

APPENDIX

INCORPORATING SOCIETAL PREFERENCES IN REIMBURSEMENT DECISIONS

RELATIVE IMPORTANCE OF DECISION CRITERIA ACCORDING TO BELGIAN CITIZENS



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COLOPHON

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LIST OF ABBREVIATIONS

ABBREVIATION

AHP
CTG / CRM

DCE
HRQoL
MCDA
NIHDI
QALYs
RIZIV / INAMI

DEFINITION

Analytical Hierarchy Process
Commissie voor Tegemoetkoming Geneesmiddelen / Commission de Remboursement des Médicaments

Discrete Choice Experiment
Health-related Quality of Life
Multi-Criteria Decision Analysis
National Institute for Health and Disability Insurance
Quality-Adjusted Life Years
Rijksinstituut voor ziekte- en invaliditeitsverzekering / Institut national d'assurance maladie-invalidité



APPENDIX 1 SEARCH STRATEGY

Appendix 1.1. Medline

Project number	HSR_2012-70-02	
Project name	Models for citizen and patient involvement in health care policy. Part 2: Societal values regarding reimbursement decision criteria.	
Search question(s)	How can information on public preferences for priority setting criteria in healthcare, independent from concrete decisions, be collected?	
	Methods	Data Collection/methods Health survey Health care survey Questionnaires Rating Ranking Choice behaviour Conjoint analysis Discrete Choice
	Public preferences	Public Opinion* Societal views Prioriti* Choice Behavior* Consumer Participation* Consumer satisfaction Patient satisfaction ((public or consumer*) adj2 (preference* or opinion or choice* or participat*))
	Priority setting	Health Planning Health Priorities* Health Care Rationing*
	Domain	Health Services Research/methods*
	Attributes for method, social values	Decision making Social values



Date	2012-09-20
Database	Ovid MEDLINE(R) <1946 to September Week 1 2012>
Search Strategy:	1 exp *Health Planning/ (124116)
Step 1.A	2 data collection/ or health surveys/ or health care surveys/ or questionnaires/ (375621) 3 exp consumer participation/ (29484) 4 consumer satisfaction/ or patient satisfaction/ (69120) 5 Public Opinion/ (14597) 6 ((public or consumer*) adj2 (preference* or opinion or choice* or participat*)).mp. [mp=title, abstract, original title, name of substance word, subject heading word, protocol supplementary concept, rare disease supplementary concept, unique identifier] (29936) 7 3 or 4 or 5 or 6 (112006) 8 1 and 2 and 7 (1773) 9 limit 8 to yr="2000 -Current" (1169)
Note Step 1.A	Searching articles about the methods for public opinion on health planning+ articles that use a method for public opinion on health planning
Step 1.B+C	1 Public Opinion/ (14597) 2 Health Care Rationing/ (9987) 3 *Health priorities/ (3873) 4 2 or 3 (13465) 5 1 and 4 (286) 6 decision making/ (61646) 7 social values/ (17355) 8 3 and 6 and 7 (14) 9 5 or 8 (300)
Note Step 1.B+C	1.B: Searching articles about public opinion on health priorities specific, because 1.A not specific enough 1.C: Looking for social values (criteria) that are important when healthcare rationing for public: can be used later also to construct attributes in choice experiment
Step 2	1 rating.mp. (97216) 2 ranking.mp. (10680) 3 Choice Behavior/ or conjoint analysis.mp. (19164)



- 4 discrete choice.mp. (424)
- 5 1 or 2 or 3 or 4 (126651)
- 6 *Health priorities/ (3873)
- 7 healthcare rationing/ (9987)
- 8 6 or 7 (13465)
- 9 5 and 8 (257)

Note Step 2 To get specific articles about public opinion on healthcare rationing that used specific methods: ranking, rating, choice methods, conjoint analysis

Appendix 1.2. Embase

Project number	HSR_2012-70-02	
Project name	Models for citizen and patient involvement in health care policy. Part 2: Societal values regarding reimbursement decision criteria.	
Search question(s)	How can information on public preferences, independent from concrete decisions, be collected?	
	Methods	Data Collection/methods Health survey Health care survey Questionnaires Rating Ranking Choice behaviour Conjoint analysis Discrete Choice
	Public preferences	Public Opinion* Societal views Prioriti* Choice Behavior* Consumer Participation*



	Consumer satisfaction Patient satisfaction ((public or consumer*) adj2 (preference* or opinion or choice* or participat*))
Priority setting	Health Planning Health Priorities* Health Care Rationing*
Domain	Health Services Research/methods*
Attributes for method, social values	Decisionmaking Social values
Date	2012-09-27
Database	Embase
Search Strategy: Step 1.A	<p>#17. 'data collection method'/exp AND [embase]/lim OR ('health survey'/exp AND [embase]/lim) OR ('health care survey'/exp AND [embase]/lim) AND ('consumer'/exp AND [embase]/lim OR ('patient satisfaction'/exp AND [embase]/lim) OR ('public opinion'/exp AND [embase]/lim)) AND ('health care planning'/exp AND [embase]/lim OR ('health care organization'/de AND [embase]/lim) OR ('health care policy'/exp AND [embase]/lim) OR ('health services research'/exp AND [embase]/lim)) (857)</p> <p>#16. 'health care planning'/exp AND [embase]/lim OR ('health care organization'/de AND [embase]/lim) OR ('health care policy'/exp AND [embase]/lim) OR ('health services research'/exp AND [embase]/lim) (162,619)</p> <p>#15. 'health services research'/exp AND [embase]/lim (4,003)</p> <p>#14. 'health care policy'/exp AND [embase]/lim (79,320)</p> <p>#13. 'data collection method'/exp AND [embase]/lim OR ('health survey'/exp AND [embase]/lim) OR ('health care survey'/exp AND [embase]/lim) AND ('consumer'/exp AND [embase]/lim OR ('patient satisfaction'/exp AND [embase]/lim) OR ('public opinion'/exp AND [embase]/lim)) AND ('health care planning'/exp AND [embase]/lim OR ('health care organization'/de AND [embase]/lim)) (488)</p> <p>#12. 'health care planning'/exp AND [embase]/lim OR ('health care organization'/de AND [embase]/lim) (93,178)</p> <p>#11. 'health care organization'/de AND [embase]/lim (66,347)</p>



#10. 'health care planning'/exp AND [embase]/lim AND ('data collection method'/exp AND [embase]/lim OR ('health survey'/exp AND [embase]/lim) OR ('health care survey'/exp AND [embase]/lim)) AND ('consumer'/exp AND [embase]/lim OR ('patient satisfaction'/exp AND [embase]/lim) OR ('public opinion'/exp AND [embase]/lim)) (223)

#9. 'consumer'/exp AND [embase]/lim OR ('patient satisfaction'/exp AND [embase]/lim) OR ('public opinion'/exp AND [embase]/lim) (70,898)

#8. 'data collection method'/exp AND [embase]/lim OR ('health survey'/exp AND [embase]/lim) OR ('health care survey'/exp AND [embase]/lim) (399,071)

#7. 'public opinion'/exp AND [embase]/lim (5,179)

#6. 'patient satisfaction'/exp AND [embase]/lim (52,992)

#5. 'consumer'/exp AND [embase]/lim (13,427)

#4. 'health care survey'/exp AND [embase]/lim (1,082)

#3. 'health survey'/exp AND [embase]/lim (89,490)

#2. 'data collection method'/exp AND [embase]/lim (333,401)

#1. 'health care planning'/exp AND [embase]/lim (30,531)

note

Searching articles about the methods for public opinion on health planning+ articles that use a method for public opinion on health planning

Step 1.B

#7. 'health care organization'/exp AND 'health care planning'/exp AND [embase]/lim AND ('public opinion'/exp AND [embase]/lim OR ((public OR consumer* OR patient*) NEAR/2 (preference* OR opinion OR choice* OR participat*) AND [embase]/lim)) (593)

#6. 'public opinion'/exp AND [embase]/lim OR ((public OR consumer* OR patient*) NEAR/2 (preference* OR opinion OR choice* OR participat*) AND [embase]/lim) (39,268)

#5. (public OR consumer* OR patient*) NEAR/2 (preference* OR opinion OR choice* OR participat*) AND [embase]/lim (39,268)

#3. 'public opinion'/exp AND [embase]/lim (5,181)

#2. 'health care planning'/exp AND [embase]/lim (30,567)

#1. 'health care organization'/exp AND [embase]/lim (604,701)

Step 1.B*

#5. 'health care organization'/de AND 'resource allocation'/exp AND 'population'/exp AND [embase]/lim (6)

#4. 'population'/exp AND [embase]/lim (135,060)

#3. 'health care organization'/de AND 'resource allocation'/exp AND [embase]/lim (702)

#2. 'resource allocation'/exp AND [embase]/lim (9,921)



	#1. 'health care organization'/de AND [embase]/lim (66,468)
note	Searching articles about public opinion on health priorities specific, because 1.A not specific enough
Step 1.C	#15. 'social psychology'/de AND 'decision making'/exp AND [embase]/lim AND ('health care organization'/exp AND [embase]/lim OR ('health care planning'/exp AND [embase]/lim)) (156) #14. 'health care organization'/exp AND [embase]/lim OR ('health care planning'/exp AND [embase]/lim) (604,701) #13. 'decision making'/exp AND [embase]/lim (64,710) #12. 'social psychology'/de AND [embase]/lim (29,216) #2. 'health care planning'/exp AND [embase]/lim (30,567) #1. 'health care organization'/exp AND [embase]/lim (604,701)
note	Looking for social values (criteria) that are important when healthcare rationing for public: can be used later also to construct attributes in choice experiment
Step 2	#27. rating AND [embase]/lim OR (ranking AND [embase]/lim) OR (conjoint AND ('analysis'/exp OR analysis) AND [embase]/lim) OR (discrete AND choice AND [embase]/lim) AND ('health care planning'/exp AND 'decision making'/exp AND [embase]/lim OR ('health care organization'/exp AND 'resource allocation'/exp AND [embase]/lim)) (140) #26. 'health care planning'/exp AND 'decision making'/exp AND [embase]/lim OR ('health care organization'/exp AND 'resource allocation'/exp AND [embase]/lim) (6,413) #25. 'health care organization'/exp AND 'resource allocation'/exp AND [embase]/lim (5,311) #23. 'resource allocation'/exp AND [embase]/lim (9,918) #22. 'health care planning'/exp AND 'decision making'/exp AND [embase]/lim (1,194) #19. 'decision making'/exp AND [embase]/lim (64,798) #13. rating AND [embase]/lim OR (ranking AND [embase]/lim) OR (conjoint AND ('analysis'/exp OR analysis) AND [embase]/lim) OR (discrete AND choice AND [embase]/lim) (224,255)



#11. 'health care planning'/exp AND [embase]/lim (30,589)
#10. 'health care organization'/exp AND [embase]/lim (605,263)
#9. discrete AND choice AND [embase]/lim (1,391)
#6. conjoint AND ('analysis'/exp OR analysis) AND [embase]/lim (860)
#4. ranking AND [embase]/lim (10,212)
#2. rating AND [embase]/lim (212,518)

note

To get specific articles about public opinion on healthcare rationing that used specific methods: ranking, rating, choice methods, conjoint analysis



APPENDIX 2. PREPARATORY MATERIAL FOR THE EXTERNAL EXPERTS DISCUSSING THE CRITERIA TO BE INCLUDED IN THE POPULATION SURVEY

Rather than discussing the results of empirical literature about priority setting in healthcare using multiple criteria, this document describes the criteria included in a number of studies with their operationalization. The objective is to develop, based on this overview, a long-list of possible criteria to examine in the KCE study.

Appendix 2.1. Examples of multi-criteria priority setting approaches and studies

Appendix 2.1.1. Oregon

The most well-known example of an attempt to set priorities in healthcare in an explicit and transparent way is the Oregon experiment (Canada). The first experiment in 1989 involved a rather mechanistic ranking of healthcare interventions based on their cost-effectiveness ratio. Effectiveness was expressed in terms of some variant of the quality-adjusted life years (QALYs). The resulting priority list showed some counterintuitive results. For example, cosmetic breast surgery was ranked higher than the treatment of an open thigh fracture.¹⁻³

The second attempt in 1994 involved a more sophisticated approach, including better information about outcomes, societal preferences for general categories of medical interventions rather than for individual conditions (e.g. the relative weight for preventive rather than curative treatment). Still, this approach is not perfect. For example, the representativeness of the 600 people participating in the consultation meeting about the general priorities can be questioned; 56% of the participants worked in the healthcare sector.

Appendix 2.1.2. NICE Appraisal Committees

The School of Health and Related Research of the University of Sheffield examined by means of a binary choice experiment whether NICE took account of the following factors when commissioning health care services⁴:

Attribute	Description	Levels
Incremental cost-effectiveness	Central estimate of cost-effectiveness for the intervention compared to current standard treatment	0: £15k per QALY gained 1: £25k per QALY gained 2: £35k per QALY gained
Uncertainty	The degree of uncertainty surrounding incremental costs and effects	Low degree of uncertainty High degree of uncertainty
Age	The mean age of the population who will benefit from the intervention	0: children (<18 yrs) 1: working (18-64 yrs) 2: retired (>64 yrs)



Baseline health-related quality of life	An index utility score of patients prior to receiving the intervention, whereby '1' represents a state of perfect health and 0 represents dead	0: 0.25
		1: 0.50
		2: 0.75
Availability of other therapies	Whether alternative effective therapies are available to manage the condition or not	0: No
		1: Yes

The results of the study showed that increases in cost-effectiveness, economic uncertainty and the availability of other therapies are associated with significant reductions in the odds of adoption. Small changes in health-related quality of life and age of the target population were not associated with reductions in the odds of a positive recommendation.

Appendix 2.1.3. The NICE social QALY study

Quality Adjusted Life Years (QALYs) are used by the National Institute for Health and Clinical Excellence (NICE) to evaluate health interventions for coverage decisions. A standard approach in economic evaluations is to give equal weight to all QALYs, regardless of who gets them. A research group from the University of Sheffield performed a study in the UK to assess the relative societal value of health gains to different beneficiaries, with an aim to define QALY weights.⁵ The societal values were assumed to be mainly a function of characteristics of beneficiaries or characteristics of the disease. Included attributes were the timing of ill health (childhood or adulthood), the severity of the disease (25% versus 50% of full health) and the responsibility (NHS responsibility & no patient responsibility, no NHS responsibility and some patient responsibility, no NHS responsibility and no patient responsibility). Also rarity of the condition was added as a possible attribute at the request of NICE.

A sample of citizens was asked to make hypothetical pairwise choices in a discrete choice experiment between two groups of patients with differing health and/or non-health characteristics.

The results of the study showed that societal preferences do not support the objective of health maximization regardless of health distribution. Hence the assumption of "a QALY is a QALY is a QALY" in economic evaluation is not supported.

The general findings of the study show that :

- People have a general aversion to inequality. This is illustrated by, for example, the fact that preference is given to a marginal health benefit for a group with a lower life expectancy than for a group with a higher life expectancy.
- The timing of ill health matters: a marginal health benefit is worth about 80% more than a the same marginal health benefit to adults.
- There are preferences for severity: the move from 25% of full health to 50% of full health is worth less that the move from 50% to 100% of full health.
- People tend to take responsibility into account. "NHS causes" are given the highest weight, followed by "Bad luck" and finally "some bad choices".
- There is a slight preference for condition rarity. An extremely rare condition is given 20% more weight than a slightly more common condition.

These results did not seem to be related to the respondent characteristics such as age, gender and education.



Appendix 2.1.4. Systematic literature review

In 2012 a paper was published, reviewing the decision criteria for resource allocation and healthcare decision making as published in the literature.⁶ The paper developed a hierarchical classification system, which was structured to fulfill the requirements of MCDA (minimum overlap, mutual independence, operationalisability, completeness and clustering). The process was guided by the structure of the EVIDEM framework (see Appendix 2.2.1).

The review is not perfect in its definition of category and classification of criteria. It is clear, for instance, from Table 1 that the criteria are not independent. For example, lifesaving (as defined by life prolongation) is a possible health benefit. Nevertheless both criteria are mentioned separately as criteria for health outcomes and benefits of intervention. The overview is mainly useful to avoid missing potentially important criteria. The criteria would need to be reformulated and redefined for the Belgian framework.

