

# Valuing informal care – an overview

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# Valuing informal care: Today's objectives

1. Give an overview of methods that have been proposed/used to value costs and/or effects of providing informal care
2. To combine the valuation methods with various types of economic evaluations
3. To discuss how to link the methods with different decision contexts, e.g. Japan, Netherlands, UK or within UK health versus social care

# What is informal care?

Often defined as unpaid care provided by non-professionals

Informal care = a composite commodity consisting of heterogeneous parts produced (unpaid or paid) by one or more members of the social environment of the care recipient

# Informal care in economic evaluations

- Adopting a societal perspective implies that *costs & effects* of informal care should be included
- Excluding informal care involves the danger of shifting *costs & effects* towards the social network of care recipients
- Please note: the societal perspective is not universally accepted
- Various types of economic evaluations (CEA, CUA, CBA) involve different methods to value informal care

## *Notice:*

- *Care recipient main aim intervention*
- *Informal care main aim intervention*

# **Part 1:**

## **Overview & comparison of monetary valuation methods**

# Economic evaluations

Focus: care recipient main aim intervention

Approach: monetary valuation methods in order to include informal care on cost side of CEA or CUA

# Monetary valuation methods

- Proxy good method
- Opportunity cost method
- Contingent valuation method
- Well-being valuation method
- *Conjoint analysis/discrete choice experiment*

# Monetary valuation methods

## Proxy good method

Value informal care = price of (quasi) market substitute

Required information: How much time would you spend on providing informal care?

- *Diary versus recall method*
- *Hours per week/minutes per day?*
- *List of pre-specified care tasks?*

**Assumes informal & formal care perfect substitutes**



# Monetary valuation methods

**Opportunity cost method**: value = paid work

But:

- 1) What is value for caregivers not participating on labour market?
- 2) Informal care causes lower wages
- 3) Informal care often at cost of leisure
- 4) Informal care involves morbidity & mortality risks
- 5) Measurement problems

# Monetary valuation methods

- How much time did you give up in order to provide informal care?
  - a) ..... hours paid work per week
  - b) ..... hours unpaid work per week
  - c) ..... hours leisure per week
- How would you allocate your time without the provision of informal care?

**Please note: excellent econometric papers**

# Monetary valuation methods

## Contingent valuation method:

Theoretical basis in welfare economic theory

### Advantage:

- Preference based *total valuation* of informal care

### But:

Money low at the informal caregivers' agenda

*(Smith & Wright, 1994)*

# Monetary valuation methods

*Suppose the care recipient needs an extra hour of care per week and the government would be willing to compensate you to provide this hour*

What is the minimum amount of money you would like to receive from the government to provide this additional hour of care per week?

## **Please note:**

- **Who's values count?**
- **WTA versus WTP**

# Monetary valuation methods

## Wellbeing valuation method

### Advantages:

- Total valuation of informal care
- No cognitive burden for respondents

### Theoretical basis:

Experienced utility as opposed to decision

utility (*Kahneman et al., 1997*)

# Measuring wellbeing

Question: In general, how happy are you?

**Answer  
category 1**

*Very happy*

*Fairly happy*

*Not happy*

**Answer  
category 2**

*Completely  
unhappy*

0

1

2

3

4

5

6

7

8

9

10

*Completely  
happy*

# Monetary valuation methods

## Survey questions:

- Happiness/life satisfaction/wellbeing
- Informal care time
- Income
- Control variables

# Results: Monetary valuation methods

- 8-12 Euro per hour
- Proxy good and wellbeing valuation methods best response (least cognitive burden)
- Monetary values could be included at cost side of CEA & CUA



# Discussion: Monetary valuation methods

Could monetary valuation methods be of any use within the NICE decision context?

- Proxy good method
- Opportunity cost method
- Contingent valuation method
- Wellbeing valuation method
- Conjoint analysis/discrete choice experiment

**Part 2:**

**Overview & comparison non-monetary  
valuation methods**

# Non-monetary valuation methods

- Caregiver burden
- Process utility
- Caregiver quality of life
- Health-related quality of life

# Non-monetary valuation methods: Burden

**Caregiver burden** (*Drummond et al., 1991*):

Assumption: providing informal care involves burden

“Ideally, the primary outcome variable for a trial such as this [caregiver support program] should be a direct measure of the burden on caregivers” (*Drummond et al., 1991*)

Instruments:

- Zarit Caregiver Burden Scale (ZCBS)
- Caregiver Strain Index (CSI)
- Caregiver Reaction Assessment (CRA)

**The Caregiver Strain Index:** I am going to read a list of things that other people have found to be difficult. Would you tell me if any of these apply to you? (Give examples)

