



EUROPE

*BHF National Centre for Physical Activity and Health
7th Annual Conference
evaluation in a nutshell: turning theory into good practice
Nottingham, 14-17 November 2007*

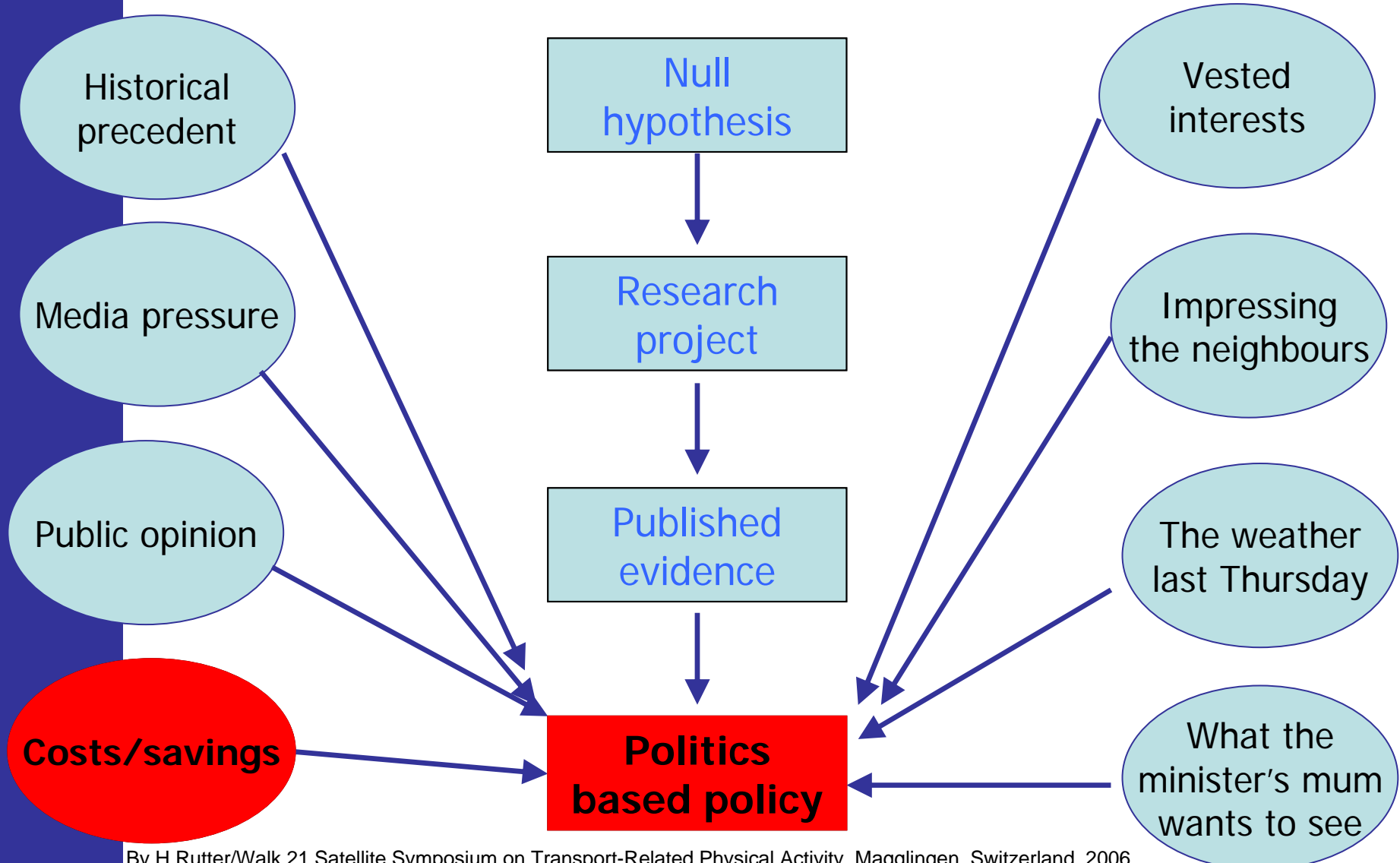
***Launch
WHO guidance and tool for economic
assessment of cycling and walking***

Sonja Kahlmeier, Francesca Racioppi

*WHO Regional Office for Europe,
Centre for Environment and Health, Rome*

Why guidance on economic assessment of walking and cycling?

Research into practice



Why guidance on economic assessment of walking and cycling?