Table 1 – Overview of priority setting criteria mentioned in published literature

Category	Criteria	Terms used in literature
Health outcomes and benefits of intervention	Health benefits	health benefits, potential health gain, enhanced health outcomes, relative advantage, health effects, additional effects, incremental health gain
	Efficacy/effectiveness	efficacy, efficacy/effectiveness, effectiveness, clinical benefit, clinical impact, clinical merit, relative clinical benefit in relation with current standards, determine relative value for degree of benefit against benchmarks, magnitude of treatment effect, response rate, onset and duration of treatment/program effect
	Life saving	prolongation of disease-free survival, saving life, life expectancy gains, average life-year benefit per patient
	Safety	side effects, unintended consequences, safety, safety and tolerability, risks, risk management, harm, adverse effects, inconvenience, risk of event, reduction in symptomatic toxicity compared with standard therapy
	Patient reported outcomes	patients reported outcomes, quality of life, impact on quality of life, number of QALYs gained per patient, disability adjusted life years, likely impact on patient, patient preference, patient autonomy, relative value to patient, best for patient
	Quality of care	overall gain in quality of care
Type of health benefit	Population effect (prevention)	public health interest, population effects, prevention, prevention of ill health, social impact, social benefit
	Individual effect (medical service)	type of medical service, relief/prevention of symptoms/complications of disease, health gain or maintenance, individual effects, individual impact and benefit, the composition of the health gain



Impact of the disease targeted by intervention	Disease severity	severity of disease, impact of the disease/condition on quality of life
	Disease determinants	determinants (the factors responsible for the persistence of the burden), characteristics of target condition
	Disease burden	burden of disease, disease burden, burden of illness, burden of therapy, cost to treat disease, cost to prevent disease, national cost of the disease/condition to the healthcare system
	Epidemiology	prevalence, number of potential beneficiaries, indirect beneficiaries, size of population, prevalence and incidence of disease, number of residents benefiting, number of clients served, number of patients, social/demographics, incidence
Therapeutic context of intervention	Treatment alternatives	treatment alternatives, availability of alternatives, availability of effective intervention and preventable, alternatives, benchmark comparators
	Need	comparative interventions limitations (unmet needs), need, clinical impact (need and trends), emergencies and need, apparent need, clinical need, desirability of effects, meets patient's basic need
	Clinical guidelines and practices	evidence-based guidelines, best practice, clinical guidelines, academic health center research (establishing/or using best practice)
	Pre-existing use	pre-existing prescribing of the drug
Economic impact of intervention	Cost	cost per patient, costs, unit cost
	Budget impact	budget impact on health plan, total budget impact, budget impact, usage and cost implications of competing new drugs if approved, affordability, operating and start-up costs
	Broad financial impact	impact on other spending, financial impact on government, economic impact, economics, national medical costs per-year, cost-saving, national saving in costs of absence per year
	Poverty reduction	positive poverty reduction
	Cost-effectiveness	cost-effectiveness, economic evaluations, cost and consequences, pharmacoeconomic analysis, cost utility expressed as cost per QALY
	Value	value for money, financial value
	Efficiency and opportunity	efficiency of intervention, efficiency, opportunity costs, opportunity costs to the population/society, best within available resources, interdependencies
	Resources	resources, variation in rate of use, available resources, resources implications, volume of activity



	Insurance premiums	impact on health insurance premiums
Quality and uncertainty of evidence	Evidence available	evidence, proof, scientific evidence, current level of knowledge, time of assessment in technology development, timelines of review, therapy mechanism of action
	Strength of evidence	strength of evidence, quality of evidence, quality of data and past decisions, quality of data, quality, validity of evidence, related degree of knowledge certainty, certainty, consistency, consistent, completeness and consistency of reporting evidence, openness, selection of studies, precision of treatment effect
	Relevance of evidence	relevance of evidence, representativeness of users (studies vs. real world), level of generalization, effectiveness in real practice, evidence of effectiveness
	Evidence characteristics	normative characteristics of study, choice of endpoints, clinical trial data, multiple randomized trials or meta-analysis/single randomized trial of reasonable size/small randomized trial, phase II
	Research ethics	research ethics, informed consent,
	Evidence requirements	adherence to requirement of decision making body
	Legislation	legal arrangements, legislative issues, medical liability, human rights legislation, legal implications, conformity of programs
Implementation complexity of intervention	Organizational requirements and capacity to implement	system requirements, physical environment, environment, system capacity, local capacity, ability to implement, implementation, organization's structure, organizational burden, logistics, process, well-organized, organizational feasibility, feasibility of delivery, deliverability
	Skills	knowledge and skills, nature of staff, clinical education and training, human resources availability, recruitment and retention of staff, attracting/retaining scarce clinical staff
	Flexibility of implementation	flexibility, reversibility, trialability, revisability, ability to evaluate, provision for revision/appeals, engagement
	Characteristics of intervention	characteristics of intervention, complexity of the intervention, components of technology, autonomy of the intervention, autonomy, convenience
	Appropriate use	appropriate use of intervention, appropriateness, appropriate setting/level of service
	Barriers and acceptability	acceptability, responsiveness, controversial nature of proposed technology



	Integration and system efficiencies	system integration (best use of elements of healthcare system), integration into local community, ease of integration, impact on other services, links to other services, compatibility,
	Sustainability	reduction of waiting list size, impact, sustainability, longevity
	Population priorities	perspective and current priority, target and priority-setting, known priorities, population priority, coverage of selected conditions
Priorities, fairness and ethics	Access	population access, access, equity of access improvement, access to care easier, distribution and access to healthcare, accessibility, equity of access, access to health system, geographical equity, timeliness of access
	Vulnerable and needy population	vulnerable population, potential victims, particular social groups with high risk and/or increased vulnerability, compassion for the vulnerable, particularly needy/vulnerable groups, age of targeted group, maternal mortality, quality of maternity care services, population equity
	Equity, fairness and justice	equity, fairness, health equity, equality, distributive justice, formal justice, social justice, justice, social injustice, addressing health status inequalities at a population level, human integrity and dignity, basic human rights
	Utility	utility, utilitarianism
	Solidarity	solidarity, collectivism, mutuality, reciprocal trust, diversity, cohesion
	Ethics and moral aspects	ethics, ethical values, values, values and beliefs, consistency with societal values, ethical implications, moral obligation to implement a technology, rule of rescue, priority to basic and necessary care, moral consequence of HTA, moral challenges related to certain components of HTA
	Mission and mandate of health system	goals of healthcare, goals, beneficence, nonmaleficence and justice, beneficence/non-maleficence, strategic fit, medical and social worth, relevance, present social consensus, consensus regarding public funding of a therapy, government mandate, national standards, healthcare context positioning
Overall context	Overall priorities	national priorities, national or board priority, local and national priorities, international priorities, alignment with external directives, strategic direction
	Financial constraints	budget constraints, cost-containment, budget level social economical context, limited provincial health resources, budget implementation challenges, economic feasibility, reliance of other services/sectors(on investment)
	Incentives	financial incentives, organizational support, donor involvement, incentives for compliance



Political aspects	political pressure, political components, politically and legally defensible decisions, politics, political impact
Historical aspects	historical components, past experiences, historical budgets
Cultural aspects	culture and religious convictions, stigma, compatibility with values, challenge of social and values arrangements, conception of certain persons or disease, psychosocial implications, public preference
Innovation	perceived benefits of change, innovativeness, generation or application of knowledge
Partnership and leadership	partnership and networking, partnerships, maintaining relationship, leadership, community development, academic commitments: research and education, partnership and collaboration across organizations, contribution to position as a learning organization
Citizen involvement	citizenship, ownership, enabling health literacy (empowerment)
Stakeholders interests and pressures	stakeholders pressure, advocacy, pressure from physician and patients groups and past decisions, clinical expert opinions, patient representative group opinions, power relations among stakeholders, user of the technology interests, challenge the relationship between patient and physician, professional prestige, clinicians excitement and decisions in other hospitals, public reaction and public accountability, HTA's producer interest, company activities, researchers ethics interests, third party agents involved, recommendations made by other countries, status in other jurisdictions, current status of public funding in other jurisdictions, drugs used in other hospitals, expressed demand, patient demand, expected level of interest (patient and medical), entitlement

The authors of the review make some reflections about the difficulty of operationalising equity: *"It is synonymous with social justice and fairness. It can be referred to as "a fair chance for all", "quality of access to healthcare resources on the basis of need", "absence of systematic disparities in health between groups with different levels of underlying social advantage/disadvantage". The WHO advocates concepts of horizontal equity (equal healthcare for equal needs) and vertical equity (providing healthcare preferentially to those with the greatest need)."*

However, concepts such as horizontal and vertical equity are not very helpful in the absence of a definition of need. It seems very important, therefore, to put sufficient effort in trying to develop an operational definition of 'need'.



Appendix 2.2. Examples of MCDA frameworks

Appendix 2.2.1. The EVIDEM framework

The EVIDEM framework consists of a list of criteria to be used in multi-criteria decision analysis (MCDA). It makes a distinction between **normative universal** criteria (or intrinsic value criteria) and **contextual** criteria (extrinsic value components). The criteria have been identified from analyses of the literature, of decision-making processes worldwide and of discussions with decision makers.

Normative universal criteria

Normative universal criteria are defined as those for which the low and high ends of the scales can be defined a priori (i.e., they are universally agreed upon). For example, the low and high ends of the scale for disease severity could be 'not severe' and 'very severe', where the lowest score is given to diseases with 'minor inconvenience' and the highest score is given to life-threatening diseases.

The normative universal criteria constitute the MCDA core model are presented in Table 2.⁷

Table 2 – Normative universal criteria according to the EVIDEM MCDA framework

Theme	Main criteria	Definition
Disease impact	Disease severity	Severity of the health condition of patients treated with the proposed intervention (or severity of the health condition that is to be prevented) with respect to mortality, disability, impact on quality of life, clinical course (i.e. acuteness, clinical stages) <i>Note: in the EVIDEM framework, the criterion disease severity captures a measure of absolute value (not relative to comparative interventions)</i>
	Size of population	Number of people affected by the condition (treated or prevented by the proposed intervention) among a specified population at a specified time: can be expressed as annual number of new cases (annual incidence) and/or proportion of the population affected at a certain point in time (prevalence) <i>Rationale: size of population contributes to the value of an intervention because the larger the population, the larger the contribution to overall health improvement. The scale direction is thus based on the ethical principle of utility which aims at “doing the greatest good for the greatest number of people”. (Or, in other words, the more worse-off people involved, the more is gained from reducing their suffering)</i>
Context of intervention	Clinical guidelines	Concurrence of the proposed intervention (or similar alternatives) with the current consensus of experts on what constitutes state-of-the-art practices in



		the management of the targeted health condition; guidelines are usually developed via an explicit process and are intended to improve clinical practice.
	Comparative interventions limitations (unmet needs)	Shortcomings of comparative interventions in their ability to prevent cure or ameliorate the condition targeted; also includes shortcomings with respect to safety, patient reported outcomes and convenience.
Intervention outcomes	Improvement of efficacy/effectiveness as compared to the existing standard intervention	Capacity of the proposed intervention to produce a desired (beneficial) change in signs, symptoms or course of the targeted condition above and beyond beneficial changes produced by alternative interventions. Includes efficacy and effectiveness data, as available.
	Improvement of safety/tolerability	Reduction in intervention-related health effects that are harmful or undesired compared to alternative interventions.
	Improvement of patient-reported outcomes	Capacity of the proposed intervention to produce beneficial changes in patient-reported outcomes (PROs) (e.g. quality of life) above and beyond beneficial changes produced by alternative interventions; also includes improvements in convenience to patients.
Type of benefit	Public health interest (prevention, risk reduction)	Risk reduction provided by the proposed intervention at the population level (e.g. prevention, reduction in disease transmission, reduction in the prevalence of risk factors).
	Type of medical service (cure, symptom relief)	Nature of the clinical benefit provided by the proposed intervention at the patient level (e.g. symptom relief, prolonging life, cure)
Economics	Budget impact on health plan (cost of intervention)	Net impact of covering the intervention on the budget of the target health plan (excluding other spending). This represents the differential between expected expenditure for the proposed intervention and potential cost savings that may result from replacement of other intervention(s) currently covered by the health plan. Limited to cost of intervention (e.g. acquisition cost, implementation and maintenance cost)
	Cost-effectiveness of intervention	Ratio of the incremental cost of the proposed intervention to its incremental benefit compared to alternatives. Benefit can be expressed as the number of events avoided, life-years gained, QALYs gained, additional pain-free days etc.
	Impact on other spending (e.g. hospitalisation, disability)	Impact of providing coverage for the proposed intervention on other expenditures (excluding intervention cost) such as hospitalisation, specialist



		consultations, adverse events, long-term care, disability costs, lost productivity, caregiver time etc.
Quality of evidence	Adherence to requirements of decision-making body	Extent to which evidence on the proposed intervention submitted to a decision-making body fulfils requirements of that body with respect to the type of evidences to be provided, level of detail to be presented, sources to be supplied/indicated etc.
	Completeness and consistency of reported evidence	Extent to which reporting of the evidence on the proposed intervention is complete (i.e. meeting scientific standards on reporting) and consistent with the sources cited.
	Relevance and validity of evidence	Extent to which evidence on the proposed intervention is relevant to the decision-making body (in terms of population, disease stage, comparator interventions, outcomes, etc) and valid with respect to scientific standards (i.e. study design etc) and conclusions (agreement of results between studies). This includes consideration of uncertainty (e.g. conflicting results across studies, limited number of studies and patients)



The EVIDEM framework assumes that highest priority should be given to health interventions:

- for severe disease (**disease severity**)
- for common disease (**prevalence**)
- for diseases with many unmet needs (**comparative interventions' limitations**)
- recommended in consensus guidelines by experts (**clinical guidelines**)
- Conferring major improvement in efficacy/effectiveness over standard of care (**therapeutic added value**)
- Conferring major improvement in safety & tolerability over standard of care (**incremental safety and tolerability**)
- Conferring major improvement of patient reported outcomes/perceived health over standard of care (**improvement of PROs**)
- Either conferring major risk reduction (**public health interest**) or major alleviation of suffering (**type of medical service**); this design allows consideration of both preventive and alleviating interventions, without giving a priori priority to either one
- That results in savings in treatment expenditures (**budget impact**), cost effectiveness of the intervention, as well as other medical and non medical expenditures (**impact on other spending**)
- For which there is sufficient evidence (**adherence to requirements** of decisionmaking body), that is fully reported (**completeness and consistency** of reporting evidence) and valid and relevant (**relevance and validity of evidence**).

It is noted that cost-effectiveness is a composite of some elements of other criteria and does not comply with the non-redundancy design requirement of MCDA. However, it is included in the framework because many decision-making processes are said to currently rely on it. We would argue that it should be replaced by the criteria with which it overlaps. This is suggested as an option by EVIDEM.

Each of the main criteria mentioned in Table 2 includes sub-criteria that can be added by end-users to the MCDA core model. A possible operationalisation of the main criteria is suggested by EVIDEM, but it is actually left to the discretion of the users how they want to operationalise the criteria. Operationalisation (i.e., clearly defined low and high ends of the scales used to appraise an intervention, with numbers attached to the scale levels if categorical scales are used) is necessary for a MCDA framework. Especially the contextual criteria are more challenging to operationalise.

Contextual criteria

The **contextual tool**, used to tailor the framework to the context of decision making, includes six generic criteria/themes, with a number of sub-criteria from which end-users can select those most relevant to their setting. Contextual criteria and sub-criteria, once identified, can either stay in the conceptual tool for qualitative consideration, or be moved to the MCDA Core Model if they can be operationalised. The Contextual Tool includes normative context-specific criteria and feasibility criteria. An overview is given in Table 3. Possible sub-criteria are mentioned in *italics*.


Table 3 – Normative contextual criteria and feasibility criteria of the contextual EVIDEM tool

Main criteria		Definition
Ethical framework	Utility – goals of healthcare <ul style="list-style-type: none"> - <i>Beneficence</i> - <i>Alignment with mission/scope of the healthcare system</i> 	Goal of healthcare is to maintain normal functioning. Such consideration is aligned with the principle of utility, which considers the act to produce the greatest good or “greatest benefits for the greatest number”. Mission and scope of a health plan/system derive from this principle.
	Fairness – population priority & access <ul style="list-style-type: none"> - <i>Disabled</i> - <i>Low-socio-economic status</i> - <i>Children 0-5 years</i> - <i>Elderly (65 years and older)</i> - <i>Women of reproductive age</i> - <i>Productive population</i> - ... 	Priorities for specific groups of patients are defined by societies/decision makers and reflect their moral values. Such considerations are aligned with the principle of fairness, which considers treating like cases alike and different cases differently and often gives priority to those who are worst-off (theory of justice)
	Efficiency – opportunity costs and affordability <ul style="list-style-type: none"> - <i>Efficiency</i> - <i>Opportunity costs for patients (foregone resources)</i> - <i>Opportunity costs for the population</i> - <i>affordability</i> 	Opportunity costs include resources or existing interventions that may be forgone if intervention under scrutiny is used/reimbursed. Such consideration is aligned with the principle of efficiency, which considers maximizing impact on health for a given level of resources (efficiency can be considered at the patient level and at societal level). This criterion also covers the concept of affordability. Both affordability and opportunity cost considerations require a financial/budgeting exercise.
Overall criteria	context System capacity and appropriate use of intervention <ul style="list-style-type: none"> - <i>Organisational requirements</i> - <i>Skill requirements</i> - <i>Legislative requirements</i> - <i>Surveillance requirements</i> - <i>Risk of inappropriate use</i> - <i>Institutional/personal barriers to uptake</i> - <i>Ability to reach the whole target region/population</i> 	The capacity of healthcare system to implement the intervention and to ensure its appropriate use depends on its infrastructure, organisation, skills, legislation, barriers and risks of inappropriate use. Such considerations include mapping current systems and estimating whether the se of the interventions under scrutiny requires additional capacities.



