

A SYSTEMATIC LITERATURE REVIEW OF BURDEN OF DISEASE STUDIES IN EUROPE: NEXT STEPS AND IMPLICATIONS FOR RESEARCHERS

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Background

- The main aim of the systematic literature reviews was to **explore the key variations** in the **methodological assumptions** used in the European burden of disease assessments
 - Non-communicable diseases
 - Injuries
 - Communicable diseases
 - Risk factors
- The studies were evaluated in terms of pre-defined criteria, focusing on data input sources used and on specific **methodological and normative choices** to assess BoD

Insights

- Preliminary results show a **wide variation** in methodological assumptions used to quantify DALYs
- ... but also important **inconsistencies** in the reporting of methods and particular assumptions

Insights

- Dealing with **uncertainties** in national burden of disease studies assessing disability-adjusted life years **still uncommon**
 - Parameter uncertainty
 - Probabilistic sensitivity analysis (38%)
 - Scenario analysis (11%)
 - Model and methodological uncertainty
 - Scenario analysis (18%)
- .. and often described using **inconsistent nomenclature**

Solution – The idea

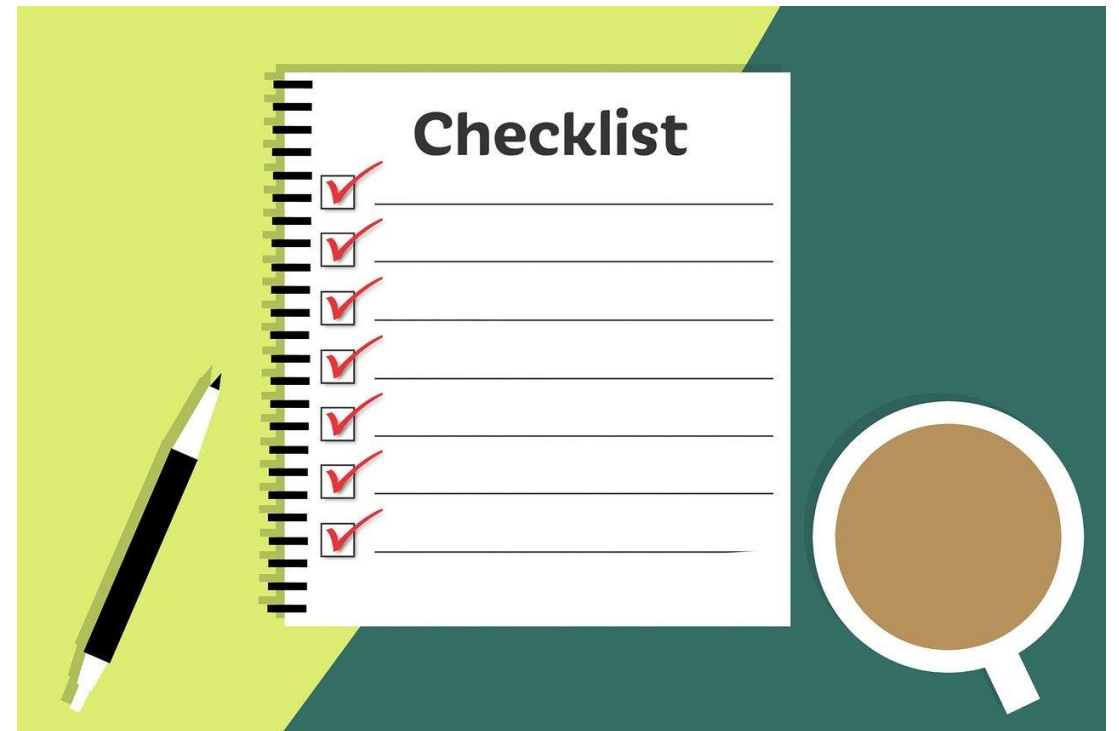
- The results of the systematic reviews show that there is a clear need for **standardized reporting guidelines** for DALY estimates
- Our network is taking the lead in developing a **checklist** that would guide researchers into reporting of DALY methods
- Such a checklist would serve **multiple purposes**:
 - increase **transparency and consistency** in reporting
 - increase **comparability** in BOD studies
 - serve as an **educational tool**, forcing researchers to make all assumptions explicit

Solution – The methodology

- Critical appraisal of existing checklists
- Initial version drafted as part of BOD Training School
- Discussions on methodology in Core Group
- Establishment of checklist task force, including external members
- Test and refine the initial protocol by applying it to our own publications
- First publication
- Evaluation of use after publication and possible refinements

Checklist elements

- ❑ Setting
- ❑ Data inputs
- ❑ DALY methods
 - ❑ Perspective
 - ❑ RLE table
 - ❑ Disease model
 - ❑ Disability weights
 - ❑ Comorbidity adjustments
 - ❑ Social weighting
- ❑ Uncertainty



Checklist elements

Section/item	Item No	Recommendation	Reported on page No/line No
Title and abstract			
Title	1	Identify the study as an economic evaluation or use more specific terms such as “cost-effectiveness analysis”, and describe the interventions compared.	_____
Abstract	2	Provide a structured summary of objectives, perspective, setting, methods (including study design and inputs), results (including base case and uncertainty analyses), and conclusions.	_____
Introduction			
Background and objectives	3	Provide an explicit statement of the broader context for the study. Present the study question and its relevance for health policy or practice decisions.	_____

What is next?

- Continued task force meetings, to finetune draft
- Expansion of task force memberships
- Evaluation of draft checklist

- Deliverable foreseen 2022

- Stay in touch via <https://www.burden-eu.net/>

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