

Methods and information requirements for health impact valuation: Discussion

Mike Holland

mike.holland@emrc.co.uk

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Completeness

- Tension between risk assessment and socio-economic assessment
 - RA: Is a risk present?
 - SEA: What is the aggregate cost of impacts?

Availability of literature

- Limited
- For many health effects, single studies
 - How well do they link to quantified health impacts?
 - How completely do they describe associated values?
 - Can we infer reliability via comparison of values across different impacts?

Understanding impacts

- Completeness
- Unfamiliar impacts
- Examples
 - Productivity
 - Cancers
 - IQ loss

Capturing the value of unfamiliar impacts

- Low birth weight
- Acceptance of partial value as full value
 - IQ loss valued via loss of earnings
- Diabetes
 - Illness, + mortality component
- Differentiating impacts by severity
 - Chronic bronchitis
 - To what extent does an agent initiate disease?
 - To what extent does an agent worsen disease?

Effects on productivity

- Air pollution effects:
 - Ostro et al: lost work days
 - Valuation can account for direct costs (wages of absent workers and replacement staff, lost production), and indirect costs (poorer quality of work).
 - CBI data used in European assessment – extrapolation?
 - Hanna and Oliva: reduced labour supply
 - Zivin et al, Chang et al: reduced productivity in the workplace, 'presenteeism'

Value of a statistical case of cancer (VSCC)

- Separation of morbidity and mortality
- Differentiation by pain and quality of life?
 - impacts of treatment
 - course of disease
 - ...
 - Burden on surveyed population?

NESHAP mercury rule

- National Emission Standard for Hazardous Air Pollutants
 - Justification largely via cobenefits (PM reduction)
 - Efficiency ?

Handling uncertainty

- No discussion in the paper, beyond recognising presence of uncertainty
- Useful approaches?
 - Scientifically valid
 - Understandable by non-experts