Stakeholder pressures/barriers <ul style="list-style-type: none">- <i>Stakeholder pressures by category</i>- <i>Stakeholder barriers</i>- <i>Conflict of interest</i>	Pressures/barriers from groups of stakeholders or individuals are often part of the context surrounding healthcare interventions. Such considerations include being aware of pressures and interests at stake and how they may affect values of decision makers.
Political/historical context <ul style="list-style-type: none">- <i>Political priorities and context</i>- <i>Cultural acceptability</i>- <i>Precedence (congruence with previous and future decisions)</i>- <i>Impact on innovation and research</i>- <i>Impact on partnership and collaboration among healthcare stakeholders</i>	Political/historical context may influence the value of an intervention in consideration of specific political situations and overall priorities (e.g. priority to innovation) as well as habits, traditions and precedence.

The ethical framework presented in Table 3 is based on three principles: utility, fairness and efficiency. These principles are often conflicting. Therefore, EVIDEM recommends identifying clearly the trade-offs and legitimize decisions by engaging a broad range of stakeholders. In this context, reference is made to accountability for reasonableness.⁸

For every contextual criterion, two options are given: either the criterion is used as a qualitative consideration or the criterion is included in the MCDA model, in which case a scale needs to be defined. For example, if the criterion “fairness” would be used as a qualitative consideration in the decision making process, a relevant question could be “would the fact that this intervention targets vulnerable populations have a positive, neutral or negative impact on appraisal of the intervention?”. If it were to be included in the MCDA model the extent to which the intervention targets vulnerable populations would be assessed. If giving priority to vulnerable populations is considered to be fair, interventions ranking higher on this sub-criterion will get a higher score.

Appendix 2.2.2. Office of Health Economics

A report by Devlin and Sussex gives a nice overview of the range of methods and approaches available for MCDA and their existing use in public sectors and health services decision making.⁹ Besides a brief overview of the literature, the report presents several illustrations of applications of MCDA in real life. We present these examples under separate headings.

**Golan et al. (2011): main criteria for prioritizing new health technologies¹⁰**

Principles of allocative justice	Criteria
Need	<ul style="list-style-type: none">• General• Severity of the condition• Availability of alternatives
Appropriateness	<ul style="list-style-type: none">• Efficacy and Safety• Effectiveness
Clinical benefits	<ul style="list-style-type: none">• General• Effect on mortality (life saving)• Effect on longevity• Effect on health-related quality of life
Efficiency	<ul style="list-style-type: none">• Cost-effectiveness/benefit• Budgetary impact• Cost
Equality	<ul style="list-style-type: none">• General• Accessibility to the service• Affordability to the individual
Solidarity	
Other ethical or social values	<ul style="list-style-type: none">• Autonomy• Public health value• Impact on future generations
'Other' considerations	
Quality of the clinical and economic evidence	
Other considerations not elsewhere classified	<ul style="list-style-type: none">• Strategic issues• Consistency with previous decisions and precedents

**Rawlins (2010): Special weightings applied by NICE in making judgments about cost-effectiveness¹¹**

Criteria	
Severity of the underlying illness	More generous consideration is given to the acceptability of an ICER in serious conditions, reflecting society's priorities
End-of-life treatments	The public places special value on treatments that prolong life at the end of life, providing that life is of reasonable quality
Stakeholder persuasion	Insights provided by stakeholders, e.g. on the adequacy of the measures used in clinical trials in reflecting symptoms and quality of life
Significant innovation	Some products may produce demonstrable and distinct benefits of a substantive nature, and which are not adequately captured in the quality of life measures
Disadvantaged populations	Special priority is given to improving the health of the most disadvantaged members of the population, e.g. poorer people and ethnic minorities
Children	Given methodological challenges in assessing quality of life in children, society would prefer to give "the benefit of the doubt"
The degree of certainty around the ICER	Advisory bodies will be more cautious about recommending a technology when they are less certain about the ICERs presented in the cost-effectiveness analysis

**Advisory Group for National Specialised Services (AGNSS)**

The AGNSS applies MCDA to develop recommendations for (or against) national commissioning of specialized services by the NHS in England for treatments involving no more than 500 patients and provided by no more than 4 centres.

The Group used a framework with 12 core criteria, grouped under 4 headings framed as questions¹²:

Question	
Does it work?	<ul style="list-style-type: none">• Severity and ability of patients to benefit• Clinical safety and risk• Clinical effectiveness and potential for improving health
Does it add value to society?	<ul style="list-style-type: none">• Stimulating research and innovation• Needs of patients and society
Is it a reasonable cost to the public?	<ul style="list-style-type: none">• Average cost per patient• Overall cost impact and affordability including opportunity cost• Value for money compared to alternatives
Is it the best way of delivering the service?	<ul style="list-style-type: none">• Best clinical practice in delivering the service• Economic efficiency of provision• Continuity of provision• Accessibility and balanced geographic distribution

Appendix 2.2.3. Israel's Health Basket Committee's MCDA framework

Golan and Hansen developed a MCDA framework for decisions about inclusion of health technologies in Israel's health basket (basket of reimbursed technologies).¹³ The framework boils down to an extended cost-effectiveness analysis, where the effectiveness measure encompasses multiple dimensions, such as purely clinical benefits and societal benefits in terms of equity. In addition, room is left for additional considerations (x-factors) that are not captured by the previous dimensions. These can be included in the decision making process where relevant.



Criteria		Scores
Incremental benefits to Israel's population	Lives saved Life prolongation Quality of life benefits Other social/ethical benefits (e.g. targeted to children/minorities, reduces health gaps,... - equity considerations)	0 (no benefit) – 100 (maximum benefit)
Incremental net cost to Israel's health system	Average net (incremental) cost per patient treated multiplied by the number of patients (over a given period of time, e.g. one year)	
Quality of the evidence	Concerning benefits and costs (e.g. robustness)	Benefits grading system: Oxford Centre for Evidence-based Medicine's level of evidence: A, B, C, D
Additional ethical or strategic x-factors or other considerations		

The criterion 'incremental benefit' consists of several sub-criteria, which are weighted in a separate MCDA model. Data on the relative weights of these criteria are obtained through a choice-based technique, called PAPRIKA (acronym for 'potentially all pairwise ranking of all possible alternatives').

The criterion 'incremental net cost' is measured in terms of the net present value of all expected future spending, net of any cost savings to the healthcare system, over the intervention's lifetime (i.e. the same lifetime over which the incremental benefits are recognized).¹³

For use of the framework, the authors recommend to include in the benefit package first the interventions with the highest benefit and the lowest incremental net cost, and then move along the efficiency frontier towards interventions with higher incremental net costs and lower benefits.



Appendix 2.2.4. Haute Autorité de Santé: grille d'analyse pour synthétiser l'ensemble des arguments éthiques

The table below presents the ethical principles and possible criteria the Haute Autorité de Santé (HAS) in France has defined as being key to the assessment of the ethical aspects related to a health technology in the context of a health technology assessment.¹⁴ The table is deliberately kept in French as this it might serve as a basis for the future translation of some of the difficult concepts to be included in our pre-deliberation questionnaire.

Principe	Exemples de concepts pouvant être mobilisés dans les arguments	Commentaires
Bienfaisance et non malfaisance	Bénéfices Risques Tolérance Sécurité Qualité de vie Efficacité médicale Estime de soi	Pour chacun des principes, les arguments de la revue de la littérature éthique sont confrontés aux conclusions des autres dimensions de l'évaluation : médicale, de santé publique, économique, sociologique, organisationnelle, juridique
Autonomie	Consentement Liberté de choix Protection de la confidentialité et de la vie privée (protection des données) Dépendance Vulnérabilité	
Justice	Efficience Equité Discrimination Disparité géographique Inégalité sociale Accessibilité Compensation/indemnisation	



Appendix 2.3. Synthesis

Based on our overview of existing MCDA frameworks and reflections about their application, we derived the following conclusions:

- A set of core criteria can be identified that is relevant for every prioritization decision in healthcare. This reflects the ethical framework within which decisions need to be taken. For decisions to be consistent with the ethical framework, the weights attached to each of these criteria need to be constant across decisions.
- The weights need to reflect the societal importance of each of the criteria and should in principle, if the ethical framework is complete, not change from one intervention to another. Besides the core criteria, specific criteria can be considered relevant for specific interventions. These specific criteria are sub-criteria of the core criteria. The relative weight attached to the sub-criteria can change from one intervention to another. The general appreciation of the performance of an intervention on a core criterion will be determined by the weighted appraisal of the sub-criteria. For example, for the core criterion “patient-reported outcome” the relative importance of ‘independent functioning of the patient’ will be more important when home care is assessed as intervention than when vaccination against the human papilloma virus is assessed.

Therefore, the most important mission of the research team was to define a coherent set of core criteria that satisfy the requirements for MCDA.

A summary of possibly relevant criteria in each question of the five-question framework, used as a basis for the discussion with the external experts, is presented in Table 4.

Table 4 – Long-list of criteria for each question in the 5-question decision framework developed by KCE

Level of the framework	Core criteria	Sub-criteria
Therapeutic and/or societal need	Therapeutic need: disease severity, given (effectiveness of) current available treatment options	Children (threshold for age??)
		Impact of disease on autonomy
		Impact of the condition on life expectancy and health-related quality of life
	Societal need: disease burden for society	Size of the population/prevalence of the condition
		Health inequality: characteristics of potential beneficiaries (e.g. low socio-economic status)
		disease transmission (prevalence of risk factors)
Preparedness to pay out of public resources for an	Own responsibility: factors responsible for the persistence of the burden	Impact on income loss, total public healthcare expenditures related to condition
		Life-style (performing risky activities voluntary, e.g. downhill mountainbiking, performing risky activities to beat awkward records)
		Genetic traits



intervention addressing this need	Children	
	End-of-life situation	
	Overall health condition/theoretical capacity to benefit?	General health condition as expressed by an index utility score of patients prior to receiving the intervention, whereby '1' represents a state of perfect health and '0' represents dead.
	Family situation	Caring for children or other family members
Preparedness to pay out of public resources for the treatment under consideration (criteria related to the improvement in therapeutic and societal need, taking safety issues into account)	Impact on therapeutic need	Safety of the intervention compared to the alternative intervention(s): Harms in terms of mortality and serious adverse events affecting health-related quality of life
		Effectiveness of the intervention compared to the alternative intervention(s): Impact on patient-relevant clinical outcomes in real life
	Impact on societal need	Impact on incidence or prevalence of the condition
		Cure, symptom relief
		Impact on health inequality
		Prevention, risk reduction
		Impact on public (healthcare) expenditures due the condition
	Added therapeutic value	Improvement of efficacy/effectiveness
		Improvement of safety/tolerability
		Improvement of patient-reported outcomes
	<i>Justification of the price level of the product?</i>	<i>If the higher price cannot be justified, we might not be prepared to pay this price</i>
	Savings induced elsewhere in the healthcare sector	
	Quality of the evidence/Uncertainty	Consistency of the evidence
		Uncertainty with respect to demonstrated outcomes



	Population subgroup	Completeness (evidence gaps?)
	<i>Rarity of disease</i>	Validity of the evidence: <ul style="list-style-type: none">• Strength of evidence• Validity of clinical data• Validity of economic data• Validity of PRO data• Validity of epidemiological data
Preparedness to pay more	Innovation	
	Average cost per patient	
	Affordability	
	<i>justification of the price level</i>	
Willingness to pay (price and reimbursement basis)	<i>Contribution of intervention to efficient use of healthcare resources</i>	
	Opportunity costs	
	Financial accessibility (for determination of reimbursement level)	

Source: le Polain et al. (2010)¹⁵

The discussions eventually led to a reduction of the criteria to be included.

The following comments were given by the experts (personal views, not necessarily supported by the entire expert group):

- Regarding “Impact of the condition on life expectancy and health-related quality of life”: life expectancy (threat to life) and quality of life should be split. Quid “autonomy”? This could be part of quality of life (e.g. EQ-5D: activities of daily life).
- Regarding “size of the population/prevalence of the condition”: is this about “How many people could be helped by a treatment?” or about “what is my risk for getting the disease?” The first interpretation is more altruistic than the second. When people consider prevalence important because a high prevalence implies that they are at higher risk of getting the disease, this is more out of self-interest.
- Regarding “Own responsibility: factors responsible for the persistence of the burden”: Alternative is to point patients towards their responsibility by means of e.g. taxes. This should not be a criterion for reimbursement as such.
- Regarding “End-of-life situation”: this could refer to thing we pay for in palliative care but do not pay for in other situations. Apparently, then the criterion “end of life” plays a role. Suggestion: “children” and “palliative situation” could be a *modifier* (in first or second level for therapeutic need), in the same way as “immediacy” and “probabilistic nature”.



- Regarding “Overall health condition/theoretical capacity to benefit?”: Define in same way as in “therapeutic need” (i.e. already covered there)? Cave: this criterion might encompass several criteria: general level of health (worse off versus better off) versus capacity to benefit. Efficiency principle: focus on capacity to benefit; pitty principle: focus on the worse off. Correlation with end-of-life, and with socio-economic status?
- Regarding “Family situation”: could be a modifier criterion.
- Regarding “Impact on patient-relevant clinical outcomes **in real life**” and “Cure, symptom relief”: Split up for life expectancy and quality of life. “Expected” effects instead of effectiveness.
- Regarding “Contribution of intervention to efficient use of healthcare resources”: Maybe not necessary to include this criterion if opportunity costs are made explicit? QALY is a far too limited concept anyway (cfr previous value criteria)



APPENDIX 3. SUMMARY TABLE EMPIRICAL LITERATURE

Criteria included		Results and conclusions
Vetter (1989)¹⁶	<ul style="list-style-type: none"> - Age - Marital status - Occupational class - Sex 	<ul style="list-style-type: none"> - Preference for younger patients - Preference for married patients over single patients - Slight preference for giving priority to the unskilled worker - Slight preference for treating women <p>Most people find it impossible to choose between occupational classes (managing director versus unskilled worker) and between men and women.</p>
Tymstra (1993)¹⁷	<ul style="list-style-type: none"> - Age of patient - Responsibility for a family (e.g. father or mother of young children) - Public responsibility (whether the patient holds an important position in society) - Position on the waiting list - The disease or complaint is attributable to patient's own behaviour 	<p>As a rule, medical criteria play a central role in determining who has access to expensive and scarce medical treatments and services.</p> <p>Consumers are less willing to accept the age criterion for rationing than physicians and nurses. The preferred selection of patients who hold important positions in society was met with strong disapproval from the consumers.</p> <p>Conditions attributable to the patient's own behaviour were considered to be an acceptable criterion by a large number of the respondents.</p>
Zweibel (1993)¹⁸	Age	<p>Five approaches were used to measure attitudes about age-based rationing. Results regarding the acceptability of age-based rationing varied depending on the approach used to measure this attitude.</p> <p>The data suggest that few respondents would categorically withhold life-prolonging medical care to critically ill older persons who are near death and unlikely to recover, on the basis of their age. However, there is a strong acceptance, particularly among older people, that extending the lives of dying persons is wasteful.</p>
Nord (1993)¹⁹	<ul style="list-style-type: none"> - First exercise: resulting health state (full health versus sub-optimal health after treatment for life-threatening condition) - Second exercise: trade-off between 10 patients saved and outcome=full health and x patients saved and outcome=moderate pain and dependency on crutches for walking. 	<ul style="list-style-type: none"> - 79% (n=48) of respondents would treat patients in the order in which they were admitted to the hospital, 15% (n=9) was in favour of giving priority to the patient with the better expected outcome. - Those who disregarded difference in outcome when choosing between two patients at the hospital level also attached little weight to such difference in the budget-decision exercise (10 patients should be saved with moderate outcome to be equivalent to 10 patients saved with full health outcome). Those who did attach weight to difference in outcome in the hospital-level exercise (1st exercise) tended to do so in the 2nd exercise.
Fowler (1994)²⁰	<p>Vignettes:</p> <ul style="list-style-type: none"> - Medical need (severity of disease) - Age - Gender 	<ul style="list-style-type: none"> - Highest rated vignettes were: auto accident victim (no fault); cleft lip/palate, suicidal patient, AIDS from blood transfusion, auto accident (speeding). - Lowest rated vignettes were: removal dark spot on arm, office visit for scraped knee, in vitro fertilization, fertility tests.