- Economic valuation standard tool of transport planners
-> helps health sector to speak “their” language
- Public health benefits are likely to be great, esp. if inactive persons can be reached
- Increasingly applied to cycling and walking but not always in transparent way

Why guidance on economic assessment of walking and cycling? (2)

- Scientific consensus needed on:
 - Health endpoints
 - Risk estimates
 - Basic assumptions
- Convergence of methods and values used by different sectors needed
- User-friendly step-by-step model needed

WHO/UNECE project
ECONOMIC ASSESSMENT OF
TRANSPORT INFRASTRUCTURE AND
POLICIES

**Methodological guidance on
the economic appraisal of
health effects related to
walking and cycling**

Project aimed at:

- Critically reviewing published economic valuations of transport projects including a physical activity element
- proposing options and guidance towards a more harmonized methodology
- fostering international consensus of experts from public health, environment, transport and economics, science and practice
- Developing guidance and an illustrative tool

Collaborative project

Core group

Nick Cavill, Harry Rutter, Sonja Kahlmeier, Hywell Dinsdale, Francesca Racioppi, Pekka Oja

Contributors

Lars Bo Andersen, Finn Berggren, Hana Bruhova-Foltynova, Fiona Bull, Andy Cope, Maria Hagströmer / Michael Sjöström, Eva Gleissenberger / Robert Thaler, Brian Martin, Irina Mincheva Kovacheva, Hanns Moshhammer, Bhash Naidoo, Kjartan Saelensminde, Peter Schantz, Thomas Schmid, Heini Sommer, Jan Sørensen, Sylvia Titze, Ardine de Wit / Wanda Wendel Vos, Mulugeta Yilma

In collaboration with:

HEPA Europe
European network for the
promotion of health-enhancing
physical activity



Transport, Health and Environment
Pan-European Programme THE PEP




Acknowledgements



*Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management
The Swedish Expertise Fund / Karolinska Institute, Sweden
National Institute for Health and Clinical Excellence (NICE)
University of Graz, Austria*


The products: launched today!



ECONOMIC ASSESSMENT OF TRANSPORT INFRASTRUCTURE AND POLICIES

Methodological guidance on the economic appraisal of health effects related to walking and cycling

By: Nick Cavill
Sonja Kahlmeier
Harry Rutter
Francesca Racioppi
Pekka Oja



Microsoft Excel - Cycling HEAT v1.0.xls

File Edit View Insert Format Tools Data Window Help

Type a question for help

Health Economic Assessment Tool for Cycling

WORLD HEALTH ORGANIZATION
UNITED NATIONS EUROPE

Fill in the two fields in Step 1 with your values and read the corresponding results in Step 3. You can use the default parameters supplied in Step 2 or adjust them according to your needs. The population parameters used to calculate the results are displayed at the bottom of the sheet.

Step 1: enter your data (all users must fill in the red fields)

Number of trips per day: 10,000
Mean trip length (km): 4

Step 2: check the parameters

Mean number of days cycled per year: 124
Proportion of trips that are one part of a return journey (or 'round trip'): 0.9
Proportion undertaken by people who would not otherwise cycle: 0.5
Mean proportion of working age population who die each year: 0.005847
Value of life (in Euros): EUR 1,500,000
Discount rate: 5.0%

Step 3: read the economic savings resulting from reduced mortality

Maximum annual benefit: EUR 4,209,000
Savings per km cycled per individual cyclist per year: EUR 0.81
Savings per individual cyclist per year: EUR 7.85
Savings per trip: EUR 3.39

Mean annual benefit: EUR 3,136,000
Present value of mean annual benefit: EUR 2,283,000

Based on:
5% discount rate
5 year build-up of benefit and 1 year build-up of uptake, averaged over 10 years

Population parameters used to calculate results

Population that stands to benefit: 2750
Mean proportion of working age population who die each year: 0.005847
Expected deaths in the local population: 16.08
Protective benefit, according to actual distance traveled: 0.17
Lives saved: 2.81

Notes on how to use this tool. For additional instructions, hold the mouse over the question marks.

How many trips are observed (or are estimated) on the specific route, across a city, or across a country?
What is the mean trip length (estimated or measured)?

