A Wealth of Experience

At RTI Health Solutions, we have collaborated with clients on over 40 projects researching vaccines for various diseases. Our experience includes:

- Cholera
- Dengue fever
- Hepatitis
- Human papillomavirus (HPV)
- Influenza (including H1N1)
- Malaria
- Measles
- Meningococcal, conjugate (including MCV4)
- Meningococcal, polysaccharide (MPSV4)
- Mumps
- Pertussis
- Pneumococcal conjugate (PCV)
- Pneumococcal polysaccharide (PPSV)
- Respiratory syncytial virus (RSV)
- Rotavirus
- Rubella
- *Staphylococcus aureus*
- Tetanus, diphtheria (Td)
- Tetanus, diphtheria, and pertussis (Tdap)
- Typhoid
- Typhoid fever
- Varicella
- Zoster

Types of Projects

We have implemented studies to help our clients develop strategies in the vaccines market and to develop and commercialize products to prevent multiple diseases. Recent project types have included:

- Dynamic disease transmission modeling
- Incidence, prevalence, and natural history estimation
- Burden of illness studies
- Linear and non-linear programming studies to estimate the impact of vaccination programs
- Cost-effectiveness and budget impact studies of vaccination programs (based on static and dynamic disease models)
- Observational cohort studies
- Conjoint analyses
- Patient-reported outcomes studies
- Literature reviews
- Benefit-risk preference studies
- Decision-analytic modeling to predict disease prevalence and the budget impact and cost-effectiveness of prevention options
- Health economics dossiers and product value and access kits
- Surveys to evaluate vaccine program implementation
See How We’ve Helped Others

Dynamic Transmission Models Estimate the Cost-Effectiveness of Vaccines
We compared the differences in the methods used to estimate the cost-effectiveness of vaccination programs using the clinical outcomes from dynamic transmission models. A targeted literature search reviewed cost-effectiveness analyses of influenza, HPV, varicella virus, pertussis, meningococcal meningitis, rotavirus, *H. pylori*, and hepatitis A programs. We identified four types of methods for estimating and presenting a cost-effectiveness ratio. The variability of the estimation framework (population or cohort), time horizon, and other input parameters observed in the review illustrate the challenges that may be encountered in comparing cost-effectiveness of different vaccination programs among themselves as well as with other prevention or treatment interventions. Study results were published in *Expert Review of Pharmacoeconomics & Outcomes Research*, 2012;12(3):357-71.

Rates of Influenza Complications by High-Risk Group
RTI-HS performed a literature review on the incidence, complication rates, and health services use associated with clinical influenza to address the unmet need for new effective treatments and/or management strategies for influenza in high-risk groups. Key findings could be used to evaluate new therapies, including better influenza vaccines, chemoprophylaxis, and/or treatment strategies for different high-risk groups. Study results were published in *Journal of Medical Economics*, 2013;16(2):264-77.

Survey of Elementary School–Based Influenza Vaccine Programs
We surveyed key stakeholders to elicit information about school-based influenza vaccination programs—including funding, logistics, schedule disruptions, benefits, and potential barriers. The results fully support the feasibility of school-based influenza vaccination programs for the prevention of childhood influenza illnesses. Study results were published in *Journal of School Nursing*, 2012;28(4):256-67.

Conjoint Analysis to Elicit Health-State Utilities for Rotavirus
We designed a web-based stated-choice survey to elicit preferences associated with rotavirus in children 5 years old or younger. Health-state quality weights were developed to populate a health economics model. The study found that, overall, the attribute that is of greatest importance to parents of small children is vomiting for 14 days; the least important attribute is behavioral changes for 1 day. Study results were published in *Vaccine*, 2011;29(45):8086-93.

Selected Publications By Our Staff