	<ul style="list-style-type: none"> - Patients' responsibility for their condition - Efficacy of treatment or care - Socio-economic group 	<ul style="list-style-type: none"> - Overall, it was the condition and the nature of the proposed treatment that dominated the priority ratings and the willingness to cover a treatment. - Gender of the patient did not affect the ratings of priority. - There was a tendency to give higher priority to younger patients than to middle-aged or elderly patients. - Respondents gave a higher priority rating to the low- income population in only 3 out of 64 vignettes including this criterion.
Nord (1995)²¹	<p>Priorities between diagnostic groups</p> <p>Priorities across diagnostic groups</p> <ul style="list-style-type: none"> - Cost of treatment: direct costs and indirect costs 	<ul style="list-style-type: none"> - With respect to direct costs, 81% of respondents rejected cost as an important criterion for assigning priority - Nevertheless, giving priority to low cost patients but keeping some capacity for the treatment of high cost patients was preferred by 53% of respondents (N=63). 33% rejected giving priority on the basis of cost and 14% would maximise the health benefits by spending all the money on the low cost patients. - With respect to indirect costs, 87% rejected workforce participation as an important criterion for assigning priority. - In conclusion, the respondents persistently rejected the idea of assigning priority to patients in inverse proportion to the direct cost of their treatment (all else assumed to be equal). The majority would assign some priority to low cost patients, but they are willing to make sacrifices in terms of numbers of patients treated to ensure some degree of equity between high and low cost patients.
Bowling (1996)²²	<p>Health service vignettes</p> <ul style="list-style-type: none"> - Treatments for children with life threatening illness - Special care and pain relief for people who are dying - Preventive screening services and immunisations - Surgery, such as hip replacement, to help people carry out everyday tasks - District nursing and community services/care at home - Psychiatric services - High technology surgery - Health promotion - Intensive care for premature babies who weigh less than 680 g with only a slight chance of survival - Long stay hospital care for elderly people - Treatment for infertility - Treatment for people aged 75 and over with life threatening illness 	<p>Priority ranking as in previous column.</p> <p>Conclusions:</p> <ul style="list-style-type: none"> - Young people should get priority over older people. (50% agrees) - Everyone should have access to high tech treatments. - High cost technology (for example, transplantation and kidney machines) should be available to all regardless of age (80% agrees) - People who contribute to their own illness-for example, through smoking, obesity, or excessive drinking-should have lower priority for their health care than others (43% disagrees, 42% agrees) - The patient's quality of life should be considered in determining whether or not to use lifesaving treatment/technology (74%)
Nord (1996)²³	<ul style="list-style-type: none"> - Age <i>per se</i> (egalitarian ageism) - Duration of health benefits (utilitarian ageism) 	<p>in the context of life saving:</p> <ul style="list-style-type: none"> - 17.6% of the respondents chose to discriminate in favour of the young - 41.9% would extend priority irrespective of age



		<ul style="list-style-type: none"> - 40.5% would discriminate only against the 'very old' <p>In the context of improving quality of life:</p> <ul style="list-style-type: none"> - 21.6% of the respondents chose to discriminate in favour of the young - 75.6% would extend priority irrespective of age - 2.8% would discriminate only against the 'very old' <p>However, in a person trade-off exercise, subjects gave higher preference to treatments directed at younger patients, even under the assumption of equal life expectancy.</p> <p>Respondents take the duration of benefits into consideration when choosing between health care programmes.</p>
Cookson (1999)²⁴	<p>Rationing principles</p> <ul style="list-style-type: none"> - Lottery principle - Distribution according to immediate need (rule of rescue) - Health maximisation - Fair innings - Equalising opportunity for health (choicism) <p>Criteria</p> <ul style="list-style-type: none"> - Age - Self-inflicted condition or 'bad luck' - Increase in life expectancy - Increase in daily functioning (psychologically and/or physically) 	<ul style="list-style-type: none"> - 8% of the respondents (N=60) gave the same priority to all patients. - The lottery principle and choicism principle received less support than the other principles. - Gaining more health from treatment, being a child, having an urgent need of life-saving treatment and saving money in the long run are considerations for which there is agreement that they should be taken into account. - Considerable disagreement on taking the fact that a disease is self-inflicted into account. - Respondents weighted conflicting considerations against one another.
Shmueli (1999)²⁵	<p>Selection of patients in an emergency setting:</p> <ul style="list-style-type: none"> - Prolonging survival (rule of rescue) - Preventing severe and permanent disability 	<ul style="list-style-type: none"> - 27% of the respondents attach a high value to the act of rescuing human life, even when death is postponed by only one month, and prefer to rescue life over preventing a dramatic decline in the quality of life. - 40% value one rescued life-year, albeit with a certain degree of dependence, for the injured with life-threatening condition more than 30 years of remaining life in severe disability of the injured with non-life-threatening condition. - There is some trade-off between quality of life and life expectancy. For example, 17% gave priority to the patient with the non-life-threatening condition when the patient with the life-threatening condition's life expectancy was one month, but preferred the former patient to be treated first when his life expectancy was over one year. <p>These findings firmly support the strength of the 'Rule of Rescue' value in the Israeli population.</p> <p>The marginal value of a life year saved diminishes, however, with an increasing survival period;</p>
Ubel (1999)²⁶	<p>Criteria:</p> <p>Severity of illness</p>	<ul style="list-style-type: none"> - Many people place priority on allocating resources to severely ill patients, even if they would benefit less from treatment than others.



	<p>Health improvement</p> <p>Justification for allocation preferences:</p> <ul style="list-style-type: none"> - Fairness - Health benefits maximization - Severely ill deserve priority - Future research benefits - Prevent decline in health - Future economic benefits - Severe illnesses more urgent - Do not discriminate according to treatment benefits - Level the playing field 	<ul style="list-style-type: none"> - Stated preferences for allocating resources to severely ill were significantly decreased by subtle wording changes in scenarios. - When given the explicit option of dividing resources equally between the two groups of patients, a majority of subjects chose to do so. - When subjects were not given the explicit option of distributing resources equally between the two groups, subjects were divided about whether to give priority to severely or moderately ill patients. <p>Fairness was the most common justification for making choices as they were made.</p>
Roberts (1999)²⁷; Bryan (2002)²⁸	<p>The study tested the public support for some of the assumptions underlying the QALY maximisation approach, notably constant marginal societal value for increases in the size of health programmes, the level of risk, and the level of benefit.</p> <p>Criteria:</p> <ul style="list-style-type: none"> - Number of people - Chances of success - Survival - Quality of life (impact on usual activities and depression/anxiety) 	<ul style="list-style-type: none"> - In terms of the strength of preference for changes in the number of patients treated, the results provide some support for a proportionality assumption of QALY-maximisation. - The strength of preference for particular scenarios appears proportional to variation in the chance of treatment success, ceteris paribus. - Proportionality appears to overstate the strength of preference where differences in quality of life between scenarios were moderate. As the differences became larger convergence with a proportionality position occurred. <p>The study provides mixed evidence regarding the core proportionality assumptions concerning societal value in the QALY-maximisation model. In general, the data from this study are not much at odds with the assumptions. They are, however, at odds with reports from previous studies.</p>
Lees et al. (2002)²⁹	<ul style="list-style-type: none"> - Direct benefits to patients - Prevention of future illness - Quality of life - Length of life - Staff time spent with patients - Health-care environment - Strategic issues - Equity of access (health status inequalities) - Evidence of effectiveness - Local health board priorities - Number of people receiving intervention - Local access - Waiting time for non-emergency treatment - National government priorities - Appropriateness - Expressed demand 	<ul style="list-style-type: none"> - A majority (69% of the general public and 73% of clinicians) would not give a higher priority to the health-care needs of young people rather than older people. - A majority (85% of the general public and 78% of clinicians) would give a higher priority to the health-care needs of people who have a life-threatening illness rather than people with less serious conditions. - Opinion was divided over whether or not a higher priority should be given to the healthcare needs of people who do not contribute to their own illness (e.g. non-smokers), rather than those who do (48% of the general public and 41% of clinicians would give a higher priority to this group). - Other groups who should receive a higher priority for health-care include: the elderly; people with chronic illnesses; people with physical disabilities; children; people who are mentally ill; people living in poverty; and people who are terminally ill. - Greater importance should be given to care that improves health, quality of life or prevents ill health rather than to cost, or to government and local health board priorities;



	<ul style="list-style-type: none"> - Health-care cost 	<p>The public and clinicians give a priority weight of about 50% to direct patient benefits, 25% to the cost of health-care and 25% to strategic health issues.</p>
Wiseman (2004)³⁰	<ul style="list-style-type: none"> - Health programme (intensive training programme aimed at parents of young children with behaviour problems, vaccination programme aimed at protecting vulnerable groups against influenza, anti-smoking education programme aimed at children approaching adolescence) - Medical procedures (hip replacement, surgery for glaucoma, health bypass surgery) - Socio-economic status - Age - Expected outcomes - Costs 	<ul style="list-style-type: none"> - Behavioural training for children received the highest weight, followed by anti-smoking campaign for school children and vaccination against influenza. - Cardiac bypass surgery was given more weight than glaucoma surgery, which received a higher weight than hip replacement. - When asked to allocate resources between programmes for higher socio-economic groups and programmes for lower socio-economic groups, ceteris paribus, people allocated more money to programmes targeting lower socio-economic groups. - 92% of the respondents allocated resources equally across different age groups. <p>For making choices over the allocation of funds to healthcare programmes, only about half of the respondents used the information (55%). Slightly more respondents used the information to assist with choices over surgical procedures (62%).</p> <p>The method of aggregating individual responses influences the final rankings of programmes or criteria.</p> <p>The number of options presented to respondents influenced the decision to allocate funds equally. When there are only two options, the vast majority of respondents give equal allocations, whereas only 16% gave equal allocations when four options were presented.</p>
Dolan & Tsuchiya (2005)³¹	<ul style="list-style-type: none"> - Past years (age) - Past health - Future years without treatment - Future health without treatment 	<p>There is a strong effect of age: younger groups (40-year olds) are always chosen over older ones (60-year olds).</p> <p>Past health was significant in the question relating to the choice between the “imminence of death” versus “the concern for the young” but not in the question concerning the “severity of health” versus “the concern for the young”. Patients with worse past health are more likely to be given priority than those with good past health.</p> <p>Future health and future years without treatment are both non-significant.</p> <p>Preference for past health was mixed. It had a significant effect in the context of imminence of death, but was not significant in the context of severity of health.</p>
Schwappah & Strasmann (2006)³²	<ul style="list-style-type: none"> - Age (child, teen, employable age, senior) - Combination of initial and post-treatment quality of life (low initial-low post treatment QoL, low initial-high post-treatment QoL, moderate initial-high post-treatment QoL, high initial-high post-treatment QoL) - Effect on life expectancy (non-preventable loss of 5 years, no effect, gain of 5 years, gain of 10 years) - Frequency of the disease (rare versus common) - Cost of treatment (above versus under average) 	<p>Respondents preferred to give priority to programs with larger benefits in terms of increased life expectancy and quality of life, targeted at more common diseases, affecting younger patients, and with below average program costs.</p>



Tsuchiya & Dolan (2007)³³	<ul style="list-style-type: none"> - Socio-economic class - Health benefit in terms of life expectancy, given discrepancies between socio-economic classes in terms of life expectancy at birth 	<p>58% of the general public sample chose to target the worse-off. Clinicians and the general public have significantly different targeting preferences. 52% of the clinicians chose not to target.</p> <p>Targeting behaviour of the general public sample was explained by age and insurance status.</p>
Gallego et al. (2007)³⁴	<ul style="list-style-type: none"> - Treatment outcome - Current health status - Quality of life - Life expectancy - Age - Socio-economic status - Family commitments - Lifestyle 	<p>35% of the respondents considered that treatment outcome of the recipients was the most important factor for choosing between potential beneficiaries of high cost medications, followed by current health status (26%) and quality of life (15%). Life expectancy (9.2%), age (9.2%), socio-economic status (4.6%), family commitments (1%) and lifestyle (0.5%) were considered less important for making priority choices.</p> <p>In the hypothetical scenario where respondents had a limited pool of money they had to spend on two treatments: Medication A, to prevent heart attacks or Medication B to improve the quality of life of a person with cancer and lengthen that person's life, more than 50% of the respondents split the resources evenly between Medication A and B. 11% allocated all the resources to Medication A and 5% to Medication B. 15% percent decided to allocate more resources to Medication A compared with B.</p> <p>In a hypothetical scenario where respondents have to choose between patients, 80% of the respondents favoured a choice based on ability to benefit in terms of quality of life and length of life.</p> <p>Justifications given for the choices made:</p> <ul style="list-style-type: none"> - Utilitarian viewpoint (though bearing fairness and solidarity in mind) - Prevention over treatment (benefit more people with limited resources in case of prevention) - Blame – personal responsibility - Involvement in decision-making (50% of the respondents did not want to get involved in the decision making)
Kasemsup et al. (2008)³⁵	<p>Principles of rationing:</p> <ul style="list-style-type: none"> - Lottery - Rule of rescue - Health maximization - Fair innings - Choicism (equalizing opportunity for health) 	<p>In paired comparisons between principles, choicism came out as the preferred principle in each of the four paired comparisons. Choicism gives priority to those who suffer from diseases that are not a result of patients' own lifestyles.</p> <p>Fair innings came out as preferred principle in 3 out of four paired comparisons.</p> <p>Health maximisation was only preferred to lottery, and the rule of rescue was preferred to health maximisation and lottery.</p> <p>The lottery principle (first come first served) was never preferred.</p>
Mortimer & Segal (2008)³⁶	<ul style="list-style-type: none"> - Individual responsibility for own condition - Purpose of the intervention(prevention, treatment) - Type of intervention (lifestyle, medical) - Lives saved per year according to the evidence 	<p>Respondents are more likely to select less costly, more effective interventions with a strong evidence base where the beneficiaries did not contribute to their illness.</p> <p>Respondents prefer prevention over cure.</p>



	<ul style="list-style-type: none"> - Strength of evidence - Total cost - Out-of-pocket costs - Life stage of people to benefit from programme (young children, young adult, working-age adult, older-age retiree) 	<p>Interventions for young children were most preferred, followed by interventions for young adults and finally interventions targeting the elderly.</p> <p>Respondents are less likely to select interventions with a higher out-of-pocket contribution.</p> <p>Community values are inconsistent with simple health maximisation. However, it should be noted that respondents were more likely to select less costly, more effective interventions – confirming that it is an adjustment to, rather than an outright rejection of, simple health maximisation that is required.</p>
Chinitz et al. (2009)³⁷	<p>Vignettes:</p> <ul style="list-style-type: none"> - Transplants - Expensive treatments - Nursing care - Minor problems - Terminal conditions - Quality of life - Mental health - Fertility treatments - Second opinion - Anxiety relief screening - Addictions - Cosmetic treatments - Alternative medicine - Dental care 	<p>Over time, there appears to be a shift from prioritization of life-extending treatments towards increased relative preference for treatments adding quality of life.</p>
Johri et al. (2009)³⁸	<p>Age</p> <p>Moral principles:</p> <ul style="list-style-type: none"> - Equal treatment (all patients deserve the best medical care) - Patient need - Relief from suffering - Capacity to benefit/best outcomes - Maximize number helped - Family responsibilities - Guarantee chance for 'full life' - Duration of benefit (younger patients will enjoy benefits longer) - Personal responsibility for health - Economic productivity 	<p>With the exception of a scenario offering palliative care, respondents preferred offering scarce healthcare resources to younger patients in different clinical contexts.</p> <p>When respondents were asked to perform a moral exercise before answering the questions, the strength of the preference for the young reduced. The moral exercise asked participants to select which 3 of 10 possible allocation principles they deemed most important for the scenario under study.</p> <p>The most important allocation principles identified by respondents were equal treatment for all, meeting patient needs and promoting relief from pain and suffering.</p>
Quintal (2009)³⁹	<ul style="list-style-type: none"> - Health gain maximisation - Geographic equality of health gain 	<p>When faced with two situations involving equal total health gain, all respondents chose the scenario ensuring geographic equality of health gain.</p>



