



EUROPEAN HEALTH CARE OUTCOMES,
PERFORMANCE AND EFFICIENCY

EuroHOPE - Taking health care performance measurement to the next level

Timo T. Seppälä

PhD, economics, Research Manager

Centre for Health and Social Economics, CHES

National Institute for Health and Welfare, THL

EUROHOPE

Why bother? – Main reasons (I)

- It yields enormous amount of wellbeing!



Why bother? – Main reasons (II)

- A stream of health care reforms are on
 - **REASON I: To improve efficiency**
- The efficiency needs to be measured:
 - **REASON II: The efficiency of health care has been placed high on the international and European agenda**

“Recent evidence on effective strategies to improve the performance of health systems, given the increasing pressure on them to ensure sustainability and solidarity is an important issue for research and policy in the years ahead” (Health ministers from the 53 Member States in the WHO European Region, 2008)
- International performance comparisons
 - **REASON III: Lack of good quality**

Approaches to international efficiency comparisons prior EuroHOPE

- System level analysis
 - WHO 2000, Afonso and St. Aubyn 2005
 - Challenges in output measurement: How to measure the impact of health services on health?

- Disease level analysis
 - McKinsey healthcare productivity study, OECD aging-related disease (ARD) project, Technological Change in Healthcare (TECH) Global Research Network (AMI)
 - Possible to relate inputs to outputs but requires nationally representative patient level data

- Sub-sector level analysis
 - Nordic hospital comparison study group (NHCSG)
 - Requires that units (DMUs) are comparable and inputs and outputs can be measured in a similar way

What and how EuroHOPE does?

- Applies both the disease level and the sub-sector level approaches
- Develops methods to measure outcomes and costs of care of specific diseases for evaluation of care given during **the whole cycle of care**
- The methods can be used for
 - routine performance evaluation and monitoring
 - establishing recommendations for lists of indicators to be routinely collected and published by the EU (as a part of European Community Health Indicators)

Aims of EuroHOPE (I)

- **To develop** methods for international comparative health service research using register data
- **To contemplate** the relationship between outcomes/quality and use of resources (e.g. costs) and compare them between European countries, regions and providers
- **To explore and reveal** reasons behind differences in outcomes and costs
 - **In particular:** the interest will be on **policy driven factors:**
 - treatment practices, use of medicines and modern technology, waiting times, financing, organisation of delivery, reforms etc.

Aims of EuroHOPE (II)

- **To compare** quality and cost of acute hospital care in the Nordic countries
- **To give proposals** concerning the data content of national level registers and outcome measurements in order to improve the continuous monitoring of performance on both national and international level
- **To establish** requirements and standards for European-wide benchmarking on outcomes, quality and costs
- **To facilitate** decision-makers as well as health professionals at different levels to learn from the best practices

Who are we? – EuroHOPE partners



- **Centre for Health and Social Economics (CHESS)**, National Institute for Health and Welfare, Finland
- **Centre for Research on Health and Social Care Management**, Universita Commerciale Luigi Bocconi, Milano, Italy
- **Health Services Management Training Centre**, Semmelweis University, Budapest, Hungary
- **National Institute of Public Health and the Environment**, the Netherlands
- **University of Oslo, Department of Health Management and Health Economics**, Norway
- **Ragnar Frisch Centre for Economic Research**, Oslo, Norway
- **University of Edinburgh**, Scotland, UK
- **Medical Management Centre (MMC)**, Karolinska Institutet, Stockholm, Sweden



