost quality improvement intervention that can be used to improve patient satisfaction.

For more information visit [www.cdc.gov/getsmtart](http://www.cdc.gov/getsmtart)