		<p>Between 70 and 80% of respondents (N= 70, 35 in each region surveyed) were willing to trade off quality of life for a more geographically equal distribution of health gains. Most of the respondents who were willing to make trade-offs were willing to forego between 10 and 30% of total health gain to keep geographic equality of health. There is, however, diversity between regions and limits to the opportunity cost of equality in terms of health gain foregone.</p>
Green (2009a)⁴⁰	<ul style="list-style-type: none"> - Severity of health condition - Socio-economic disadvantage 	<p>The majority of the respondents wanted to divide resources equally between competing groups, giving at least equal preference to the more severely affected group, and the more disadvantaged group, regardless of a stated lower potential health gain in these groups compared to alternatives.</p> <p>In the severity of health question 60% indicated that a unit of health gain in a severely affected patient group was of greater social value to that same unit of health gain in a moderately affected patient group, all else equal.</p> <p>When described by level of disadvantage, 80% of respondents stated such a preference, which indicates that they attach a greater social value to a unit of health gain in a disadvantaged patient group, compared to a more advantaged group, all else equal.</p> <p>Very few respondents (5%) took the option to opt out of a difficult decision and to 'let others choose'.</p>
Green (2009b)⁴¹	<ul style="list-style-type: none"> - Expected health improvement from the treatment - Value for money (cost-effectiveness) - Severity of health - Availability of other treatments 	<p>At an attribute level, the results show that the most important changes in attribute levels in the choice model, i.e. changes in utility for health technology scenarios, are in the "level of health improvement", followed by changes in attribute levels for "value for money", with change in "severity of health" the next important, and change in "other treatments" being the least important of the attribute-level differences.</p>
Louviere (2010)⁴²	<p>Possible principles for healthcare reform in Australia:</p> <ul style="list-style-type: none"> - People and family centered - Equity - Shared responsibility - Promoting wellness and strengthening prevention - Comprehensiveness - Value for money - Providing for future generations - Recognize social and environmental influences shape our health - Taking the long-term view - Quality and safety - Transparency and accountability - Public voice and community engagement - A respectful, ethical system 	<p>'Quality and safety' should get the highest priority, with 'people- and family centred care' and 'promoting wellness and strengthening prevention' a distant second priority.</p> <p>'Having a culture of reflective improvement and innovation' and 'public voice and community engagement' are clearly low priority. All other principles are in between.</p>



	<ul style="list-style-type: none"> - Responsible spending - A culture of reflective improvement and innovation 	
Blacksher (2010)⁴³	<p>Public values related to social inequalities in health.</p> <ul style="list-style-type: none"> - Equal health - Efficiency/health maximisation - Need 	<p>Participants' preferences (N=43) fell into one of three distributive preferences:</p> <ul style="list-style-type: none"> - Prioritize the disadvantaged (26%) - Equalize health outcomes between advantaged and disadvantaged groups (35%) - Equalize health resources between advantaged and disadvantaged (40%) <p>All but three participants moderated their distributive preferences to accommodate other health goals (maximizing health and prioritizing the sickest), particularly to prioritize the allocation of resources to the very sick regardless of their socioeconomic status (>50% of the respondents).</p>
Golan et al. (2011)¹⁰	<ul style="list-style-type: none"> - Need, appropriateness and clinical benefits - Efficiency (incl cost-effectiveness) - Equality, solidarity and other ethical and social values 	<p>The criteria and their weights from the conjoint-analysis survey are:</p> <ul style="list-style-type: none"> - 'Lives saved' (0.343) - 'Life-prolongation benefits' (0.243) - 'Quality-of-life gains' (0.217) - availability of alternative treatments (0.107), and - 'Other important social/ethical benefits' (0.087) <p>More than half of the respondents (58%) attached greater weight to 'life-prolongation benefits' than 'quality-of-life gains'.</p> <p>The criteria represent a pluralistic combination of needs-based, maximizing and egalitarian principles</p>
Mak et al. (2011)⁴⁴	<p>Health services to be prioritized:</p> <ul style="list-style-type: none"> - Treatment for children with life threatening illnesses - High technology surgery, organ transplants and procedures which treat life threatening conditions - Preventive screening and immunization - Surgery (e.g. hip replacement) to help people carry out everyday tasks - Health promotion/education services to help people lead healthy lives - Psychiatric services for people with mental illness - District nursing and community services/care at home - Long stay hospital care for elderly people - Treatment for people aged 75 and over with life threatening illness - Special care and pain relief for people who are dying - Intensive care for premature babies who weigh less than 680 g with only a slight chance of survival - Treatment for infertility 	<p>Rank order of health services as in previous column.</p> <p>Most respondents (58%) agreed or strongly agreed that "high cost technology should be available to all regardless of age," which somewhat contradicts the low ranking (9) of "treatments for elderly people"</p> <p>About 44% of respondents agreed or strongly agreed that "if resources are to be rationed then higher priority should be given to treating the young rather than elderly people."</p> <p>Most respondents (69%) agreed or strongly agreed that the patient's quality of life should be considered in determining whether or not to use lifesaving treatment/technology.</p> <p>55% of the respondents agree or strongly agree that people who contribute to their own illness should have lower priority for healthcare.</p> <p>Younger people gave a lower priority to elderly, but higher priority to younger people than elderly</p> <p>Tertiary education preferred more health promotion (rather own view, than societal view)</p> <p>Age criterion might not be well understood in questions and might not incorporate other elements: i.e. QALY</p>



Mason et al. (2011)⁴⁵	<p>Four categories of healthcare intervention:</p> <ul style="list-style-type: none">- Quality of life enhancing interventions- Life extending interventions (i.e. reducing the risk of death each year)- Interventions which improve both quality of life and life expectancy- Life saving interventions (i.e. if not provided, premature death will occur)	<p>Five factors emerged: 'life saving to maximize the size of the health gain', 'everyone deserves a chance at life', '(potential for) own benefit', 'maximum benefit for (perceived) lowest cost' and 'quality of life and social responsibility'.</p> <p>Respondents considered not only the type of health gain received from an intervention as important, but also the size of the health gain, who received the health gain and an individual's personal responsibility. Gains associated with life saving interventions are valued more highly than those which are life extending or quality of life enhancing.</p>
Anderson (2011)⁴⁶	<ul style="list-style-type: none">- Safe living- Life style (diet, exercise, etc)- Contribution to the community through caring for others- Talents- Sexual behaviour- Age- Marital status- Australian citizen or employed	<p>Few respondents are consistent egalitarians, i.e. answering "equal priority" to all questions. However, many were strong egalitarians, prepared to discriminate only on select occasions.</p> <p>A high proportion of respondents chose "Equal Priority" for both patients: 72 to 89 percent to the Citizen group; 65 to 73 percent to the Sexuality group; 63 to 90 percent to the Gifted group; and 50 to 69 percent to the Life Style (except overweight item) group.</p> <p>On the other hand, significantly large proportions of respondents believe that priority ought to be given to those patients who are in demanding caring roles in society (individuals caring for children or elderly relatives). The fact that so little explanation is forthcoming (in either clear demographic or ideological terms) regarding the Caring factor indicates that such preferencing is community wide.</p> <p>By contrast, giving preference to those who are heterosexual and/or conservative in their sexual behaviour is a highly contentious and divisive issue within the community.</p>
Edlin (2012)⁴⁷	<ul style="list-style-type: none">- Own responsibility for condition- Inequality in lifetime health	<p>Poor health prospects are weighted more heavily than personal responsibility for ones health condition. Thus, 'blameworthy' groups who experience a moderate drop in quality of life due to their behaviour, receive higher priority than an otherwise 'thrustworthy' group if they also experience poorer health prospects.</p> <p>In all choice sets presented, the priority remained to treat those who have less lifetime health. Results suggest that if the blameworthy group had an expected lifetime health of 69.23 QALYs, then marginal health to them would be given the same priority as marginal health to a thrustworthy group with expected lifetime health of 70 QALYs. If its lifetime health was less than 68.23 QALYs, it would be given higher priority.</p>
Lim (2012)⁴⁸	<ul style="list-style-type: none">- Severity of disease (level of the quality of life without treatment, life years remaining without treatment)- Health improvement effect (survival gain after treatment, quality of life gain after treatment)- Patient's household income level	<p>The study found strong public support in South-Korea for the principle of equal opportunity for treatment.</p> <p>Through the focus group interviews, it was found that respondents thought priority should be given to the most disadvantaged before treatment, even if their health gains are smaller.</p> <p>With respect to personal responsibility, most respondents did not support a patient whose lifestyle was mainly responsible for a disease, although many of them changed their initial decisions when the case presented became more severe.</p>



		<p>With regard to age, most favoured the young over the old.</p> <p>The discrete choice experiment results showed that the severity of disease, health gains, and patients' socioeconomic status significantly influence their choices. Higher priorities were given to patients with higher QALY gains, less remaining life, a lower quality of life before treatment and a lower level of household income. In contrast to the interviews, the discrete choice experiment found a higher importance of health gains.</p>
Linley (2013)⁴⁹	<ul style="list-style-type: none"> - Severity of the underlying disease (society would generally give priority to the expensive relief of a very serious condition than to the inexpensive relief of a mild condition) - Unmet need - Significant innovation - Wider societal benefit (impact of a product beyond direct health effects. These might include benefits related to reduced reliance on carers and other wider societal factors) - Disadvantaged populations (poorer people and ethnic minorities) - Children - End-of-life treatment - Cancer treatment - Rare diseases - Stakeholder persuasion 	<p>Respondents supported the criteria proposed under the value-based pricing system: more weight was given to severe diseases, products that address unmet needs or are innovative, but only if they offer substantial health benefits, and have wider societal benefits.</p> <p>The study found a preference for treating diseases where there are no alternative treatments available, despite the assumption of little health gain in that patient group compared with considerable improvements in health gain in patients with several treatment options available.</p> <p>Treatment for common diseases that produce considerable improvements in health gains was also strongly preferred to treatments for rare diseases that produce little improvement in health.</p> <p>Respondents did not support the end-of-life premium or the prioritisation of children or disadvantaged populations, nor the special funding status for treatments of rare diseases, nor the Cancer Drug Fund.</p> <p>The study suggests that, all else being equal, severity of disease, unmet need, and medicines that reduce reliance on informal caregivers (representing wider societal benefits) are supported by society as valid NHS resource prioritisation criteria.</p> <p>The study demonstrates that preferences are sensitive to the health gains that may be realised and the number of patients who may be treated, which contrasts with the utilitarian view of population health maximisation.</p>
Watson (2012)⁵⁰	<ul style="list-style-type: none"> - Location of care - Public consultation - Use of technology - Service availability - Patient involvement - Management of care - Evidence of effectiveness - Health gain - Risk avoidance - Priority area 	<p>All attributes except risk avoidance were significant. The most important attribute levels were a large health gain to many people, care being provided in teams, using latest or cutting-edge technology and 24 h service availability. Local priorities were valued higher than national priorities.</p> <p>Based on the preference values elicited through a discrete choice experiment, acute services rank higher than community services or long-term condition services in one specific Scottish healthcare organisation (National Health Service (NHS) Dumfries and Galloway).</p>
Diederich (2012)⁵¹	<ul style="list-style-type: none"> - Severity of disease - Quality of life - Unhealthy life style 	<p>Health status is by far the most important attribute (relative importance: 50.0%).</p>



-
- Age
 - Family status (single with(out) dependents, couple with(out) dependents)
 - Occupational status

Quality of life is the second most important attribute but gets only half of the importance score for health status (relative importance: 24.7%).

The relative importance for age is 12.0%. The most preferred age was 43, which represents people of working age. The utilities decrease for both decreasing and increasing age, with a steeper decrease for increasing age.

Family and occupational status represent the socioeconomic background of the hypothetical patients, as well as level of social responsibility. With relative importance values of 7.9% and 4.6% respectively, these attributes play only a minor role in determining preferential treatment. Patients with social responsibilities are preferred to those without caring obligations. Within this group, singles are preferred to couples.

Even less important for determining priority treatment is the patient's economic status, i.e. his or her occupation: the patient with the lowest status is preferred over the one with the highest status.

The relative importance weight of attribute "lifestyle" is negligible (0.8%) and the utilities are not significantly different from zero.



APPENDIX 4. DATA EXTRACTION SHEETS PREFERENCE ELICITATION TECHNIQUES

Appendix 4.1. Ranking exercises (ranking and combinations with other methods) (6)

Ref.	Aim study/method	of	Acceptability respondents	to	Data collection/cost	Internal consistency	reproducibility	Validity
Bowling (1996)²²	UK national public preference on priorities for treatments for groups of people with ranking exercise + preference for criteria for rationing with Likert scale (rating)		75% response rate (2005 interviews)		Face-to-face interview	Lowest ranking was for older people this is consistent with rating results that young should have priority, but inconsistent with rating results: everyone should have access to high tech treatments	Questionnaire was tested with pilot studies beforehand	Highest ranking was treatments for children with life-threatening disease and special care for people who are dying; lowest ranking for infertility treatment and people over 75 with life threatening diseases (other studies: public says age is not a valid criterion) Patient quality of life and high-technology care, young should have priority if rationing needed was rated important and self-responsibility is (42%) important
Mak et al. (2011)⁴⁴	To examine view of Chinese people in Hong Kong on health care prioritization (as Bowling 1996) Ranking of health services + Likert scale (rating) for agreement with criteria and principles		1512 respondents, non representative sample: hospital staff, patients, people in park Assistants helped to complete the questionnaires in person		Hard copies of questionnaires was distributed in hospitals, parks + assistance Web-based questionnaires were send to undergraduate students	Lowest ranking was for older people whereas inconsistent with rating results: everyone should have access to high tech treatments, but consistent with rating results that young should have priority		High priority treatments for children (according with other studies) 55% agrees that if own responsibility than you deserve less healthcare (less younger people preferred this) Younger people gave a lower priority to elderly, but higher priority to younger people than elderly Tertiary education preferred more health promotion (rather own view, than societal view) Same ranking as Bowling (1996) except end-of-life care(cultural difference?) and treatment premature babies gets lower ranking, higher ranking for health promotion ,high-



					<p>tech surgery and long stay in the hospital</p> <p>Hong Kong has less agreement on Likert scale that everyone should have treatment</p> <p>Age criterion might not be good understood in questions and might not incorporate other elements: i.e. QALY</p> <p>Non-respondents bias might be active</p>
Mason, Baker & Donaldson (2011)⁴⁵	<p>Investigate what features of health gains and interventions are important</p> <p>Q methodology- Ranking of 36 health interventions + preference of choice= factor loading</p>	<p>52 people of north east England, representative according to age, status and sex</p>	<p>Social research company was contracted to recruit sample, every respondent received 20 pound</p>		<p>Information was given about QALY and limited budget and study set up as a societal problem</p> <p>Gains that are life saving are more important than gains that are life-extending or better quality of life, reason not necessarily rescue argument but here only interventions with large life gains</p> <p>Low priority if own fault : smoking or alcohol (according to evidence if insufficient supply i.e. liver transplant, mixed evidence if general wording)</p>
Chinitz et al. (2009)³⁷	<p>To assess new public management and regulated competition</p> <p>Ranking in 1997 and 2001 (cost and effectiveness information)</p>	<p>1005 respondents of the Israeli public</p>	<p>Phone interview</p>	<p>Between 1997 and 2001: Less consensus on ranking and less prioritization life-extending treatments if terminal ill, even in the case of life extending treatments in non-terminal conditions and more prioritizing quality of life improvement</p>	<p>Shift in ranking after cost-effective information was added to less care for terminally ill and more for quality of life (other US study has lower ranking than this study)</p>
Dolan & Tsuchiya (2005)⁵²	<p>Investigate preference of young over the old</p> <p>Ranking</p>	<p>2000 people were invited by post and only (257) 13,2 % responded, 192 respondents were</p>	<p>Postal questionnaire + afterwards interviews: questions were</p>		<p>People give priority to the young</p> <p>Results depends on attributes: age ranges</p>



selected for a representative sample. 128 (66,7%) participated

explained to groups of 6-8 people and self-completed

Appendix 4.2. Rating exercises (VAS scale, Likert scale)

