

**Globally-oriented vaccine economics research ideas,  
Research Agenda in Vaccine Economics Project, United States, 2002**

Idea Topic	VACCINE ECONOMIC RESEARCH IDEA	Priority Rank		
		All Voters	Non-industry voters	Industry voters
Optimization models -- Global	Develop a comparative resource allocation tool or model so that global decision makers who have limited resources can decide where to best invest funds as they become available.	1	1	1
Human immunodeficiency virus	What is the cost-effectiveness of HIV vaccine in developing countries?	2	3	7
Malaria vaccine	What is the projected cost-effectiveness of malaria vaccine in various developing countries?	3	2	13
Rotavirus	Does rotavirus vaccination have an acceptable benefit-cost tradeoff in developing countries?	4	5	5
Meningococcal vaccine	What would be the cost-effectiveness of meningococcal A vaccine for sub-Saharan Africa?	5	6	6
Polio	What is the cost-effectiveness of alternative policies for polio prevention in the post-eradication era?	6	7	11
Tuberculosis	If a new, really effective TB vaccination became available, what would it save?	7	4	20
Measles	What are the cost and benefit tradeoffs associated with the combined MMR vaccine vs. measles vaccine alone, in various countries?	8	8	4
Administration modes	What are the costs and cost-effectiveness of alternative modes of vaccine administration, eg oral, nasal, injectable? This idea is especially pertinent for resource-constrained places where HIV, Hep C and Hep B can be spread by multi-use injections.	9	10	2
Yellow fever	What would be the cost-effectiveness of a yellow fever vaccine?	10	9	18
Measles	What is the cost-effectiveness of alternative global strategies after measles eradication?	11	12	8
Human papillomavirus vaccine	What will be the cost-effectiveness of HPV vaccine? Take possible reduction of Pap screening into account. Different strategies for choosing the population to be vaccinated should be evaluated.	12	15	11
Dengue vaccine	What would be the cost-effectiveness of Dengue fever vaccine?	13	13	19
Updating analyses	Update the analysis by the Harvard Center for Risk Analysis (by Tengs) that compares the cost-benefit / cost-effectiveness of immunization programs with other medical interventions.	14	16	13
Rotavirus	What is the cost-effectiveness of rotavirus vaccine, with intussusception added to the model?	15	11	30
Supply and shortages	How does existing pricing and profitability affect investment in new vaccine development and the availability of existing vaccines?	16	19	9
Thimerosal	What would be the costs to developing countries of using thimerosal-free vaccine? What would be the effects on vaccine choices and vaccination rates?	17	20	14
Herd immunity	How much more cost-effective would a specific vaccine appear -- eg influenza vaccine -- if herd immunity were incorporated in an analysis?	18	23	3
Influenza	What are the costs of pandemic influenza?	19	14	31
Group A strep	What is the cost-effectiveness of vaccination against Group A streptococcus?	20	25	15
Rotavirus	What is the cost-effectiveness of the rotavirus vaccines currently in development?	21	17	28
Measles	What is the cost-effectiveness of controlling measles in Japan, Germany, and other countries, and the impact on the U.S.? Could we drop the second dose of measles vaccine?	22	18	30
Smallpox	At what risk of disease will people be willing to accept smallpox vaccination and its risk of adverse events?	23	22	21

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Migrant populations	What are the most efficient strategies for vaccinating migrant populations when records are not available?	24	21	26
Pricing	What are the projected future costs of vaccines? Are the costs of vaccines rising more quickly than inflation? Are they increasing more or less quickly than other drugs? What is happening in this market?	25	25	25
Combination vaccines	What are the economic consequences of combination vaccines on stimulating or repressing the vaccine development process?	26	26	22
Utilities and QALYs	Conduct studies to derive utilities for various vaccine preventable illnesses. For example, HAV vs. HBV, which have different morbidity and mortality profiles.	27	28	16
Development (and supply issues)	What are the costs, and opportunity costs, of bringing a new vaccine to market, including research and development, response to regulatory needs, and marketing? What is the return on investment for the vaccine industry? Lyme disease vaccine would be a good case study for this.	28	27	23
Financing	What are the differences between the U.S. and English vaccine reimbursement systems? Are there policies that could be adapted to the U.S., given the difference in health insurance systems?	29	29	17
Regulation	What is the cost of regulation? Have these costs increased over the years?	30	31	24
Smallpox	How much would it cost to have a smallpox vaccination campaign?	31	31	27