institute for
Medical Technology Assessment

Societal perspective Why and how

Valuing Life – Medicines Access Summit
Tim Kanters, PhD
April 29th 2024

Erasmus University Rotterdam

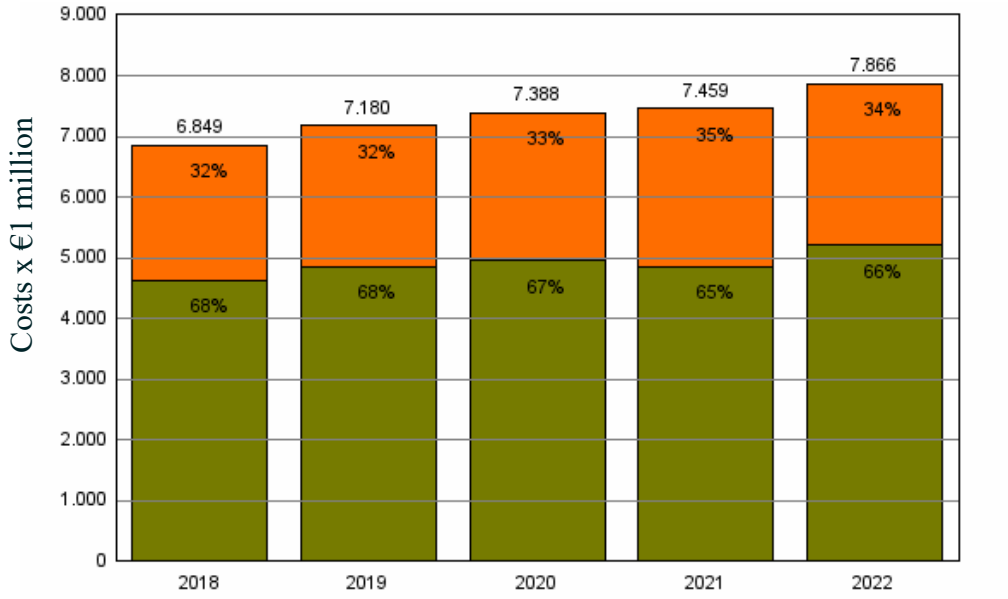
Disclosure statement

- No personal financial interests
- Speaker fee Medicines New Zealand Inc
- Research grants & contracts through iMTA and Erasmus University Rotterdam in past 3 years: Biogen, Boehringer Ingelheim, Dutch Association Dermatology & Venerology, Essity, Johnson & Johnson, Novartis, NovoNordisk, Sanofi, Takeda
- Governmental grants: European Union (Horizon 2020), Federal Office of Public Health (Switzerland), National Health Care Institute (Netherlands), Netherlands Organisation for Research and Development

Total expenditure on outpatient and inpatient medicines in NL

2022
- 17.5 million inhabitants
- € 96,028 million total healthcare costs (€1 = 1.8 NZ$)
    - 8% for medicines

Source: Zorginstituut Nederland / GIP, 24-5-2023



Dutch healthcare insurance

- Mandatory basic healthcare insurance for all Dutch citizens

- Basic reimbursement package > Effective care

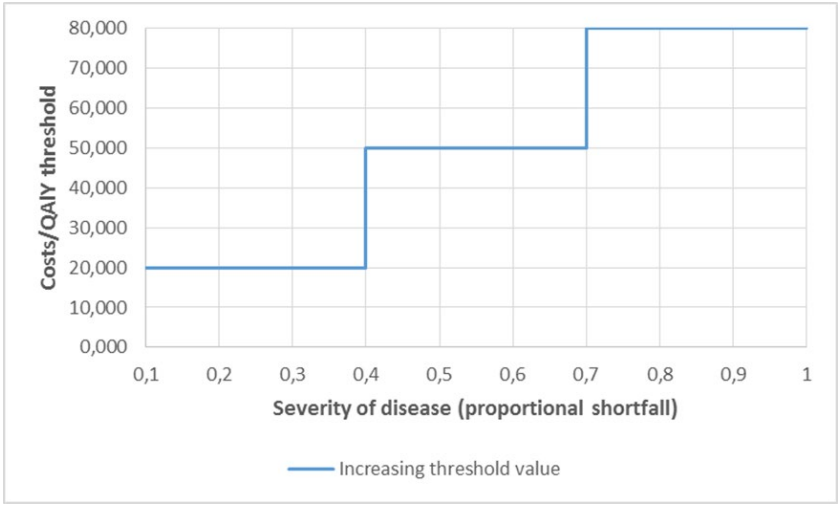
  Open part (about 90%): no evaluation by the Government
  > Determined by healthcare insurers, professional groups and patient organizations
  > Clinical guidelines and “good practice” standards

