

A collaborative approach to promote appropriate antibiotics use with practical considerations for sick-child exclusion policies in Pennsylvania

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Introduction

- Widespread antibiotic use drives the emergence of antimicrobial resistance
- Children in childcare centers are often prescribed antibiotics for acute respiratory infections, primary caused by virus for example:
 - cold, influenza, sore throat, otitis media and bronchitis (1)
- Children in group settings experience acute respiratory illnesses due to:
 - close proximity with others
 - interact with their environment
- The main objective of sick-child exclusion policies is prevention of communicable diseases
- However, misuse of exclusion policies contributes to overuse of antibiotics in children

Aim

- Develop practical guidance for implementing model sick-child exclusions based on a previous study (2)
 - Part of antimicrobial stewardship initiatives supported by CDC Get Know When Antibiotics Work in the Community Program

Methods

Sick-child Exclusion Policy Advisory Group and Surveys

- During 2012-2014, created an advisory group
 - Pediatricians, childcare directors, public health officials, representatives from the state licensing agency and Child Care Aware America
- Surveyed directors of a random sample of 904 licensed facilities regarding exclusion policies
 - Sample from ~8,000 licensed facilities serving ~24,200 Pennsylvania children

Information reviewed by the Advisory Group

- Group reviewed information from various sources (Figure 2):
 - data from surveys on current practices on sick child exclusion requirements
 - American Academy of Pediatrics (AAP) Model Child Care Exclusion Policies
 - Public health guidelines, state regulations, and
 - Vignettes on recent problems posed by childcare directors
 - Identifying fever in a child, color of nasal discharge

Methods (cont.)

Review of Advisory Report

- Advisory group report reviewed by two state agencies responsible for public health and licensing of childcare facilities
- Pre-publication peer-review by member of the AAP (Timothy R Shope, MD)



Figure 1. Example of children with acute respiratory infections

Results

Survey findings

- 25% (226) of directors responded
- While 95% (215) of facilities had written exclusion policies
 - 70% (158) were based on state requirements
 - 45% (102) based on model policy

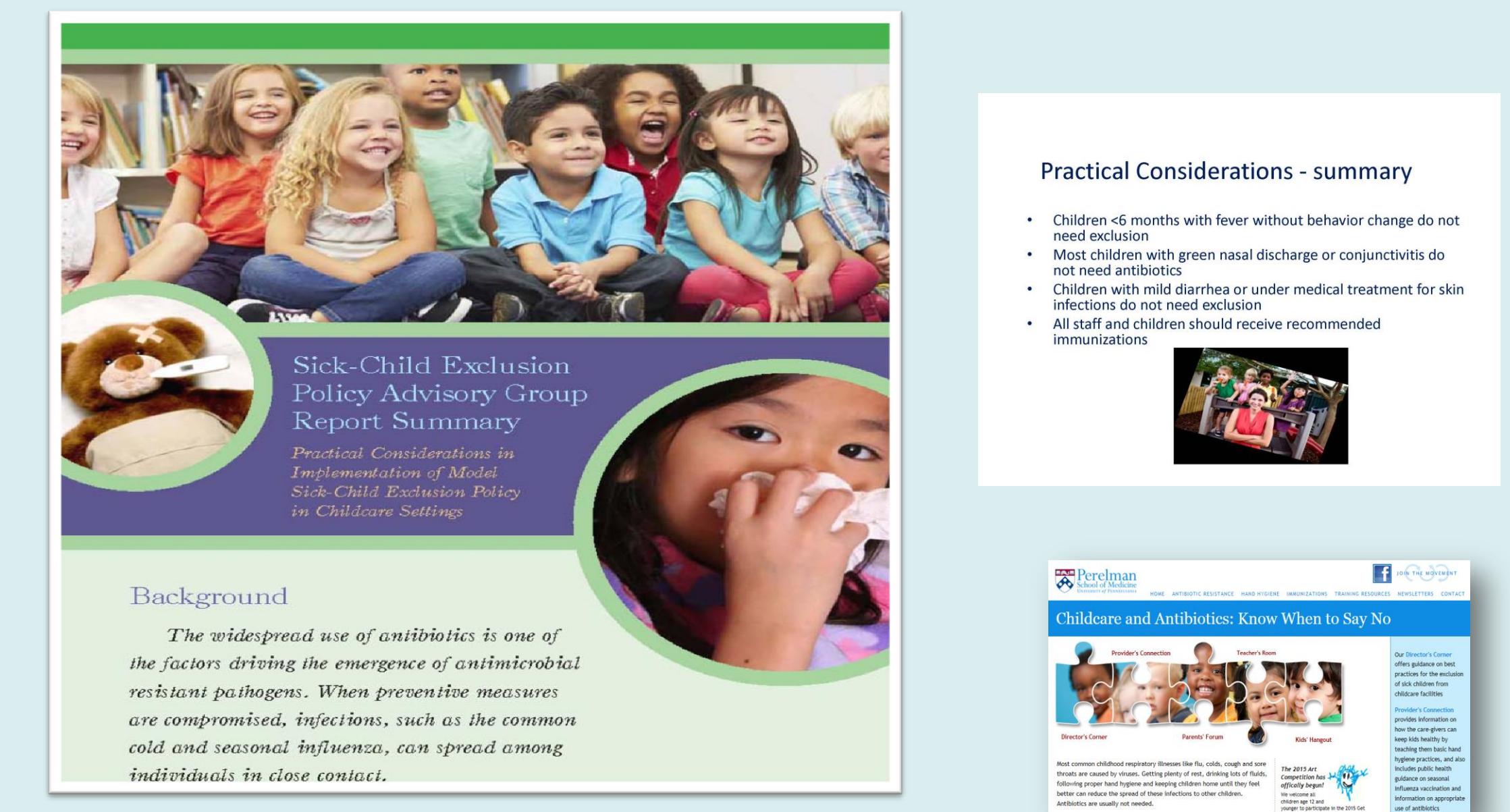


Figure 3. *Practical Considerations in ... Model Sick-child exclusion policies* is widely disseminated as part of the Get Smart Know When Antibiotics Work in the community efforts