	Yes=1	No=0
Sleep is disturbed (e.g., because _____ is in and out of bed or wanders around at night)		
It is inconvenient (e.g., because helping takes so much time or it's a long drive over to help)		
It is a physical strain (e.g., because of lifting in and out of a chair; effort or concentration is required)		
It is confining (e.g., helping restricts free time or cannot go visiting)		
There have been family adjustments (e.g., because helping has disrupted routine; there has been no privacy)		
There have been changes in personal plans (e.g., had to turn down a job; could not go on vacation)		
There have been other demands on my time (e.g., from other family members)		
There have been emotional adjustments (e.g., because of severe arguments)		
Some behavior is upsetting (e.g., because of incontinence; _____ has trouble remembering things; or _____ accuses people of taking things)		
It is upsetting to find _____ has changed so much from his/her former self (e.g., he/she is a different person than he/she used to be )		
There have been work adjustments (e.g., because of having to take time off)		
It is a financial strain		
Feeling completely overwhelmed (e.g., because of worry about _____; concerns about how you will manage)		

# Non-monetary valuation methods: Burden

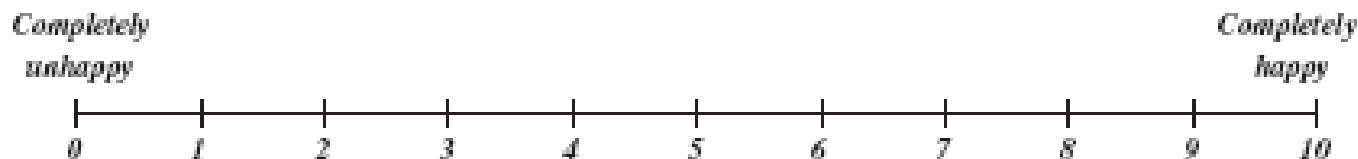
## But:

- Sum scores implicitly assume similar weighting for all items
- Partial (valuation) method as opposed to total valuation method
- What about positive aspects of providing informal care?
- Double counting

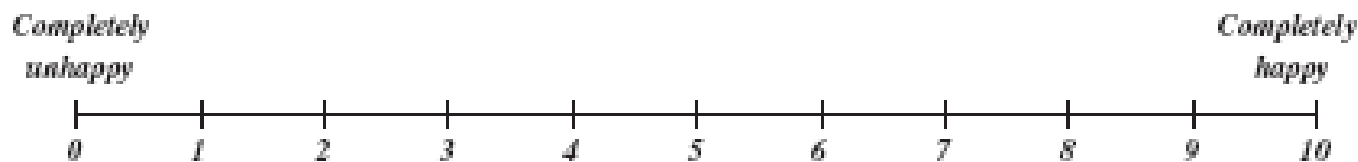
# Non-monetary valuation methods

## Process utility (*Brouwer et al., 2006*):

**In general, how happy are you?**



**Suppose a person of you and your care recipient's choice would take over the informal care you are providing. How happy would you be?**



**How to include in economic evaluations?**

# Non-monetary valuation methods

## **Caregiver quality of life** (*Mohide et al., 1988*):

Concept: “In the absence of a quality of life instrument which is applicable to the caregivers of elderly relatives and amenable to a cost-utility analyses, the Caregiver Quality of Life Instrument (CQLI) was developed using Torrance’s time trade-off technique” (*Mohide et al., 1988*)

- Implicit assumption: Caregivers preferences count



# Non-monetary valuation methods

## Dimensions CQLI:

- Feel physically well and energetic
- Feel happy and free from worry or frustration
- Have sufficient time to socialize with family and friends
- Get an adequate amount of undisturbed sleep
- Get along well with the person being cared for
  
- Are the calculated utilities using time equivalence scales comparable with QALYs and/or health maximisation?
- Time is the valuation currency in *Mohide et al (1988)* but not in de modern approaches
- What about interdependent utilities?

# Non-monetary valuation methods

## QALY (*Williams, 1989*)

“So it is with long-term care. If the alternative is a rapid deterioration of the patient’s condition, on both disability and distress dimensions, and, **in addition, the imposition of extra disability and distress on informal carers if the alternative is struggling on at home**, then I can well imagine that the cost-per-QALY for long-term care may be very favourable even compared with apparently quite dramatic (but very expensive) acute interventions” (*Williams, 1989*)

Informal care involves even increased mortality risks  
(*Schultz & Beach, 1999*)

# Issues around QALY and informal care

- Causality health and providing care
  - Could be solved by means of randomised clinical trials
- Value of forgone paid work via QALYs?
- Implicitly assuming general population values count
- Interdependent utility functions/preferences
  - Value of spillover effects via QALYs?
  - Caregivers might prefer the QALY loss

# **In sum: non-monetary valuation methods**

- Should positive caregiving effects be excluded?
- Methods developed for CUA
  - Include care-related dimensions neglecting health
  - Focus on health neglecting other dimensions
  - Solution: combining both? Also for NICE?
  - What about Japan or the Netherlands

# **Discussion: Non-monetary valuation methods**

Could non-monetary valuation methods be of any use within the NICE decision context?

- Caregiver burden
- Process utility
- Caregiver quality of life
- Health-related quality of life

# Discussion: Monetary valuation methods

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# Questions & discussion

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