The default parameters in green are based on best available evidence data available.
The estimated number of days per year that people cycle
What proportion of these observed cyclists do you expect will also be making a return journey?
Proportion of these cyclists that are new users DIRECTLY as a result of the new infrastructure.
See local parameters page for explanation.
What is the standard value of a statistical life used in the country of study?
Discount rate used for future benefits. This is only used for the 'Present value of mean annual benefit'.


Click here to change local parameters
Click here to view underlying study parameters

Total value of lives saved (mortality only) assuming 'steady state' of health benefits as a result of the infrastructure.
This value takes the likely build-up of benefit into account (see below)
This value uses the discount rate from section two to calculate the present value, taking into account the build-up of uptake.

Click here to change the timeframe used in calculation
Click here to view full calculation, graphs and adjust error

Based on number of individual cyclists calculated from data in steps 1 and 2
This reflects the relative risk of all cause mortality in the age groups that are most likely to cycle.
Yearly deaths expected among the population of cyclists (assuming they are aged 25-64).
Relative risk of death among cyclists, adjusted for the actual distance cycled (assuming a 5 km trip).
Reduction in number of deaths expected due to the modelled increase in cycling.

start | N:\TRT\Publications\... | Microsoft Excel - Cycli...




ECONOMIC ASSESSMENT OF TRANSPORT INFRASTRUCTURE AND POLICIES

METHODOLOGICAL GUIDANCE ON THE ECONOMIC APPRAISAL OF HEALTH EFFECTS RELATED TO WALKING AND CYCLING


Health Economic Assessment Tool for Cycling (HEAT for cycling)

User guide



leibnizinstitut.de

THE PEP Transport, Health and Environment Pan-European Programme
Only when it comes together it can be a force for good.




Do you want to know more?

Please come to
Room 1 - Session 5

Cost Benefit Analysis of Cycling
Nick Cavill and Dr Harry Rutter


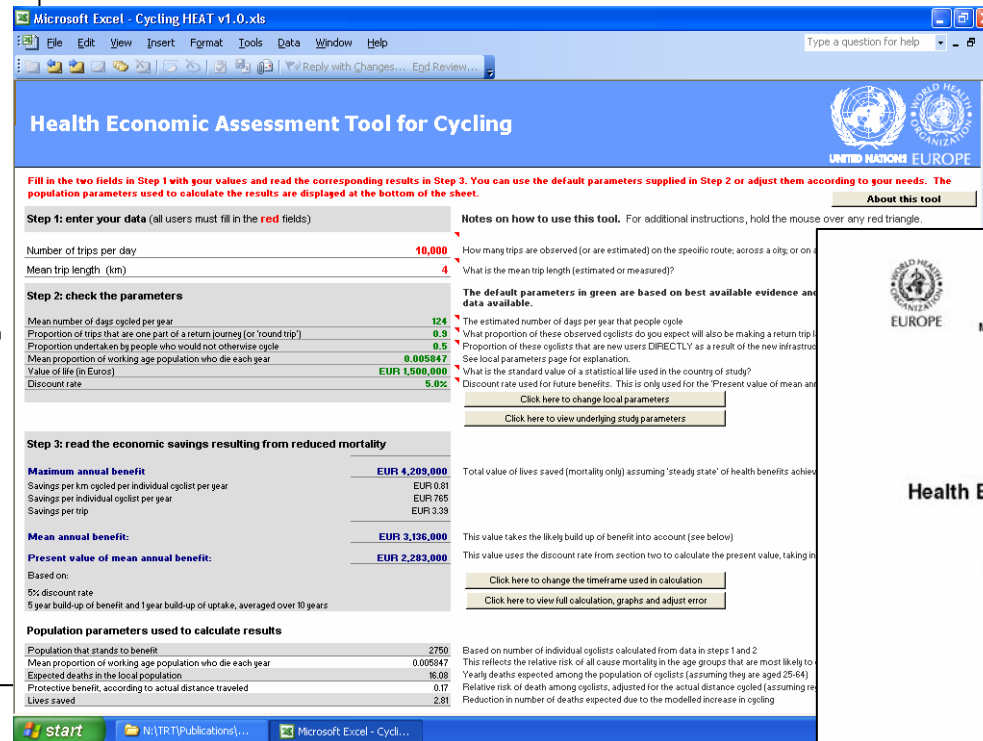
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Present value of mean annual benefit:	EUR 2,283,000

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lebensministerium.at

THE PEP Transport, Health and Environment Partnership Programme



Download the guidance document, HEAT for cycling and user guide from www.euro.who.int/transport/policy/20070503_1