EUROPEAN HEALTH CARE OUTCOMES,
PERFORMANCE AND EFFICIENCY

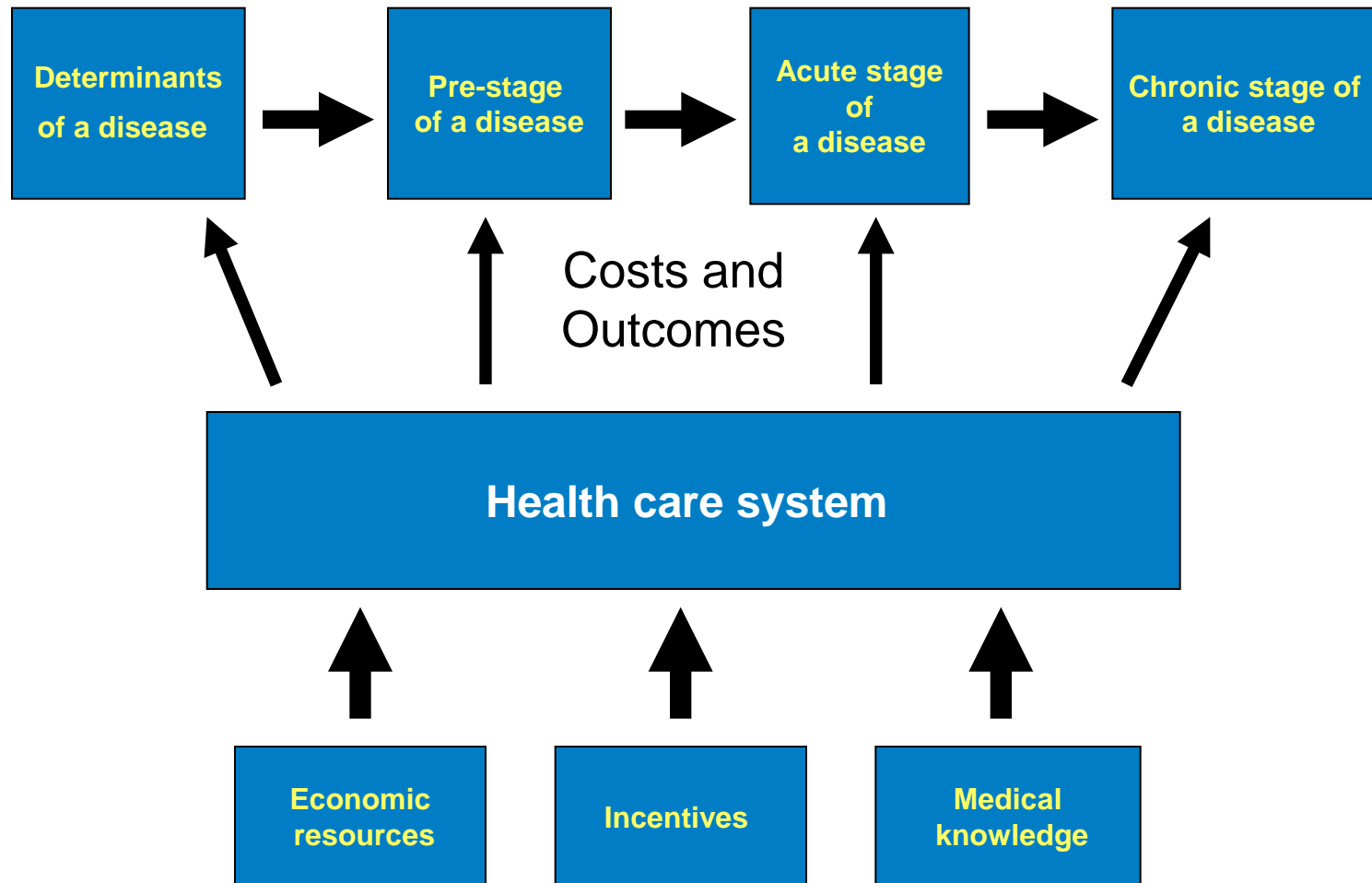
The tricks

EUROHOPE

EuroHOPE final seminar, 8th of April, Stockholm. Contact:
timo.t.seppala@thl.fi

Population-based cost-effectiveness approach

- Microeconomic disease-based strategy
- Based on modeling the natural progress of a disease, with a specific interest in the role of health services as a determinant in the progress
- Uses data from registers on individual patients



Developing methodology

- Statistics group
 - Risk adjustment
- Costing group
 - Measurement of cost
 - Methods for cost analysis
- Survey group
 - Develop a protocol for health-related quality of life (HRQoL) and patient satisfaction measurement

Patient group specific work (I)

- **Five** patient groups subject to
 - acute myocardial infarction (AMI)
 - stroke
 - hip fracture
 - breast cancer
 - very low birth weight infants

