



Advanced Economic Evaluation: Decision Analytical Modelling WORKSHOP IN VACCINE ECONOMICS

School of Public Health
University of the Witwatersrand, Johannesburg
23 – 25 April 2018

Background

Policy makers in low and middle-income countries regularly apply economic principles to healthcare decision-making. To do this well requires greater expertise in applied health economics. A professional team of health economists from the Johns Hopkins Bloomberg School of Public Health, WITS School of Public Health, Indian Institute of Hospital Management Research (IIHMR) University, Aga Khan University, and Makerere University have developed a series of training workshops to strengthen skills related to economics and financing of national immunization programs and to improve the sustainability of vaccine delivery in low and middle-income countries. The program will provide a rare and unique opportunity to interact with subject experts.

Workshop Overview

This workshop will build on the Introduction to Economic Evaluation for Decision-Making in Health short course and cover advanced topics in decision analytical modelling for economic evaluation through a hands-on approach. Participants will perform basic analyses using complex inputs and will be guided, in a step-by-step approach, in building a Markov model using Microsoft Excel.

Workshop Contents

1. Introduction to Advanced Modelling Methods
2. Introduction to Markov Modelling
3. Complex Markov Modelling
4. Probabilistic Modelling and Sensitivity Analysis
5. Monte Carlo Simulation
6. Introduction to Value of Information Analysis

Target Audience

This workshop is designed for professionals and academics with some experience conducting cost-effectiveness analyses. Target participants would therefore, be familiar with approaches in economic evaluation and be proficient in the use of Microsoft Excel.

Facilitators

A team of Health Economists from Wits University, Johannesburg and John Hopkins University will jointly deliver the workshops:

- **Dr Bill Padula**, Assistant Professor
Department of Health Policy & Management
Johns Hopkins Bloomberg School of Public Health
- **Prof David Bishai**
Department of Population, Family and Reproductive Health, Johns Hopkins Bloomberg School of Public Health
- **Dr Anthony Kinghorn**, Senior Technical Advisor, PRICELESS SA, Wits School of Public Health, Johannesburg
- **Dr Ijeoma Edoa**, Research Director, PRICELESS SA, Wits School of Public Health, Johannesburg

How to Apply

Prospective participants should submit the following documents to **Ms. Winfrida Mdewa** (details below):

1. A completed application form (see below)
2. One-page motivation for why you wish to attend this workshop and how it will be useful to your work.
3. Latest CV

Registration Fee

ZAR 4,000

Participants will on completion, be awarded a PRICELESS SA Certificate of Attendance.

A limited number of grants are available to cover travel, accommodation, per diems and registration fees of prospective participants. Priority will be given on a first come, first serve basis to applicants with relevant experience in economic evaluation who work in EPI programs, National Immunization Technical Advisory Groups (NITAG) and the academia from GAVI-eligible countries in Southern Africa. Funded participants would ideally be proficient in the use of Microsoft Excel and have some experience working on planning, budgeting and economic evaluation of vaccine and immunization programs.

Application deadline: 14th March 2018

Applications received after this date will not be considered for attendance grant.

For further enquiries please contact:

Ms. Winfrida Mdewa

Project Administrator

PRICELESS SA

Wits School of Public Health

E-mail: winfrida.mdewa@wits.ac.za

Tel: 011 7172714

Workshop Programme

Day 1

1. **Introduction to Advanced Modelling Methods**
2. **Introduction to Markov Modelling**
3. **Practice Exercise:**
 - Conduct Simple Markov Model and Analysis in Excel
 - Interpret the ICET

Day 2

1. **Practice Exercise**
 - Develop a complex Markov Model Analysis in Excel
 - Interpret the ICER
2. **Probabilistic Modelling and Sensitivity Analysis**
 - Introduction to Making Models Probabilistic
 - Probability Distributions
 - Understand the difference between univariate, bivariate and multivariate sensitivity analysis
 - Recognize why uncertainty exists
3. **Practice Exercise**
 - Make a Model Probabilistic

Day 3

1. **Practice Exercise: Monte Carlo Simulation**
 - Application of Visual Basic Coding
 - Explore simulation graphics
2. **Introduction to Value of Information Analysis**
 - Definition of Value of Information
 - Practice Exercise in Expected Value of Perfect Information (EVPI) Calculation

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Application form

Title	
First Name	
Surname	
Physical address	
Country of Residence	
E-mail address	
Phone number	
Job Title	
Current employer	
Employer's address	
Sector (please check one box)	<input type="checkbox"/> Public <input type="checkbox"/> Private
Special Dietary requirements	