  Closed part (about 10%): evaluation by National Health Care Institute
  > Outpatient medication
  > Expensive in-hospital medication

HTA criteria and Cost/QALY threshold

Four assessment criteria:

1. Necessity
2. Relative effectiveness
   (added therapeutic value)
3. Cost effectiveness
4. Feasibility
   (financially, budget impact)



- *"Sustainability" and "workforce" are explored*

Cost-effectiveness in Dutch system

- Cost-effectiveness for pharmaceutical interventions
  - Outpatient drugs: Total costs ≥€10M/year OR costs pp/py ≥€10K
  - Inpatient drugs: Total costs ≥€20M/year OR costs pp/py ≥€10K

- Health economic guidelines (latest update 2024)
  - Costing manual for economic evaluations

- Societal perspective

Societal perspective in the Netherlands

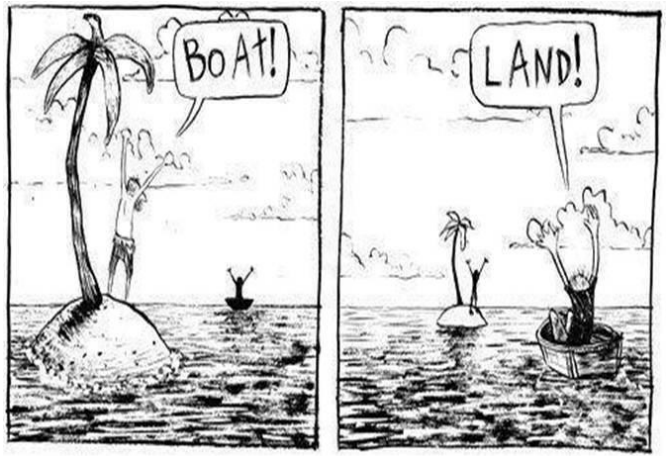
- Strong academic foundation in the Netherlands

- Advocated since first pharmacoeconomic guidelines in 1999
  - Welfare economic principles
  - Comprehensive evaluation of financial consequences

Perspective matters – Example episodic migraine

	Intervention	Comparator	Incremental
Healthcare costs	€ 29,392	€ 12,517	€ 16,812
Patient / Family costs	€ 14,714	€ 16,541	-€ 1,827
Costs other sectors	€ 144,309	€ 156,804	-€ 12,495
Total costs	€ 188,352	€ 185,862	€ 2,490

	Societal perspective	Healthcare perspective
Incremental cost-effectiveness ratio	€ 9,718	€ 65,638



Different types of costs

Healthcare costs

- Hospital
- Paramedics
- Medication
- Home care
- …

Patient/Family costs

- Informal care
- Travel
- Co-payments
- Home adjustments
- …

Costs in other sectors

- Productivity losses
- Justice
- Education
- Safety
- …

How to include societal costs?

From theory...

PharmacoEconomics (2013) 31:1105–1119
DOI 10.1007/s40273-013-0104-z

PRACTICAL APPLICATION

How to Include Informal Care in Economic Evaluations

Renske J. Hoefman · Job van Exel · Werner Brouwer

PharmacoEconomics (2014) 32:335–344
DOI 10.1007/s40273-014-0132-3

PRACTICAL APPLICATION

How to Estimate Productivity Costs in Economic Evaluations

Marieke Krol · Werner Brouwer

... to practice

Costing manual: Methods and Reference Prices for Economic Evaluations in Healthcare

2024 version

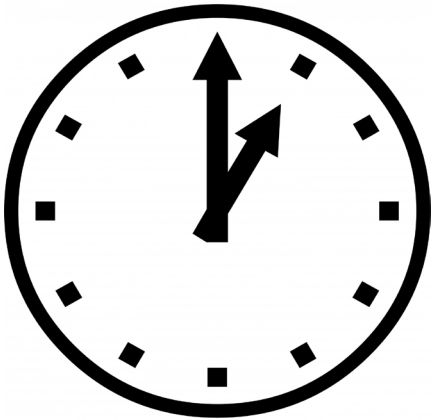
Erasmus School of Health Policy & Management (ESHPM)
Institute for Medical Technology Assessment (iMTA),
Erasmus University Rotterdam

Leona Hakkaart-van Roijen
Stijn Peeters
Tim Kanters

Informal care – what information do we want?