Ref.	Aim of study/method	Acceptability to respondents	Data collection/ Cost	Internal consistency	Reproducibility	Validity
Anderson et al. (2011) ⁴⁶	Views of Australian general public: understanding the role of personal characteristics when allocating healthcare resources Choice method: 28 pairs of patients based on 28 individual characteristics (i.e. smoker vs non-smoker) + Likert Scale questions: favor strong to equal opportunity	15% response rate due to large task of 150 questions, Sample: more women, under-sample immigrants and non-degree holders	Three surveys sent by post	Only 9 of 188 respondents followed the consistent "equal priority" response for 28 cases.		Support for equal opportunity in most cases but also tendency to choose group with characteristics similar to ones own Sensitive issues (race gender)- authors encouraged people to answer truthfully, tried to establish a cooperative relationship, and respondents asked not to answer if felt "not comfortable" Responses not sensitive to hypothetical cases?
Baron & Ubel (2001) ⁵³	To analyse priority rankings based on cost and effect VAS, VAS instructed interval (three		Web survey	People were consistent in three different methods prominence effect: that benefit weighs more than cost	According to this study cost-effective rankings change after considering the results	All methods show same results: prominence effect: after people see ranking they benefit more those in ranking with larger benefit +



	different levels of interval explained) Person trade-off					numerical judgements for treating mild conditions are often too high (can be overcome by additional instructions next to scale) hypothetical cases do they represent real decisionmaking?
Lees et al. (2002)²⁹	To test the validity of a health priority ranking methodology (PSI) with the wider Scottish public of Argyll and Clyde Open and Likert scale questions	1969 participants and 51% response rate, but underrepresentation of under 35 years and overrepresentation of 55-74 years old.	Survey sent by post (less resource intensive than conjoint analysis or willingness to pay)	Majority of the public (69%) would not give a higher priority to the needs of older people, whereas "the elderly" were prioritized as a group	Earlier check with focus groups of questionnaire	In accordance with other studies: priority setting for people with life-threatening diseases, elderly, chronic illness physical disabilities, children, people who are mentally ill, people living in poverty, terminally ill. Different with other findings was that there was no higher priority to the needs of older people. Comparing to PSI ranking, the biggest difference is 50% weight of general public to patient benefits and 25% to cost
Tymstra (1993)¹⁷	Dutch questionnaire about criteria for rationing and preference for	1700 Dutch citizens, 95,8% response rate, average 44 years and 55% were women	Sent via post? By Dutch Consumers Organisation			Criterion: age and public responsibility or responsibility not a lot of support, own



	inclusion in benefit package, Likert scale questions and rating scale			responsibility does play a role High preference for inclusion in basic package: periodic medical evaluations; exclusion: in vitro fertilisation
Zweibel (1993)¹⁸	U.S. public questionnaire about the role of age when allocating resources Choice based: Vignettes/Likert scale	505 of 1417 completed, 71% response rate (response rate between 70-75% is considered to be ok), sample representative over all ages	Telephone interviews	Questionnaire was developed over several months, pilot with 58 people No support to give treatment to younger instead of older people, average priority for severity of illness, life-expectancy and cost of illness, but no support for life expanding treatment if no effect No correlation between self-interest and age preference, however respondents with experience of life prolonging treatment were more in favour of age-based rationing Respondents who believed in the concept of “full, long life” were strongly correlated with wavering life prolonging treatment



Appendix 4.3. Choice based questions: simple choice, conjoint analysis, budget impact or combinations with one of the choice methods

Reference	Aim of study/method	Acceptability to respondents	Data collection/cost	Internal consistency	Reproducibility	Validity
Linley, (2012) ⁴⁹	Hughes Choice-based experiment: 11 different resource configurations of NHS budget per criterion (table 1) for two competing populations, i.e. criterion: severity disease: part 1: (all else being equal) choose of 100 patients to treat with severe or moderate health problems; part 2: cohort 1: change effectiveness for severe disease, cohort 2: change cost for severe	2000 UK respondents	Internet based			Excluding bias, people who drop out, do not count Hypothetical scenario's Choice of terminology 11 Cases per criterion, no interaction criteria Respondents influenced by own environment (i.e. health status) Web research: underrepresentative for 65+ People with severe disease, unmet need and innovative treatments were supported if large health gain; no support for end-of-life premium, children or rare diseases
Mossialis & King (1999) ⁵⁴ See also Busse et al. (1999) for Germany and King & Maynard (1999) for the UK	Q6-8 of Eurobarometer: choices regarding preference for criteria in healthcare priority setting	1000 people of every country: France, Italy, UK, The Netherlands, Germany, Sweden Non-responding households were replaced by others				In support with other Eurobarometer studies age is not supported as a criterion for priority setting (only 20%) (except for Netherlands 50%) (see Lees et al. 2002, difference priority age group or age as criterion?) Sensitivity analysis was done with a subset of models because of



					excluding “don’t know” answers Although survey claimed not to enhance group feelings in contrast to other group methods, self-interest did not play a big role apart from the Netherlands
Kinnunen et al. (1998)⁵⁵	Find attitudes towards prioritization in healthcare Budget impact study: respondents were asked to tick 10 boxes were there should be a 7% cut in expenses and a 7% raise in expenses	59% response rate 1178 (of 2000 sample) Finnish general public	Postal questionnaire		Attempts to reduce choice method: budget, categories, resource allocation, 7% cutback was close to real situation Home care was top priority Respondents might be biased by questions + large resource amounts Specialized (high-tech) care was prioritized when budget diminished (in accordance with other findings)
Lim et al. (2012)⁴⁸	To identify the principles the Korean public considers important and the trade-offs between different values in health-care resource allocation practices Two separate methods : Qualitative (focus groups) + DCE	800 participants, not representative for the Korean general public, income and education relatively high	Internet survey	There was a rationality test: 84 respondents had rationality issues	All choice sets in DCE were given an explanation, might bias outcome DCE coefficients are according to expectations: higher QALY gains, less remaining life, lower QOL before treatment, lower level of household income Health gains were important in DCE, but in focus groups severity of disease and socioeconomic background was more important than health gains,



Bryan et al. (2002)²⁸	Investigating whether the QALY maximization approach is supported by the public DCE: choices between two different healthcare scenario's	A random sample of 909 households within Hertfordshire Health Authority boundaries (462 or 26,2% no response; 391 or 22,2% refuse to answer)	Face-to-face interviews conducted by public survey company (MORI) that used experienced interviewers	By using dominant examples, there was a non-consistency test, respondents who failed it, were defined non-consistent (88 respondents = 9,7% failed)	Different research claims that there is a test re-test reliability for conjoint analysis	Pilot study showed that results did not make a difference if clinical info was added or not Always same financial cost, no extra cognitive burden Only 77 or 8,5 % choose always in accordance with QALY maximization assumptions, but in general support for QALY (in contrast with other findings, who stress more equality principles instead of maximisation) Study used only daily activities and anxiety as quality of life Limitation: survival gain is linair (same between 1 and 2 years as 4-5 years)
Gallego (2007)³⁴	et al. To gather information about views of the general public of Sydney (Australia) about access to High Cost Medications in public hospitals respondents had to rank factors deemed important from 1 to 4 + choose between two patients to allocate high cost medicines in public hospitals	67 % people responded (200 of 29) (no random selection) Not respondents because: not interested, don't have time or could not read English	People were approached by an interviewer in shopping centres and public transport			Pilot study was tested Most important factors ranked were treatment outcome, health status, quality of life, life expectancy (socio-economic status and lifestyle less important) (in accordance with other studies, i.e. Eurobarometer) Identical case people (80%) choose for the one who will benefit most in terms of quality and length of life Case with different costs of treatment: people (60%) would spend money evenly



				(in accordance with other studies not necessarily prolonging life but also prevention) DCE might help to make tradeoff between criteria
Golan et al. (2011)¹⁰	To review criteria used for new healthcare technology DCE: Choosing between two technologies with two criteria per technology; 40 questions about 20 minutes	Convenience sample: 74 respondents from Canada and Israel: 64 Israeli (44 physicians or researchers, 5 patient representatives, 12 general public) 13 researchers Canada 100% response rate	Internet based + Open access software: 1000minds	Criterion of cost was excluded because to ambiguous in pilot study No data on sample SES, age, sex More than half of respondents prefers life-prolonging benefits instead of quality of life gains (so according to clinical effectiveness criteria today)
Green (2009a)⁴⁰	To examine preferences of the UK general public over the allocation of healthcare resources (role of severity of health) Respondents had to make a choice between groups with different severity of health or other disadvantage; four different questionnaire formats (based on Ubel, 1999)	Random sample of 251 (of 261) people in Southampton (UK) 96 % response rate 3,8 % (10 respondents) indicated "don't know" or other, between 3,1% and 7,4% indicated let others choose (more in-home respondents, because in-home interview)	Face-to-face interview at home by Ipsos MORI Social Research Institute Interviewers read out the question and response options and showcards with info	Sample according to guidelines Ubel (1999) Low percentage of don't know questions or others choose strengthens true preference There is a preference for treating severely ill (in accordance with Ubel; so no strict health maximization) but greater preference for treating disadvantaged (in accordance with Rawls and others suggesting more urgent needs) Simple scenario's and there was no trade-off between severity of illness and



Green (2009b)⁴¹	<p>To explore distributive preferences of general UK public using social value judgements</p> <p>DCE: respondents make choices between description of alternative health technology scenarios</p>	<p>Random Sample of 263 respondents (no response rate because random sampling)</p> <p>4 respondents indicated don't know, 26 respondents did not provide a preference (more in-home people, because in-home interview)</p> <p>Majority did not found the question very or not all difficult, but very to fairly difficult (but no significant differences in difficult answers)</p>	<p>Face-to-face interview by a public survey company (Ispos MORI)</p>	<p>5% (14 of 259) of the cases failed a 'consistency check' question was used where one of the options was dominant: all attributes were regarded as more desirable</p>	<p>All the scenario's were checked for plausibility i.e. potential that health technology would fit the scenarios</p> <p>Aim was explore preferences over generic attributes, no detailed info given</p> <p>Level of health improvement most important followed by value for money followed by severity of health and other treatments last</p>
Johri et al. (2009)³⁸	<p>To determine whether moral reasoning exercise can improve quality to surveys of healthcare priorities: focusing on patient age</p> <p>Choice between 35 or 65 year old in 5 different cases by using a rating scale (between -5 and +5, 0 indicating no preference)</p> <p>Half of respondents had a moral reasoning exercise</p>	<p>2574 (8% responded to invitation), 2020 (79%) completed baseline survey</p> <p>1247 (62%) completed follow-up</p> <p>13 respondents discarded because intentionally wrong answers, so 78% included in baseline and 48% in follow-up</p> <p>Respondents, randomized, mirroring age and sex composition of participants country</p>	<p>Web-survey</p>	<p>Consistency check was performed by two liver and lung transplant scenario's that were identical, almost no in-consistency</p>	<p>Both groups changed over time their responses, but people without moral reasoning exercise had more change towards neutrality for age</p> <p>Group with moral reasoning exercise had higher "no preference", less extremes for young or old, less emphasize on life-style factor (more closer to results of focus groups, more deliberation)</p> <p>Age preferences favor younger patients (consistent with other findings) but much less important after moral exercises, so not in accordance with other studies where age is very important)</p> <p>Three principles selected as most important were</p>



					equality of treatment, meeting patient needs and relief of pain (not in accordance with age preferences nor maximization of best outcomes)
Kasemsup (2008)³⁵	et al.	Investigate to which extent principles for rationing were preferred by a sample of Thai citizens Choice between two patients who had different conditions different scenario's with different principles	780 of 1000 (78%) responded 50% people waiting in room for dentist, 50% physicians dentists, nurses and pharmacists Six respondents excluded because of no answer		Choicism was the rationing principle that prevailed in all scenarios (no healthcare if own responsibility) (not according to previous study), than fair innings, than rule of rescue, than health maximisation Factor analysis proved that principles were distinct
Matschinger Angermeyer (2004)⁵⁶	&	To examine to what extent public is willing to allocate financial resources to the care of people with mental disorders Respondents had to select 3 of 9 diseases for which available resources should not be withheld + rating: by putting 6 diseases on a scale	5025 interviews = a response rate of 65,1% The sample was representative random sample according to German population statistics	Face-to-face Interviews in private households	There was a personal value orientation exercise where respondents express desirability for each orientation before the preferences were investigated This choice experiment instead of rating choices (Guttman scale); two assumptions: (1) all subjects locate the diseases the same way along the preference dimension, (2) subjects choose only those diseases that are close to each other on the continuum 89% of respondents choose that financial resources for



						<p>cancer should not be shortened, after that Aids (51%) and cardiovascular disease (49%)</p> <p>Last place mentally ill (in accordance with other literature) because people believe own responsibility</p> <p>Socio-demographic: Age was only significant factor, older people more willing to allocate financial resources for mental disease</p>
Mortimer & Segal (2008)³⁶	<p>Investigate If health maximization plays no role for the public, what are the other characteristics that play a role</p> <p>DCE with 32 scenarios that were randomly distributed across four versions of the questionnaire</p>	<p>Questionnaires sent to 4000 Australian addresses, 274 responded, 176 unopened, 21 excluded by age, too difficult, too busy, other reasons</p> <p>3 no choice so 271 respondents answers were available</p> <p>Relatively wealthy, well-educated population</p>	<p>Questionnaires were sent by post</p>	<p>One of the scenarios had a dominant response (small number selected the dominated profile (8/274))</p>		<p>Pilot tests of questionnaire to reduce size of attributes, comprehensive DCE is too difficult</p> <p>Only life saving programs</p> <p>Only two options, there was no no-choice option</p> <p>Respondents received a separate sheet with a list of examples</p> <p>Preference for young people even after correcting for duration of benefit</p> <p>Preferences for health programs were dependent on own responsibility</p> <p>People select less costly more effective treatments but non-health arguments are also important so adjustment of QALY maximisation needed</p>
Roberts et al. (1999)²⁷	<p>To explore whether QALY maximization</p>	<p>91 respondents randomly selected to</p>	<p>Face-to-face interviews by public</p>	<p>6 respondents failed the consistency test</p>		<p>When QALY difference is very big, than people</p>



	is a good predictor for public responses for healthcare priorities DCE with 16 scenarios- three groups with different clinical information	represent south-England	survey company MORI	and choose 'inferior' option	choose for QALY maximization, if still large QALY gain difference not always QALY maximization (in accordance with other findings) If less clinical information more QALY maximization (clinical information induced emotional response) No support for treatments with little benefit or little improvement in quality of life There wasn't more engagement if there was more clinical information
Schmueli (1999)²⁵	Investigate priorities of Israeli public aged 45-75 in allocation of resources: focus on trade-off life expectancy and quality of life Choice method: choice between two people for treatment + option by lottery	Sample of 2006 people (of 2030 = 98,8%) response rate	Face-to-face interviews		Population characteristics determine outcome: Age (older are more in favor of lottery), level of education (more in favor of quality of life) and religiosity (more rule of rescue) are the main determinants of the choices 27% of people prefers to rescue people even if only one month life expectancy, 40% prefers to rescue person for 1 year instead of 30 years of QoL prevention, 53% assigns greater value to rescue of life for 5 years than preventing 30 years of disability. (so marginal value of saved lives decreases)



						<p>There is a trade-off between quality of life and life expectancy</p> <p>10 to 14% accepted lottery (including leaving decision to physician)</p> <p>Cases were only old age</p>
<p>Schwappach & Strasmann (2006)³²</p>	<p>To investigate test-retest reliability of Internet-based stated preference survey for treatment programs.</p> <p>Choice method: Stated preference survey: pairwise comparisons of treatment programs + budget pie or allocation of points to indicate strength of preference</p>	<p>843 individuals completed T1 (response rate 84%)</p> <p>716 individuals completed T2 (relative response rate 85 %, relative response rate 72%)</p> <p>Not representative sample</p>	<p>Web survey</p>	<p>Consistency test by dominant answer on all levels: 95% passed.</p> <p>Transitivity test: instead of A versus B from within chosen scenarios, an unused scenario C is used instead of B to test: if a dominates b and b dominates c than a dominates c</p> <p>75 % passed the test.</p>	<p>Two surveys with 34 days in between</p>	<p>High consistency in answers comparing to literature (5% to 25%)</p> <p>No answer option was more taken by people with lower education</p> <p>Via internet sample is biased to more younger and well educated</p> <p>The re-test reliability of allocation of points was moderate to good comparing to the literature</p> <p>Respondents were more likely to prioritize between alternative treatment programs competing for funding and stronger prioritizations (by Chow-test)</p> <p>Time between response seems to be an answer intensifier</p> <p>Opt-out choices can bias results</p> <p>Qualitative comments to check if people did not choose arbitrarily</p>



Tsuchiya & Dolan (2007)³³	To investigate public (UK) preferences about maximize life expectancy Choice method: choose between two methods with different life expectancy	271 of 1000 responded (27% response rate) Questionnaires were Randomly assigned	Postal survey	58% of the general public chose to benefit the social class with lower life expectancy at birth (strong correlation with age and insurance status)
Ubel (1999)²⁶	Exploring stability of peoples preferences (US) for treating severely ill (even if no health gain) Adjustments to Nord's questionnaire: choice between treating two groups with different severity and different health gains	479 Potential jurors selected from voter registration records of Philadelphia (US)		No ranking method was chosen because no info on strengths of preferences No willingness to pay method, because unreliable According to Nord's study: severely ill were more favored, but minor wording changes weakens effect of favor
Vetter (1989)¹⁶	To investigate what the public (UK) decides when resources are not sufficient to treat everyone Choice based method: choice between two individuals	719 of 5145 responded (14%) randomly chosen from the electoral registry		Preference to treat the young (relatively easy to answer question) in case of leukemia and heart attack Favour for married people, slight favour for unskilled worker and women (harder to choose)
Watson et al. (2012)⁵⁰	Investigating public (UK) preferences in healthcare priorities for resource allocation DCE: 64 scenarios	Random sample of 86 (of 100) participants invited by post	Face-to-face interview	The use of technology has significant weights, risk avoidance is not statistically significant Acute service area bids tend to rank higher than