- **Clinical experts** from each of the participating countries

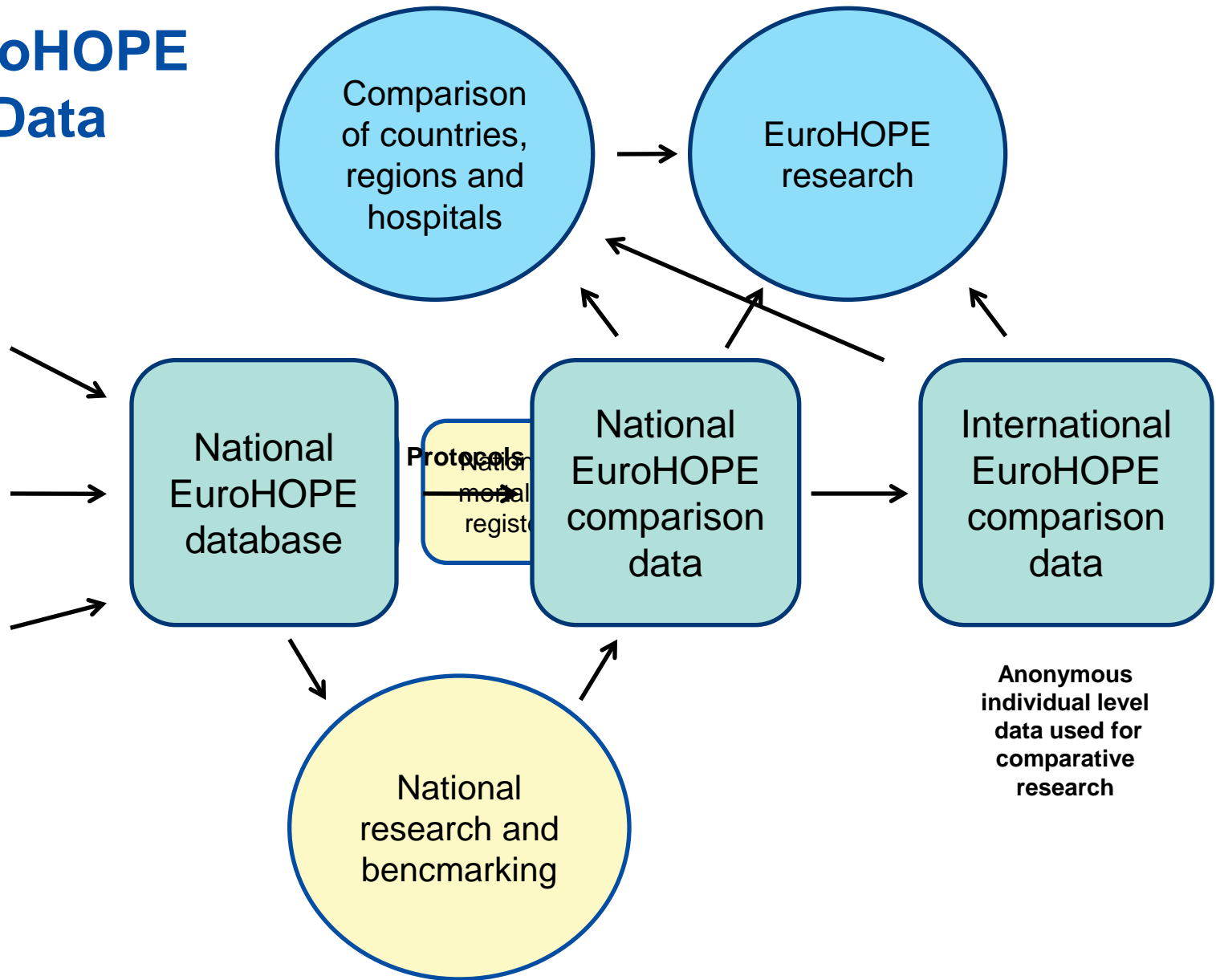
- **The protocols define**
 - inclusion/exclusion criteria
 - definition of cycle of care (when it starts, follow-up etc.)
 - comorbidities (used in risk adjustment)
 - specification of outcome measures

Patient group specific work(II)

- Development of national, regional and hospital level indicators for
 - access and utilisation of services
 - treatment practices
 - costs and outcomes

- A pilot study on HRQoL and patient satisfaction measurement in selected hospitals in participated countries for
 - stroke
 - breast cancer

EuroHOPE Data



Challenges – Searching for the smallest common denominator

- **Definition of an episode**
 - When it starts and when it finishes (follow up time)?