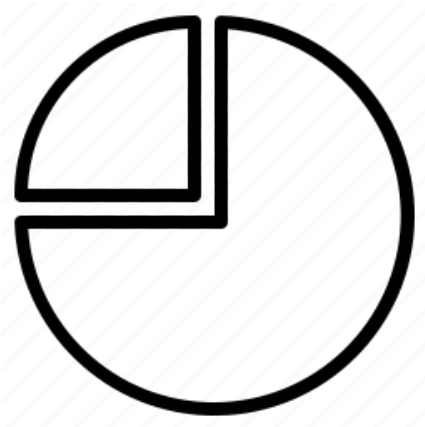
Information on the total number of hours of informal care patients receive

Volume of informal care (hours)



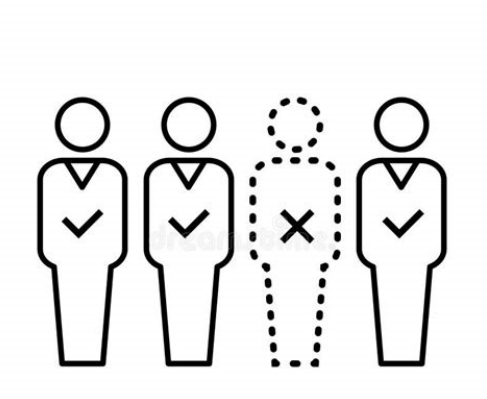
Number of caregivers

Proportion of patients receiving informal care



Productivity costs– what information do we want?

Absenteeism



Presenteeism

Unpaid work

Data collection: questionnaires

- Most straightforward option
  - Patients often know best
  - Data collection along other instruments
  - Many (validated) instruments available

- Informal care: we need information total hours of informal care received
  "How much informal care have you received during period X?"

- Productivity costs:
  "How many days/Since when were you not able to work?"
  "How many days were you less productive while at work?"

Alternative approaches

Literature (including previous appraisals)

- Assumptions on generalizability
- Availability of evidence might be scarce

Expert opinion (clinicians, patient organizations, ...)

- Considered lowest level of evidence

Informal care: regression methods (iCARE informal CARE effect tool) [1]

- Assumptions on generalizability and data inputs

Productivity costs: alternative sources like sickness registration/insurers

- Data access, incomplete data
- Selection bias

1 Gheorge et al. (2019) DOI: https://doi.org/10.1007/s40273-018-0706-6

Valuation of informal care / productivity costs

- Informal care
  - Proxy good method (recommended in Dutch costing manual)
    - Costs of formal replacement (e.g., housekeeper)
  - Opportunity cost method
    - Costs of time forgone
  - and other options …

- Productivity costs
  - In general: time lost multiplied by reference price (wage / productivity)
  - Discussion on long-term absences

institute for
Medical Technology Assessment

Questions

Erasmus University Rotterdam

institute for
Medical Technology Assessment

References

References

- Aranda-Reneo et al (2021) Can the consideration of societal costs change the recommendation of economic evaluations in the field of rare diseases? An empirical analysis. *Value Health*. DOI: https://doi.org/10.1016/j.jval.2020.10.014
- Duevel et al (2020) Considering the societal perspective in economic evaluations: a systematic review in the case of depression. *Health Econ Rev*. DOI: https://doi.org/10.1186/s13561-020-00288-7
- Gheorge et al (2019) Estimating informal caregiving time from patient EQ-5D data: The informal CARE effect (iCARE) tool. *Value Health*. DOI: https://doi.org/10.1007/s40273-018-0706-6
- Hakkaart et al (2024) Costing manual: Methods and reference prices for economic evaluations in healthcare. Zorginstituut Nederland.
- Hoefman et al (2013) How to include informal care in economic evaluations. *Pharmacoeconomics*. DOI: https://doi.org/10.1007/s40273-013-0104-z
- Krol et al (2013) How to estimate productivity costs in economic evaluations. *Pharmacoeconomics.* DOI: https://doi.org/10.1007/s40273-014-0132-3
- Rodriguez-Sanchez et al (2022) Does the inclusion of societal costs change the economic evaluations recommendations? A systematic review for multiple sclerosis disease. *Eur J Health Econ*. DOI: https://link.springer.com/article/10.1007/s10198-022-01471-9