	+ weighted benefit scores were constructed for 12 health services (by bids) by summing the weights of DCE responses				community service or long-term conditions There were many scenarios which made the DCE complex The attributes are based on national UK attributes that are important for people in general of UK
Wiseman (2004)³⁰	Investigate alternative methods for eliciting public preferences for healthcare allocation Pie method : allocate and extra \$10 million of healthcare resources across competing programmes in three levels: healthcare programmes, medical procedures and population groups (criteria SES and age)	Convenience sample of 373 attending two central Sydney medical clinics (72-83% response rate across the four questions)	Interviewer assisted questionnaire: asked for consent, background info, guide through questions	Piloted on 50 citizens	Additional information about each programme, expected outcomes and costs was provided, but this had no effect on the outcome It is likely that the number of options presented influenced the allocation of funds, i.e. vast majority gave equal allocations when there were only two options to choose from. Regarding first level: More funds to behavioural training programme, than anti-smoking and finally influenza vaccination Second level: Highest weight of public to cardiac bypass graft, than glaucoma, finally hip replacement Third level: People were more in favour of programme favoring people with low socioeconomic (7,4) status and low current health status (6,4)

HAND SEARCH



Diederich (2012)⁵¹	To probe the acceptance of priority setting in medicine and explore the practicability of direct public involvement Mixed-method design: 34 yes or no questions and 2 DCEs (one DCE with cases with patients with different characteristics and one DCE with cases with new treatments)	Randomised sample of 2031 people over 18 years old and living in private households in Germany (representative for Germany) General response rate (2031) 56,8% Specific response rate of 2031 for DCE was 94,3%	Computer assisted face-to-face interviews	Good or bad lifestyle was not weighted high in both methods for priority setting, but people that perform extreme sports or take heroin should pay a higher copayment (explanation specific wording?) When analyzing consistency for age groups there was no consistent preference for a certain age group	By both methods: Patients with life threatening or acute diseases were prioritized, socio-economic elements were not considered to be relevant; low weights for good or bad lifestyle; nor preference for age groups In the DCE less resemblance between characteristics respondent and answers than questionnaire, however the downside for DCE is strategic behaviour
Louviere (2010)⁴²	Public preferences for healthcare reform in Australia Best-worst scaling (Case 1)	Sample of 204 respondents Participation rate of 85%	Internet based		Importance of quality and safety in healthcare Authors checked if respondents understood the principles and 7 of the 15 principles were understood by less than two-thirds of the respondents. Authors argue that rating scales are not used consistently



APPENDIX 5. PRE-TEST CHECKLIST

Objectif du prétest :

Vérifier que le questionnaire est compréhensible pour tout tant quant au vocabulaire que pour les consignes.

Les réponses ici ne nous intéressent pas vraiment ; la personne qui participe au prétest n'est pas obligée de répondre.

Notez toutes les difficultés directement sur le questionnaire ou dans un doc à part. Toutes les infos sont les bienvenues.

Point d'attention

Texte d'intro :

- Quel sentiment ?
- Est-ce que c'est compréhensible ?

A chaque question demander :

- Est-ce que vous savez comment répondre ?
- Est-ce que vous avez compris tous les mots ?

Pour les explications (pop up) :

- Est-ce que vous avez compris l'idée ?
- Est-ce qu'il y a des mots difficiles ?

Question QoI :

- Est-ce que le schéma est clair ?
- Est-ce qu'il est utile ?

En général,

- Est-ce difficile ?
- Quand on se retrouve face à un tel exercice (scenarios), comment raisonne-t-on ?

Commentaires

Doel van de pre-test

Nagaan of de vragenlijst verstaanbaar is voor iedereen, zowel op het vlak van woordgebruik als op het vlak van de instructies.

In deze fase zijn we niet echt geïnteresseerd in de antwoorden op zich ; de persoon die deelneemt aan de pre-test is zelfs niet verplicht om te antwoorden.

Noteer alle problemen rechtstreeks op de vragenlijst of in een apart document. Alle informatie is welkom.

Aandachtspunten

Inleidende tekst :

- Welk gevoel ?
- Is de tekst verstaanbaar ?

Bij elke vraag vragen :

- Weet u hoe u moet antwoorden ?
- Begrijpt u alle woorden ?

Voor de verklaringen van onderlijnde woorden (pop-ups) :

- Begrijpt u het concept/idee ?
- Zijn er moeilijke woorden in de verklaringen ?

Vraag over kwaliteit van leven :

- Is de figuur duidelijk ?
- Is de figuur nuttig ?

In het algemeen :

- Is het een moeilijke vragenlijst ?
- Wanneer u een dergelijke oefening moet doen, met scenario's waartussen u moet kiezen, hoe redeneert u ?

Commentaren



APPENDIX 6. INVITATION LETTER

CODE: XXX

POUR LA VERSION FRANÇAISE, VOIR AU VERSO

Brussel, 18 februari 2014

Betreft: Uitnodiging voor deelname aan een enquête rond gezondheidszorg

Geachte mevrouw,

Geachte heer,

Het Federaal Kenniscentrum voor de Gezondheidszorg (KCE) nodigt u uit om in een enquête uw mening te geven over de terugbetaling van nieuwe medische behandelingen.

De gezondheidszorg belangt ons allen aan. Als u ziek bent worden uw uitgaven gedeeltelijk of volledig terugbetaald door uw ziekenfonds. Het geld waarmee de ziekenfondsen deze uitgaven terugbetalen, komt uit belastingen en bijdragen die u zelf betaalt. U wilt wellicht dat dit geld dan ook goed wordt besteed.

Waarop zou u zich baseren om te beslissen om een nieuwe behandeling terug te betalen? Dankzij de enquête kunnen de mensen die beslissen over de terugbetaling rekening houden met uw mening. Het is de eerste keer dat hierover een enquête gebeurt in België.

Uw antwoorden zijn anoniem. De enquête duurt 15 tot 20 minuten. U vindt meer praktische informatie op de volgende bladzijde.

De resultaten van de enquête zullen in groep worden besproken in een 'burgerlabo', georganiseerd door de Koning Boudewijnstichting. U kan op het einde van de enquête aangeven of u hieraan wenst deel te nemen.

Alvast bedankt voor uw deelname.

Raf Mertens

Algemeen Directeur KCE

CODE: XXX

NEDERLANDSE VERSIE – ZIE OMMEZIJDE

Bruxelles, le 18 février 2014

Concerne : Invitation à participer à une enquête sur les soins médicaux

Madame, Monsieur,

Le Centre fédéral d'expertise des soins de santé (KCE) vous invite à donner votre avis sur le remboursement des nouveaux traitements médicaux.

Les soins médicaux nous concernent tous. Quand vous êtes malade, vos dépenses sont partiellement remboursées par votre mutualité. L'argent des mutualités provient surtout des impôts et des taxes que vous payez. Vous souhaitez sûrement que cet argent soit bien utilisé.

Si vous pouviez décider ce qui doit être remboursé, sur quoi vous baseriez-vous ? Grâce à cette enquête, les décideurs pourront tenir compte de votre avis. C'est la première fois qu'une enquête sur ce sujet est réalisée en Belgique.

Vos réponses sont anonymes. Cela vous prendra entre 15 et 20 minutes. Vous trouverez les informations pratiques à la page suivante.

Les résultats de l'enquête seront discutés en groupe dans un 'labo citoyen' organisé par la Fondation Roi Baudouin. Si cela vous intéresse, vous pouvez vous y inscrire à la fin de l'enquête.

Merci d'avance pour votre participation.

Raf Mertens

Directeur Général du KCE



Praktische info over de enquête

Hoe lang duurt het om de enquête in te vullen?

Het duurt 15 tot 20 minuten om deze enquête in te vullen.

Is deze enquête anoniem?

Ja! Uw naam wordt niet bewaard en uw antwoorden blijven volledig anoniem.

Waarom werd ik gecontacteerd?

U werd geselecteerd via een willekeurige trekking uit het bevolkingsregister. Er werden in totaal 20 000 mensen geselecteerd om deel te nemen aan de enquête.

Hoe kan ik deelnemen?

Door de vragenlijst in te vullen op deze website: **Error! Hyperlink reference not valid.**

UW PERSOONLIJKE CODE is: XXX

Indien u **liever op papier** antwoordt, kan u een vragenlijst op papier aanvragen via een eenvoudig telefoontje op nummer 02/518 21 24. De vragenlijst wordt u dan per post opgestuurd, samen met een vooraf gefrankeerde omslag, om uw antwoorden terug te sturen.

Gelieve binnen de twee weken, dit is vóór 7/03/2014, te antwoorden.

Wat als ik niet wens deel te nemen?

Als u jammer genoeg niet wenst deel te nemen, zal u hiervan geen gevolgen ondervinden.

Indien u geen herinneringen wenst te ontvangen, kan u ons dat laten weten via de website van de enquête www.kcenet.be/survey/

Wat gebeurt er met mijn antwoorden?

Alle antwoorden komen anoniem toe op het Federaal Kenniscentrum voor de Gezondheidszorg (KCE) en worden daar statistisch geanalyseerd. De resultaten zullen gepubliceerd worden in een KCE rapport in november 2014. Dit zal gratis beschikbaar zijn op de website van het KCE (www.kce.fgov.be). Het rapport zal geen enkele informatie bevatten over de identiteit van de deelnemers, noch over hun individuele antwoorden.

De link tussen uw code en uw identiteit is alleen gekend bij het Rijksregister. Het Rijksregister zal op geen enkel moment de identiteit van de persoon met een bepaalde code aan de onderzoekers van het KCE doorgeven. Door aan de enquête deel te nemen, geeft u aan dat u akkoord gaat met het gebruik van uw antwoorden zoals hierboven beschreven.

Waarom deze enquête?

Het doel van deze enquête is om de mening van de burgers te kennen – en dus ook uw mening – over de criteria die van toepassing zijn bij terugbetalingsbeslissingen. Op basis van die criteria wordt beslist of een behandeling van een bepaalde aandoening wordt terugbetaald door de ziekteverzekering of niet. De resultaten van de enquête zullen meegedeeld worden aan de beleidsmensen, waaronder de minister van volksgezondheid.

Wat doet het Federaal Kenniscentrum voor de Gezondheidszorg (KCE)?

Het Federaal Kenniscentrum voor de Gezondheidszorg (KCE) is een onafhankelijke federale onderzoeksinstituut. Het voert studies uit en maakt rapporten voor de beleidsmensen, om hun advies te geven bij hun beslissingen over gezondheidszorg en ziekteverzekering. U vindt meer informatie op de website van het KCE: www.kce.fgov.be

**Later ook deelnemen aan het Burgerlabo?**

Op het einde van de enquête zal u gevraagd worden of u geïnteresseerd bent om deel te nemen aan een burgerlabo. Dit is een discussiegroep van een 30-tal personen, waarin verder zal nagedacht worden over de terugbetaling van concrete medische behandelingen. De Koning Boudewijnstichting zal deze groep kiezen uit de mensen die hebben deelgenomen aan deze enquête en die zich kandidaat hebben gesteld voor het burgerlabo.

Als u meer wil weten over de Koning Boudewijnstichting: www.kbs-frb.be

Technische vragen

Indien u vragen of problemen hebt **van technische aard** bij het invullen van de web-enquête, gelieve een e-mail te sturen naar enquete@kce.fgov.be.

Informations pratiques sur l'enquête***Combien de temps cela prend-il pour répondre à l'enquête?***

Remplir le questionnaire devrait vous prendre 15 à 20 minutes maximum.

Cette enquête est-elle anonyme ?

Vous ne devrez à aucun moment donner votre nom. Vos réponses resteront anonymes.

Pourquoi avez-vous été contacté ?

Vous avez été tiré au sort à partir du Registre national. Au total, 20 000 personnes auront été sélectionnées pour participer à l'enquête.

Comment puis-je participer à l'enquête ?

En remplissant le questionnaire accessible sur le site web <http://www.kcenet.be/survey/>

VOTRE CODE PERSONNEL: XXX

Si vous préférez répondre via un **questionnaire imprimé sur papier**, vous pouvez demander une version imprimée simplement en téléphonant au Registre national au numéro 02/518 23 08. Le questionnaire vous sera alors envoyé par la poste dans les plus brefs délais avec une enveloppe préimbrée pour renvoyer vos réponses.

Veillez répondre au questionnaire dans les 2 semaines, soit avant le 7/03/2014.

***Que se passe-t-il si je ne souhaite pas participer ?***

Si malheureusement vous ne souhaitez pas participer, il n'y aura aucune conséquence pour vous. Pour éviter des rappels inutiles, nous vous invitons à nous le signaler sur le site web de l'enquête <http://www.kcenet.be/survey/>

Que va-t-il se passer avec mes réponses ?

Toutes les réponses seront transférées de manière anonyme au Centre fédéral d'expertise des soins de santé (KCE) et feront l'objet d'analyses statistiques.

Les résultats finaux seront publiés dans un rapport KCE en novembre 2014. Ce rapport sera accessible gratuitement sur le site web du KCE www.kce.fgov.be. Le rapport ne comportera aucune information sur l'identité des participants ni sur leurs réponses individuelles.

Le lien entre votre code et votre identité n'est connu que du Registre national. Le Registre national ne transmettra à aucun moment aux chercheurs du KCE l'identité des personnes ayant répondu avec leur code. En participant à l'enquête, vous marquez votre consentement pour l'utilisation de vos réponses aux fins décrites ci-dessus.

Pourquoi cette enquête ?

Le but de cette enquête est de connaître l'avis des citoyens – et donc le vôtre – quant aux critères qui permettent de choisir quels traitements rembourser. Les résultats de cette enquête seront communiqués aux décideurs, dont le Ministre de la santé.

Que fait le Centre Fédéral d'Expertise des Soins de Santé (KCE) ?

Le Centre Fédéral d'Expertise des Soins de Santé (KCE) est un organisme scientifique fédéral indépendant. Il mène des études et produit des rapports à destination des décideurs, afin de les conseiller dans leur prise de décision en matière de soins de santé et d'assurance maladie.

Vous trouverez plus d'information sur le site Web du KCE : www.kce.fgov.be/fr

Participer aussi ensuite au Labo citoyen ?

À la fin du questionnaire, il vous sera demandé si vous envisageriez de participer à un labo citoyen. Il s'agit d'un groupe de discussion réunissant une trentaine de personnes, au cours duquel le remboursement de traitements concrets sera examiné. La Fondation Roi Baudouin sélectionnera ce groupe parmi les personnes qui auront participé à l'enquête et qui se seront portées candidates. Ce groupe discutera plus en profondeur des conditions pour les décisions de remboursement.

Si vous voulez en savoir plus sur la Fondation Roi Baudouin : <http://www.kbs-frb.be/>

Questions techniques

Si vous avez des questions ou des problèmes **techniques** pour remplir le questionnaire en ligne, vous pouvez envoyer un mail à enquete@kce.fgov.be.



APPENDIX 7. QUESTIONNAIRE

Appendix 7.1. Dutch version

Persoonlijke code:

Welke nieuwe medische behandelingen terugbetalen?

Welkom bij deze enquête over de terugbetaling van medische behandelingen.

Via deze enquête willen wij **uw mening** vragen over wat u belangrijk vindt voor de terugbetaling van nieuwe medische behandelingen.

Wat u nog moet weten:

- De enquête duurt 15 tot 20 minuten.
- Uw deelname is vrijwillig en uw antwoorden blijven anoniem.
- U kunt zelf beslissen welke vragen u niet wenst te beantwoorden, maar het is belangrijk dat we uw mening kennen over zoveel mogelijk vragen. Alleen zo kunnen we ons een betrouwbaar beeld vormen.

Bij sommige woorden staat er een cijfertje, bijvoorbeeld “behandeling^a”. Deze woorden worden onderaan de pagina uitgelegd.

Er zijn geen juiste of foute antwoorden. We vragen naar uw persoonlijke mening. Als u onzeker bent over uw keuze, geef dan het antwoord dat u het beste lijkt.

^a Een behandeling kan een operatie zijn, een geneesmiddel, een prothese of speciale verzorging.

U bent een

- ☐ man
☐ vrouw

Wat is uw leeftijd?

- ☐ Tussen 20-29
☐ Tussen 30-39
☐ Tussen 40-49
☐ Tussen 50-59
☐ Tussen 60-69
☐ Tussen 70-79
☐ Tussen 80-89

Hebt u kinderen?