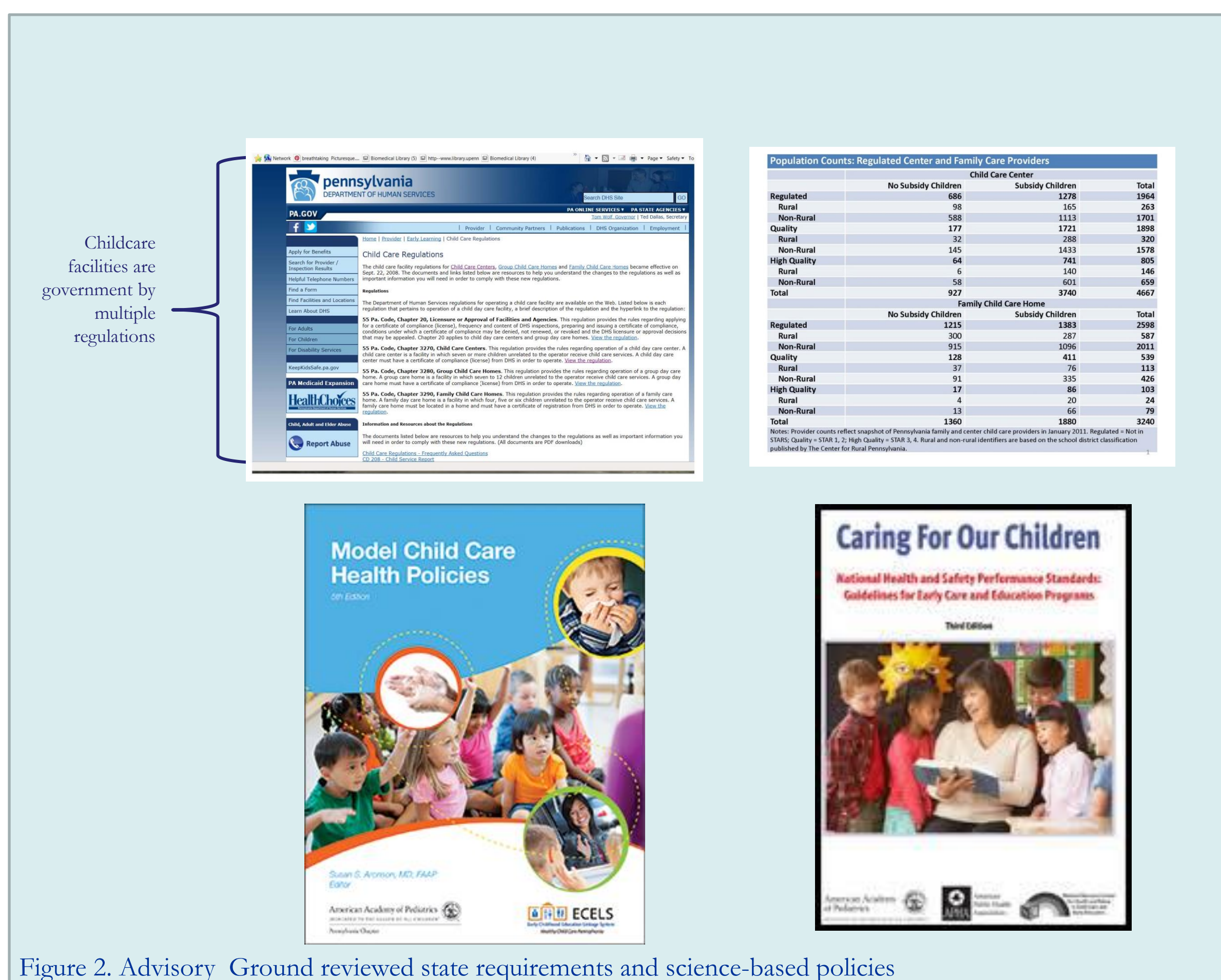


Figure 2. Advisory Ground reviewed state requirements and science-based policies

Finding from Advisory Group discussion

- Most common cause of exclusions are fever, diarrhea, rhinorrhea, conjunctivitis, skin infections and scabies
- Staff and child immunization requirements not always clear
- Advisory group produced *Practical Considerations in ... Model Sick-child exclusion policies* to clarify recommended exclusion criteria

Conclusions

- A collaborative approach including key stakeholders has the potential to:
 - Address drivers of antibiotics use in children
 - Disseminate up-to-date policies that promote vaccination and prevention control

References

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- M'ikanatha NM, Gasink LB, Kunselman A, Warren K, Lautenbach E. Child care center exclusion policies and directors' opinions on the use of antibiotics. *Infect Control Hosp Epidemiol*. 2010;31: 408-11

