



# Quantification of cost-of-injury

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# Cost-of-illness

Cost of illness gives insight into the societal burden of injury, and factors and characteristics that are associated with higher costs.

Information on the cost of illness allows us to understand main cost drivers of health care.

Cost-of-illness consists of two components:

- Direct health care costs
- Productivity costs (= indirect costs that result from loss of productivity due to injury morbidity or mortality)



# Cost-of-injury

Comparability of cost-of-injury studies is hampered because of differences in methods.

For instance:

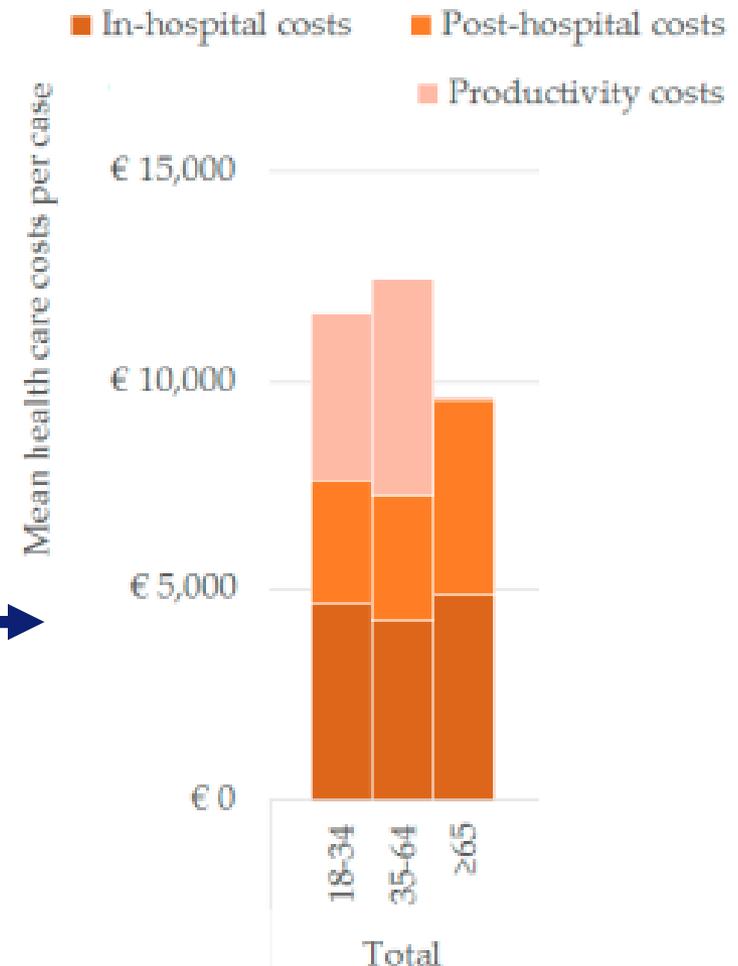
- included and excluded health care resources (*e.g. direct costs in hospital vs. direct costs total health care sector*)
- the perspective (*e.g. societal vs. health care perspective*)
- time horizon (*e.g. 1-5 years vs. life time*)
- inclusion or exclusion of productivity costs

See also: Polinder S, Segui-Gomez M, Toet H, Belt E, Sethi D, Racioppi F, van Beeck EF. Systematic review and quality assessment of economic evaluation studies of injury prevention. *Accid Anal Prev.* 2012 Mar;45:211-21. doi: 10.1016/j.aap.2011.07.004. Epub 2011 Jul 30. PMID: 22269503.

# The importance of productivity costs

- Productivity costs refer to that are caused by work absence.
- Among working age injury patients, productivity costs are a significant contributor to the total costs related to injury.

## Cost of road injuries in the Netherlands



# Data input needs for cost-of-injury studies

- In hospital costs: Stay at health care facilities, procedures
- Post hospital costs: e.g. physical therapy and home care.
- Unit costs
- Return to work rates, days absence
- At multiple time points after injury!

For more information, see:

- Polinder et al. (eds.) Methodological approaches for cost–effectiveness and effectiveness and cost–utility analysis of injury prevention measures. World Health Organization, 2011.
- [https://www.euro.who.int/\\_data/assets/pdf\\_file/0007/144196/e95096.pdf](https://www.euro.who.int/_data/assets/pdf_file/0007/144196/e95096.pdf)

# Conclusions

- Cost of illness studies are important.
- Give insight into the societal burden of injury, and factors and characteristics that are associated with higher costs.
- Post hospital and productivity costs also important to take into account.
- Harmonization of methods and data sources needed to be able to compare results of cost-of-illness studies???



*Thank you for your attention  
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