Vaccine Communication Safety Curriculum for Medical Residents: Development and National Distribution

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Abstract

Background: Due to increasing vaccine refusal physicians need to know how best to effectively address concerns about vaccine safety. Most primary care medical residents receive training on vaccine recommendations and administration, but not necessarily on how to communicate about vaccine safety concerns. In 2009-2011 funded by a CDC/ARRA grant the American Academy of Pediatrics, California Foundation convened a partnership to develop and distribute a multifaceted curriculum for primary care residents focused on effective messages and communication techniques for talking to parents and patients about vaccine safety.

Project Description: A survey and focus groups of primary care medical residents identified gaps in vaccine safety communication education. It also provided valuable information regarding their interest in this area and their preferred education strategies. The resulting curriculum was designed in three modules: pediatric, family medicine, and internal medicine. Each contains web-based patient case studies, a small group discussion guide, and a lecture presentation. Pre/post-tests were developed to assess comprehension and attitudes about vaccine safety. The completed curriculum was distributed to all pediatric, family medicine and internal medicine medical residency programs in the United States.

Results/Lessons Learned: Focus groups of primary care residents indicate that it is important to have multiple formats to accommodate different learning styles. Over 97% of the residents participating in pilots of the materials reported that reviewing the cases was a good use of their time and that they anticipated utilizing the information they learned with their patients. Over 90% reported both improved ability to communicate about vaccination as well as improved comfort level discussing vaccination with patients. Distribution to over 1,000 primary care medical residency programs was completed, utilizing a personalized approach and varied data sources to identify contacts at each program

Background

- Need for a comprehensive vaccine safety curriculum
 - Increasing rates of vaccine hesitancy
 - Inconsistent training for primary care residents on communication of vaccine safety
 - Increasing time burden for physicians discussing vaccine safety topics with patients/parents

Project Description

- Collaborative leadership from the AAP-CA, the CA Family Physician association, Stanford University, UCSD, UC Davis and expert consultants from Children's Hospital of LA
- Focus groups conducted with residency programs nationwide to define content
- Pilot-testing of online modules
- Final product distributed nationally through AAP and AAFP
- Evaluation Ongoing

Vaccine Safety Curriculum Components

3 Modules for Pediatrics, Family Medicine & Internal Medicine include:

Online Case Studies

Small Group Discussion Guide

Didactic Lecture

Online Case Studies

- 3 Modules
 - Pediatrics (5 cases)
 - Family Medicine (6 cases)
 - Internal Medicine (5 cases)
- Pre & Post Tests

Format: Self-Paced Directed Study

Online Case Studies: Common Elements

- Patient History: Medical & Social
- Vaccine Ordering Form
- Methods of Effective Communication
- Identifying common vaccine safety concerns
- Addressing real vaccine safety issues
- Exploring pro-vaccine web resources
- Encountering anti-vaccine web resources
- Video examples of effective communication

Small Group Discussion Guide

- 3 Modules
 - Pediatrics (6 cases)
 - Family Medicine (8 cases)
 - Internal Medicine (7 cases)
- Q&A Format led by Residency Coordinators/ other educators

Detailed references for additional self-study

Didactic Lecture

- Slides with notes
- Covers wide range of vaccine safety topics
- Addresses effective communication styles
- Provides examples of "sound bites"

Vaccine Safety Curriculum Formats

- Online Case Studies
 - Programmed in Captivate (customizable by program)
 - Coordinators can generate pre/post test scores
 - Coordinators can track completion by residents
 - Participants can print certificate of completion
- Small Group Discussion Guide
 - Written in Word, available in PDF
- Didactic Lecture
 - Written in PowerPoint (can be customized), or available in PDF

Results Overview

- Focus Groups
- Online Survey Pilot
- Development of Curriculum Materials
- Nationwide distribution of Curriculum

Results: Online Survey Pilot

- Over 97% of the residents participating in the online pilot reported both that reviewing the cases was a good use of their time and that they anticipated utilizing the information they learned with their patients.
- Over 90% reported both improved ability to communicate about vaccination as well as improved comfort level discussing vaccination with patients.

Results: Focus Groups

Convenience sample at 6 primary care medical residency programs participated in guided, facilitated in-person focus groups in March and April of 2010. Participating programs: Children's Hospital of Los Angeles, Long Beach Memorial, Harvard University, Stanford University, UC at Davis, and University of Chicago.

- * Significant percentages answered "not" (21.5%) and "somewhat" (46.2%) for whether they learn vaccine safety communication (VSC) in residency.
- * Those serving compliant populations not sure this will be a big issue in practice, although nearly all said more VSC training would be valuable.
- * Online is not the top choice for method in program; residents prefer didactic lectures and role-modeling.
- * New vaccine/inadequate testing competes with autism/dangerous ingredients as primary VSC concern.

Results: Materials Development

Seven curriculum/material products were developed:

On-line Module: Pediatrics'

On-Line Module: Family Medicine

On-Line Module: Internal Medicine

•Train-the-trainer/Small Group Training Guide: Pediatrics

•Train-the-trainer/Small Group Training Guide: Family Medicine

•Train-the-trainer/Small Group Training Guide: Internal Medicine

•Slide deck/didactic lecture resources

To view all products go to:

http://vaccinecommunicationresource.wikispaces.com/

Results: Nationwide Distribution Phase 1

- *Goals: Notify all primary care medical residency programs nationwide of new curriculum. Identify at least 16 programs interested in use.
- * Lists of all primary care medical residency programs with contact information were accessed through medical specialty societies (peds and FPs) and via online search (internists)
- * 100% of primary care medical residency programs (over 1,000) in pediatrics, family medicine and internal medicine were contacted via email to Program Director to inform them about the new curriculum.

Results: Nationwide Distribution: Phase 2

• 18 residency programs responded to the first communication regarding the new vaccine safety curriculum with interest. Each received personal follow-up and access to the curriculum with a commitment from our project for technical assistance.

Results: Nationwide Distribution: Phase 3

- All programs that had not responded were re-contacted and provided with a direct link to the curriculum for their use.
- Data was shared regarding the effectiveness of the curriculum. An additional 21 programs responded with interest.
- Each received personal follow-up with a commitment to technical assistance. In sum, 38 total programs responded to availability of the new curriculum with interest; the project more than doubled its goal of providing the curriculum to 16 interested programs.

Project Partners











California District IX



