

IMMUNIZATION COALITIONS AND EVIDENCE-BASED INTERVENTIONS

WHAT RESEARCH SAYS ABOUT THE EFFECTIVENESS OF COALITIONS

AN IZTA MEMBER WROTE, “I AM IN SEARCH OF REFERENCES THAT DOCUMENT EVIDENCE-BASED IMMUNIZATION COALITIONS/PARTNERSHIPS WORK.”

“Evidence-based” can mean different things. In its most strict scientific use, Evidence-Based Interventions (EBIs) are programs that have undergone systematic, scientific review by external experts. Evidence-based can also refer to any program that has published findings to prove the intervention is efficacious or effective.¹

To date, there has not been a systematic review of studies focusing on the effectiveness of coalitions for immunization. However, individual immunization coalitions have published supportive findings. Some have appeared in peer-reviewed journals; those we are aware of are presented below.

Northern Manhattan Start Right Coalition, New York City

Two published studies from the Start Right Coalition show promise for supporting the role of coalitions in improving on-time immunization coverage for children for the 4:3:1:3:3 series (4 diphtheria-tetanus-pertussis, 3 polio, 1 measles-mumps-rubella, 3 Haemophilus influenza b, and 3 Hepatitis B). The Start Right program integrates a combination of strategies including health education, reminders, follow-up, and incentives, into already existing programs offered by its twenty-three member organizations.

One published evaluation of Start Right in July 2006² compared the immunization rates of 3,748 children enrolled in the program between 2002 and 2004 to national rates. The researchers focused on the effects of the coalition by controlling for other factors associated with immunizations, such as race. Findings showed an increase in up-to-date children from 46 percent to 80.5 percent, surpassing the national average of 79.4 percent. Importantly, the evaluation showed that the coalition was effective in closing disparities between Caucasian, African American and Latino children in New York City.

A second evaluation, published in November 2008,³ compared immunization rates for the 4:3:1:3:3 series of 895 children enrolled in Start Right to 9,962 children in New York City who were not enrolled in the program. Children in Start Right were found to exceed citywide immunization rates by 11 percent, and they completed the 4:3:1:3:3 series eleven days earlier than those not in the program. Less than three years later, children in Start Right still maintained higher coverage rates.

Start Right’s success was attributed to community ownership of the program, integrating program activities into services already utilized by parents of young children, and getting the message out into the community. The coalition member organizations that were most successful included those with ties to the health care system and those already dealing with young children, such as WIC and daycare and parenting programs.

For help on building evaluation into your coalition activities, see the IZTA Web site for evaluation resources.

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Dane County Immunization Coalition, Madison, WI

The Dane County Immunization Coalition⁴ (for Madison and surrounding townships) designed their assessment around CDC's national survey, and borrowed questions from the CDC questionnaire. Whereas CDC used random digit dialing for their surveys, the Dane County Immunization Coalition kept costs manageable by reviewing a random sample of patient charts drawn from major clinical provider groups and public health clinics in the region. Using CDC's survey questions and a rigorous sampling technique allowed the Coalition to directly compare findings from Dane County with state and national results to show higher immunization levels for MMR and Hib vaccine in Dane County.

The Mid America Immunization Coalition, Kansas City, KS

The Mid America Immunization Coalition tested three types of interventions offered by coalitions in GET HEP_B, a bi-state, 16-district school-based immunization program.⁵ Schools participating in GET HEP_B were placed into one of three programs: staff education only, parental education only, or staff/parent/child education with school-based immunizations. Costs for the schools and the health department were calculated and compared to estimated savings in future health care costs. Based on the evaluation, a combination of staff/parent/child education and school-based vaccinations was found to be most effective and efficient for reaching the largest number of adolescents. During 1997-1998, for example, almost 9,000 students or 73 percent of those who were eligible received at least one dose of the vaccine through the intervention combining education and school-based vaccinations.⁶

WHY IS IT SO IMPORTANT TO HAVE EBIS AND WHY IS IT DIFFICULT TO FIND EVIDENCE-BASED STUDIES FOR IMMUNIZATION?

EBIs emerged as a strategy for dealing with an increased volume of published studies presenting interventions which purportedly “work.” The goal of EBIs is to deduce which practices have the strongest evidence to recommend their use, as opposed to interventions supported by weaker studies or anecdotal testimonies. “Evidence-based” has become a watchword of medical practice and a marker increasingly sought by legislators, policy makers and providers of funding for public health interventions.

EBIs can help health coalitions and other community organizations decide how to allocate limited resources by identifying interventions that have proven effective and cost efficient. They can also guide content in communications. For example, the California Adult Immunization Coalition provides materials for health professionals that qualify for continuing medical education credit. A learning objective for this curriculum is the ability to list evidence-based strategies that can be used to improve adult immunization rates in practice.⁷

But the evidence comes at a price. Conducting an evaluation requires setting aside program funds and having access to personnel trained in research and evaluation methods. Task force members of the CDC *Guide to Community Preventive Services* (2000) noted other problems in generating recommendations from evidence-based reviews, including a lack of studies, and important outcomes that are difficult to measure.⁸ These are relevant obstacles for showing evidence of effectiveness for coalitions. There simply have not been enough studies of immunization coalitions to date.

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By comparison, a recent review of interventions to prevent falls in elderly drew from 62 trials involving 21,668 people.⁹ Immunization outcome measures cannot be standardized, because the quality of immunization registries varies between municipalities, counties and states. This makes it harder to compare immunization rates with and without coalition efforts.

SO, CAN WE SAY THAT COALITIONS ARE EVIDENCE-BASED INTERVENTIONS FOR IMPROVING IMMUNIZATION RATES?

First, let's put "evidence-based" in perspective. Undoubtedly, it is good to know when an intervention is found to be effective in a rigorous review from a respected source. But the opposite is not necessarily true; just because an intervention does not have enough evidence does *not* mean it is ineffective.

Thanks to the pioneering efforts of coalitions in New York City, Madison, and Kansas City, there is valid evidence to support the effectiveness of coalitions in increasing immunization rates overall, and among vulnerable children. There is a need for more studies like these. IZTA's [evaluation resource page](#) has helpful links to organizations that provide "how to" guides for non-profit organizations. Many of these guides are excellent references for developing logic models and conducting low-cost process evaluation. Logic models are visual depictions that illustrate how outcomes from an intervention are linked to program activities and theoretical assumptions.¹⁰ Using a logic model helps ensure that all the important factors are considered in an evaluation. Process evaluations describe how coalition activities are carried out, and document measurable outcomes such as the number of vaccines distributed through various providers.

For help on building evaluation into your coalition activities, see IZTA's [evaluation resource page](#). For more information on evidence based interventions, a good place to start is with a helpful glossary¹¹ published in the [Journal of Epidemiology and Community Health](#).

If your coalition has good examples of evaluation to share, please contact us at IZTA@aed.org.

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IMMUNIZATION TECHNICAL ASSISTANCE NETWORK

**1825 Connecticut Avenue, NW
Washington, DC 20009**

<http://www.izta.org>

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