- **Balancing**
 - What can be done on routine basis with scientific/methodological aspects

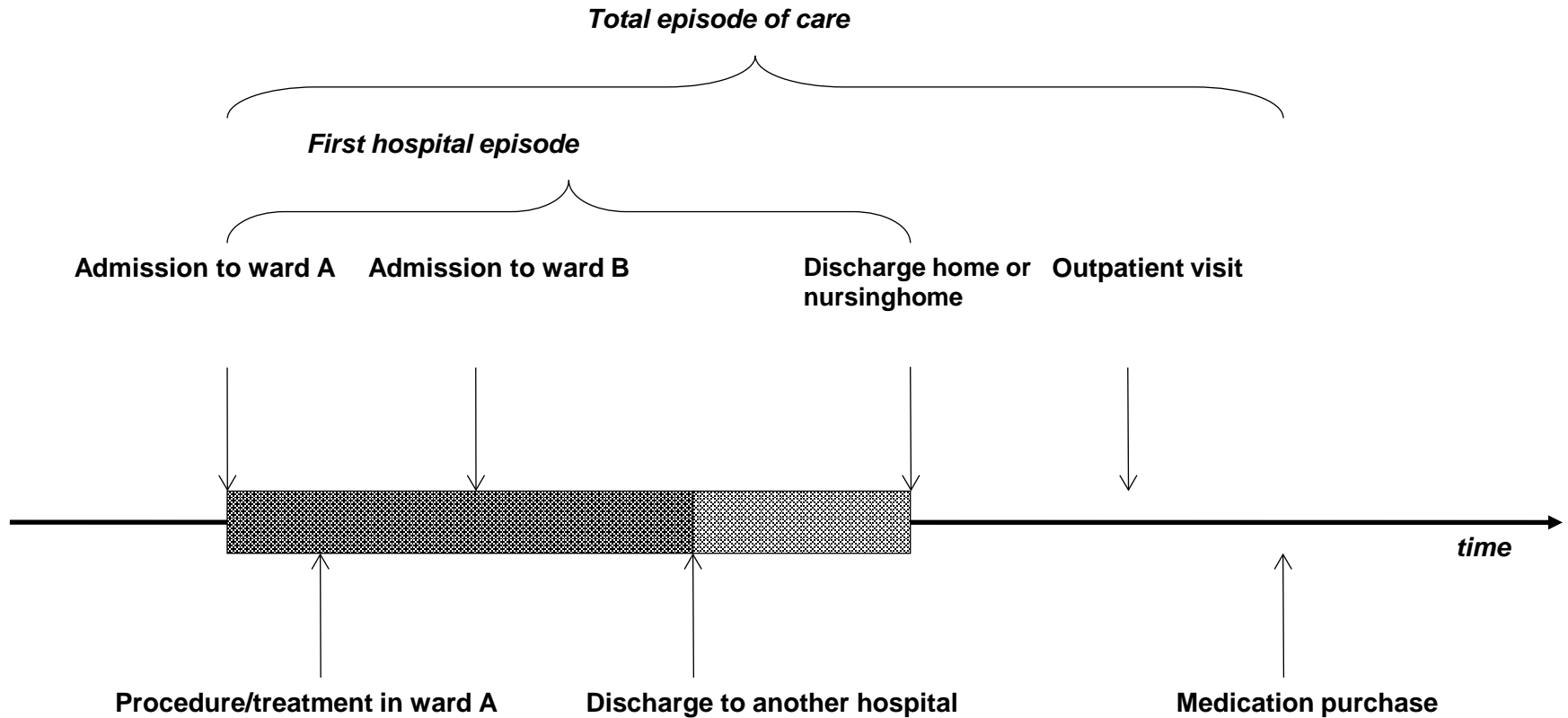
- **Comparability**
 - Case-mix adjustment and/or eliminating selection bias

Solutions in EuroHOPE



- **Use of registers together with solid coding (ICD10, ICD9)**
 - Definitions of patient groups to maximize comparability
- **Follow-up and follow-down**
 - Extensive risk adjustment and baseline
- **Econometrics and statistics knowhow**
 - Standardisation by modeling and computing confidence intervals
- **Protocols**
 - Definitions of episodes

Definitions of the episodes



EuroHOPE now and future - Stay tuned!

- Maintains **national and regional indicators** at <http://www.eurohope.info>
- Implements **framework for international performance and efficiency benchmarking**
- Provides audience with scientific and policy relevant results
 - **Health Policy articles – 2 pieces on the air already!**
 - **Health Economics Supplement – Autumn 2014**
 - **Variety of clinical articles – 4 papers submitted**
 - **Stream of publications in EuroHOPE Discussion Papers Series at www.eurohope.info**
- **Continues the performance evaluation and extends the activity to other countries and other patient groups**