



Judicious Use of Antibiotics Project

"When I asked you the question what do you prefer [regarding treatment], most of you said antibiotics... Why?"

"Because that [antibiotics] makes them feel better, it works against the pain. I only treat mine for three days, because otherwise I think that the antibiotics make him vomit..."

Judicious Use of Antibiotics Parent Focus Group

Reducing Antibiotic Use for Viral Upper Respiratory Infections

The *Judicious Use of Antibiotics* project was developed to address a growing public health concern: the increase of antibiotic resistant bacteria, a consequence of the inappropriate antibiotic use for viral infections.

One family practice and two pediatric physician offices serving large numbers of MassHealth members participated in this project. The practices engaged in clinical improvement planning to increase clinicians' compliance with clinical recommendations and decrease the number of prescriptions inconsistent with the recommendations. The targeted patient population was MassHealth members, ages six months to six years of age diagnosed with:

- ◆ Colds
- ◆ Otitis Media with Effusion
- ◆ Acute Otitis Media
- ◆ Bronchitis
- ◆ Sinusitis
- ◆ Cough
- ◆ Pharyngitis

Project Approach

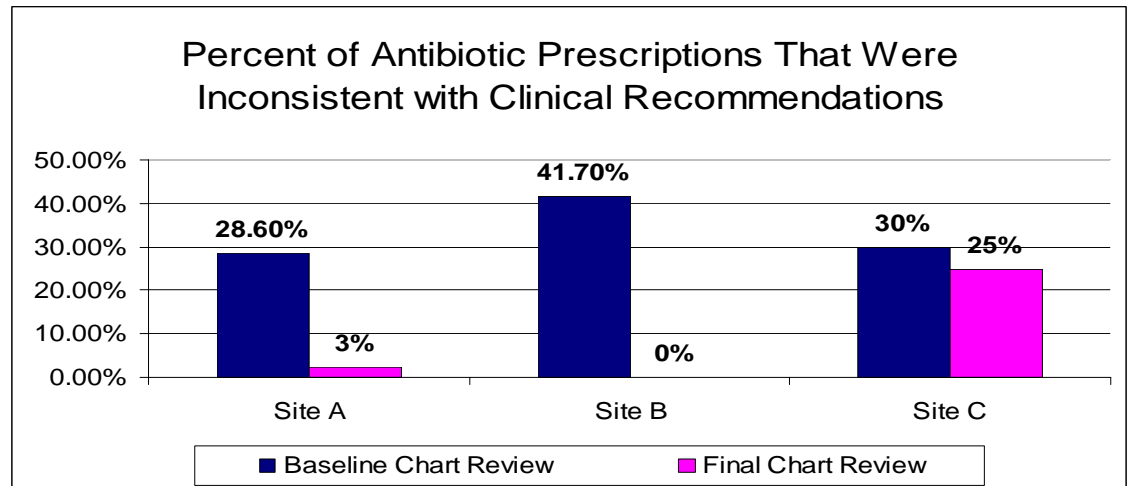
The project was developed in accordance with the [MassHealth/MAP clinical education template](#) (PDF) and included the development of the following project resources:

- ◆ The development of clinical recommendations by a team of medical experts entitled: [Judicious Antibiotic Use: An Approach to Upper Respiratory Illness](#); (PDF)
- ◆ The [Antibiotic Toolkit for Clinicians](#); (PDF)
- ◆ [Educational Materials](#) for parents describing the proper treatment for viral upper respiratory infections;
- ◆ Focus Groups among parents conducted in Spanish and English to determine parents' perceptions of antibiotic use and treatment of upper respiratory infections;

- ◆ Focus Groups among providers obtain their perceptions of parental concerns regarding antibiotic use and educational materials for parents;
- ◆ Use of clinical experts to provide clinical training to each clinical site team on the rationale for and use of The Clinical Recommendations.

Project Evaluation

Following completion of the project in 2001, baseline chart review data was compared to the final chart review indicating a **decrease in the percentage of prescriptions inconsistent with the guidelines from 30.7% (pre-intervention) to 9.4% (post-intervention)**. This change was significant at the 95% confidence level.



In addition 78% of the clinicians believed that their prescribing practices had been changed by participation in the project.

Antibiotic Resources

To speak to the program manager about this project, contact Theresa Glenn at 508-856-4859 or email Theresa.Glenn@umassmed.edu.

To learn more about this topic, check out the websites below:

[American Academy of Family Physicians & American Academy of Pediatricians](#) *Diagnosis and Management of Acute Otitis Media*

[American Academy of Pediatrics](#)

[APUA](#) (Alliance for Prudent Use of Antibiotics)

[Association for Practitioners in Infection Control and Epidemiology, Inc.](#)

[CDC](#) *Get Smart Know When Antibiotics Work*

[Division of Healthcare Quality and Promotion](#), CDC

[Massachusetts Department of Public Health](#)

[National Center for Infectious Diseases](#), Antimicrobial Resistance:

[National Institutes of Health](#) (antibiotic resistance)

REACH MASS (Reducing Antibiotics for Children), REACH Mass works with pediatric clinicians, parents and day care providers to promote judicious antibiotic use in children and to reduce the prevalence of antibiotic-resistant bacteria.

[The Massachusetts Chapter of the American Academy of Pediatrics](#)

[U.S. Centers for Disease Control and Prevention](#) (hand-washing information)