- ☐ Ja
☐ Nee

U woont voornamelijk (slechts één antwoord)

- ☐ alleen
☐ samen met één of meerdere personen

U woont (meerdere antwoorden mogelijk)

- ☐ samen met uw partner
☐ samen met uw kind(eren)
☐ samen met het (de) kind(eren) van uw partner



- ☐ samen met (één van uw) ouders of schoonouders
- ☐ in een gemeenschappelijk verblijf (bijvoorbeeld rust- en verzorgingstehuis, instelling...)
- ☐ Andere:

Hebt u een betaalde beroepsactiviteit? (slechts één antwoord)

- ☐ Ja

Wat is uw statuut in uw voornaamste beroepsactiviteit? (slechts één antwoord)

- ☐ Arbeider/Arbeidster
- ☐ Bediende
- ☐ Ambtenaar
- ☐ Zelfstandige
- ☐ Leerjongen/-meisje
- ☐ Stagiair(e)
- ☐ Interim werkkraacht
- ☐ Andere:

- ☐ Nee (meerdere antwoorden mogelijk)

- ☐ Ik werk zonder vergoeding, bijvoorbeeld als huisvrouw, huisman of vrijwilliger
- ☐ Ik ben werkloos
- ☐ Ik ben ziek of invalide
- ☐ Ik studeer
- ☐ Ik ben gepensioneerd
- ☐ Ik ben helper van een zelfstandige
- ☐ Andere:



We betalen belastingen zodat de ziekenfondsen de uitgaven voor medische behandelingen kunnen terugbetalen als iemand ziek is.

Als u zou mogen kiezen hoe dit geld gebruikt wordt, aan welke behandelingen zou u dan voorrang geven voor terugbetaling?

Stap 1. Kruis de behandelingen aan waar u voorrang aan zou geven voor terugbetaling.

U mag er meerdere aankruisen

Stap 2. Rangschik daarna de behandelingen die u gekozen hebt in volgorde van belang voor u.

1 = de belangrijkste voor u

2 = de tweede belangrijkste voor u

3 = de derde belangrijkste voor u

enzovoort.

Uw persoonlijke mening telt. **Er zijn geen foute of juiste antwoorden.**

Ik zou voorrang geven aan de terugbetaling van	JA	Volgorde van belang voor u
behandelingen die levens redden. De oorzaak van het levensgevaar, de kost van de behandeling of de leeftijd van de patiënten zijn minder belangrijk.	<input type="checkbox"/>	
behandelingen die ernstige pijn verminderen. De ernst van de ziekte die de pijn veroorzaakt of de kost van de behandeling zijn minder belangrijk.	<input type="checkbox"/>	
behandelingen voor ziekten die bij veel mensen voorkomen. De ernst van de ziekte, de kost van de behandeling of de leeftijd van de patiënten zijn minder belangrijk.	<input type="checkbox"/>	
behandelingen voor zeldzame ziekten. De kost van de behandeling, de leeftijd van de patiënten of de ernst van de ziekte zijn minder belangrijk.	<input type="checkbox"/>	
behandelingen die zeer duur zijn. De ernst van de ziekte of de leeftijd van de patiënten zijn minder belangrijk.	<input type="checkbox"/>	
behandelingen voor ernstige ziekten ^b . De kost van de behandeling of de leeftijd van de patiënten zijn minder belangrijk.	<input type="checkbox"/>	

^b **Ernstige ziekte:** Een ziekte kan ernstig zijn omdat de behandeling zwaar is voor patiënten of omdat de ziekte zelf ernstige gevolgen heeft voor de patiënt, zoals vroegtijdig overlijden, slecht functioneren, fysiek en/of psychisch lijden.



Hieronder staan twee patiëntengroepen. Beide patiëntengroepen krijgen momenteel al een behandeling^c. Die behandeling zorgt voor het volgende ongemak^d en de volgende kwaliteit van leven^e en levensverwachting^f:

De patiënten van groep 1	De patiënten van groep 2
hebben nu een kwaliteit van leven van 8 op 10 ^f	hebben nu een kwaliteit van leven van 5 op 10 ^g
ondervinden veel ongemak van de behandeling	ondervinden weinig ongemak van de behandeling
zijn tussen 18 en 64 jaar	zijn ouder dan 80 jaar
sterven niet meer door de ziekte	sterven niet meer door de ziekte

^c Een **behandeling** kan een operatie zijn, een geneesmiddel, een prothese of speciale verzorging.

^d **Ongemak van de behandeling** slaat op de frequentie van het gebruik (bijv. een geneesmiddel 1 maal per dag of meermaals per dag moeten innemen), de manier van toediening (bijv. pilletjes, inspuitingen, toediening door iemand anders), plaats van behandeling (bijv. in het ziekenhuis, thuis). Dit zit nog niet vervat in het begrip kwaliteit van leven.

^e **Kwaliteit van leven** verwijst naar de mate waarin patiënten zich kunnen verplaatsen, zichzelf kunnen verzorgen (zichzelf wassen en aankleden), dagelijkse activiteiten kunnen uitvoeren (buitenshuis werken, studeren, huishoudelijk werk uitvoeren), pijn hebben en/of angstig of depressief zijn. Een persoon in perfecte gezondheid krijgt een score van 10 op 10. "Dood zijn" is 0 op 10.

^f Een **levenskwaliteit van 8 op 10** is bijvoorbeeld een toestand
zonder problemen met wandelen
zonder problemen om zichzelf te wassen of aan te kleden
met enige problemen om te werken, studeren of huishoudelijke taken te doen
zonder pijn of andere klachten
zonder angst of depressie

^g Een **kwaliteit van leven van 5 op 10** is bijvoorbeeld een toestand
met enige problemen met wandelen
met enige problemen om zichzelf te wassen of aan te kleden
zonder problemen om te werken, studeren of huishoudelijke taken te doen
met enige pijn of andere klachten
met matig angstig of depressief zijn



Voor welke patiënten vindt u het het meest belangrijk dat er een nieuwe en betere behandeling wordt ontwikkeld? U bepaalt zelf wat 'beter' is.
Kies één groep van patiënten.

☐ De patiënten van groep 1☐ De patiënten van groep 2

Hoe zeker bent u van uw keuze?

Kies één antwoord.

☐ Helemaal niet zeker☐ Niet zeker☐ Zeker☐ Heel zeker

Hieronder staan twee andere patiëntengroepen. Beide patiëntengroepen krijgen momenteel al een behandeling.

De patiënten van groep 1

hebben nu een kwaliteit van leven van **8 op 10**

ondervinden **weinig** ongemak van de behandeling

zijn **ouder dan 80 jaar**

sterven **bijna onmiddellijk** door de ziekte

De patiënten van groep 2

hebben nu een kwaliteit van leven van **5 op 10**

ondervinden **veel** ongemak van de behandeling

zijn **ouder dan 80 jaar**

sterven **niet meer** door de ziekte

Voor welke patiënten vindt u het het meest belangrijk dat er een nieuwe en betere behandeling wordt ontwikkeld? U bepaalt zelf wat 'beter' is.
Kies één groep van patiënten.

☐ De patiënten van groep 1☐ De patiënten van groep 2

**Hoe zeker bent u van uw keuze?***Kies één antwoord.*

☐ Helemaal niet zeker ☐ Niet zeker ☐ Zeker ☐ Heel zeker

Hieronder staan twee andere patiëntengroepen. Beide patiëntengroepen krijgen momenteel al een behandeling.

De patiënten van groep 1	De patiënten van groep 2
hebben nu een kwaliteit van leven van 5 op 10 ondervinden weinig ongemak van de behandeling zijn tussen 18 en 64 jaar sterven bijna onmiddellijk door de ziekte	hebben nu een kwaliteit van leven van 2 op 10 ^h ondervinden veel ongemak van de behandeling zijn ouder dan 80 jaar sterven niet meer door de ziekte

Voor welke patiënten vindt u het het meest belangrijk dat er een nieuwe en betere behandeling wordt ontwikkeld? U bepaalt zelf wat 'beter' is.
Kies één groep van patiënten.

<input type="checkbox"/> De patiënten van groep 1	<input type="checkbox"/> De patiënten van groep 2
---	---

^h Een **kwaliteit van leven van 2 op 10** is bijvoorbeeld een toestand met enige problemen met wandelen met enige problemen om zichzelf te wassen of aan te kleden met niet in staat zijn om te werken, studeren of huishoudelijke taken te doen met ernstige pijn of andere klachten zonder angst of depressie

**Hoe zeker bent u van uw keuze?***Kies één antwoord.*

☐ Helemaal niet zeker ☐ Niet zeker ☐ Zeker ☐ Heel zeker

Hieronder staan twee ziekten.

ZIEKTE 1	ZIEKTE 2
komt niet zo vaak voor: tussen de 2 000 en de 10 000 mensen ⁱ in België hebben de ziekte elke patiënt kost weinig aan de samenleving ^j	komt tamelijk vaak voor: tussen de 10 000 en de 100 000 mensen ^k in België hebben de ziekte elke patiënt kost veel aan de samenleving

Voor welke ziekte vindt u het het meest belangrijk dat er een nieuwe en betere behandeling wordt ontwikkeld? U bepaalt zelf wat 'beter' is.

Kies één ziekte.

<input type="checkbox"/> Ziekte 1	<input type="checkbox"/> Ziekte 2
-----------------------------------	-----------------------------------

ⁱ **Tussen de 2 000 en de 10 000 mensen** in België is tussen de 1 op 5 000 en 1 op 1 000 personen

^j **Kost voor de samenleving:** Een ziek persoon veroorzaakt een kost voor de samenleving. Dat kan door bezoeken aan een arts of het gebruik van geneesmiddelen die worden terugbetaald. Maar iemand kan ook arbeidsongeschikt, invalide of werkloos worden. Die persoon krijgt dan een uitkering, hogere gezinsbijslagen, ... Dit zijn allemaal kosten van een ziekte voor de samenleving.

^k **Tussen de 10 000 en de 100 000 mensen** in België is tussen de 1 op 1 000 en 1 op 100 personen

**Hoe zeker bent u van uw keuze?**

Kies één antwoord.

- ☐ Helemaal niet zeker ☐ Niet zeker ☐ Zeker ☐ Heel zeker

Stel dat er tegelijk twee nieuwe behandelingen op de markt komen voor eenzelfde ziekte. Er bestaat al een behandeling die volledig wordt terugbetaald door het ziekenfonds.

U mag nu zelf beslissen welke van de twee nieuwe behandelingen terugbetaald zal worden door het ziekenfonds.

Er is slechts geld om één van de twee nieuwe behandelingen terug te betalen. De patiënten die de behandeling willen die u niet kiest, moeten die zelf betalen.

NIEUWE BEHANDELING 1	NIEUWE BEHANDELING 2
<p>De nieuwe behandeling, in vergelijking met de reeds beschikbare behandeling,</p> <ul style="list-style-type: none">• geeft evenveel ongemak voor de patiënt• verandert niets aan de kwaliteit van leven van patiënten• vermindert de kost van elke patiënt aan de samenleving• geneest evenveel patiënten• verlengt het leven van patiënten	<p>De nieuwe behandeling, in vergelijking met de reeds beschikbare behandeling,</p> <ul style="list-style-type: none">• geeft meer ongemak voor de patiënt• verbetert de kwaliteit van leven van patiënten• verhoogt de kost van elke patiënt aan de samenleving• geneest minder patiënten• verandert niets aan de levensduur van patiënten

Welke behandeling moet volgens u terugbetaald worden?

Kies één behandeling.

☐ Nieuwe behandeling 1

☐ Nieuwe behandeling 2

**Hoe zeker bent u van uw keuze?***Kies één antwoord.*

- ☐ Helemaal niet zeker ☐ Niet zeker ☐ Zeker ☐ Heel zeker

Indien u niet zeker bent, waarom twijfelt u?*Kies slechts één antwoord*

- ☐ Beide nieuwe behandelingen zijn even goed. Het maakt niet uit welke wordt terugbetaald.
- ☐ Geen van beide behandelingen moet worden terugbetaald.
- ☐ De keuze is moeilijk.
- ☐ Andere:

Stel dat er tegelijk twee nieuwe behandelingen op de markt komen voor eenzelfde ziekte. Er bestaat al een behandeling die volledig wordt terugbetaald door het ziekenfonds.

U mag nu zelf beslissen welke van de twee nieuwe behandelingen terugbetaald zal worden door het ziekenfonds.

Er is slechts geld om één van de twee nieuwe behandelingen terug te betalen. De patiënten die de behandeling willen die u niet kiest, moeten die zelf betalen.

NIEUWE BEHANDELING 1

De nieuwe behandeling, in vergelijking met de reeds beschikbare behandeling,

- geeft **meer** ongemak voor de patiënt
- **verandert niets** aan de kwaliteit van leven van patiënten
- **verhoogt** de kost van elke patiënt aan de samenleving
- geneest **evenveel** patiënten
- **verlengt** het leven van patiënten

NIEUWE BEHANDELING 2

De nieuwe behandeling, in vergelijking met de reeds beschikbare behandeling,

- geeft **evenveel** ongemak voor de patiënt
- **verbetert** de kwaliteit van leven van patiënten
- **verandert niets** aan de kost van elke patiënt aan de samenleving
- geneest **minder** patiënten
- **verandert niets** aan de levensduur van patiënten

**Welke behandeling moet volgens u terugbetaald worden?***Kies één behandeling.*☐ Nieuwe behandeling 1☐ Nieuwe behandeling 2**Hoe zeker bent u van uw keuze?***Kies één antwoord.*☐ Helemaal niet zeker☐ Niet zeker☐ Zeker☐ Heel zeker**Indien u niet zeker bent, waarom twijfelt u?***Kies slechts één antwoord*

- ☐ Beide nieuwe behandelingen zijn even goed. Het maakt niet uit welke wordt terugbetaald.
- ☐ Geen van beide behandelingen moet worden terugbetaald.
- ☐ De keuze is moeilijk.
- ☐ Andere:



Stel dat er tegelijk twee nieuwe behandelingen op de markt komen voor eenzelfde ziekte. Er bestaat al een behandeling die volledig wordt terugbetaald door het ziekenfonds.

U mag nu zelf beslissen welke van de twee nieuwe behandelingen terugbetaald zal worden door het ziekenfonds.

Er is slechts geld om één van de twee nieuwe behandelingen terug te betalen. De patiënten die de behandeling willen die u niet kiest, moeten die zelf betalen.

NIEUWE BEHANDELING 1	NIEUWE BEHANDELING 2
<p>De nieuwe behandeling, in vergelijking met de reeds beschikbare behandeling,</p> <ul style="list-style-type: none">• geeft meer ongemak voor de patiënt• verlaagt de kwaliteit van leven van patiënten• verhoogt de kost van elke patiënt aan de samenleving• geneest minder patiënten• verandert niets aan de levensduur van patiënten	<p>De nieuwe behandeling, in vergelijking met de reeds beschikbare behandeling,</p> <ul style="list-style-type: none">• geeft minder ongemak voor de patiënt• verbetert de kwaliteit van leven van patiënten• vermindert de kost van elke patiënt aan de samenleving• geneest meer patiënten• verlengt het leven van patiënten

Welke behandeling moet volgens u terugbetaald worden?

Kies één behandeling.

☐ Nieuwe behandeling 1

☐ Nieuwe behandeling 2

Hoe zeker bent u van uw keuze?

Kies één antwoord.

☐ Helemaal niet zeker

☐ Niet zeker

☐ Zeker

☐ Heel zeker

**Indien u niet zeker bent, waarom twijfelt u?***Kies slechts één antwoord*

- ☐ Beide nieuwe behandelingen zijn even goed. Het maakt niet uit welke wordt terugbetaald.
- ☐ Geen van beide behandelingen moet worden terugbetaald.
- ☐ De keuze is moeilijk.
- ☐ Andere:

Stel dat er tegelijk twee nieuwe behandelingen op de markt komen voor eenzelfde ziekte. Er bestaat al een behandeling die volledig wordt terugbetaald door het ziekenfonds.

U mag nu zelf beslissen welke van de twee nieuwe behandelingen terugbetaald zal worden door het ziekenfonds.

Er is slechts geld om één van de twee nieuwe behandelingen terug te betalen. De patiënten die de behandeling willen die u niet kiest, moeten die zelf betalen.

NIEUWE BEHANDELING 1	NIEUWE BEHANDELING 2
<p>De nieuwe behandeling, in vergelijking met de reeds beschikbare behandeling,</p> <ul style="list-style-type: none">• geeft meer ongemak voor de patiënt• verbetert de kwaliteit van leven van patiënten• verandert niets aan de kost van elke patiënt aan de samenleving• geneest meer patiënten• verlengt het leven van patiënten	<p>De nieuwe behandeling, in vergelijking met de reeds beschikbare behandeling,</p> <ul style="list-style-type: none">• geeft evenveel ongemak voor de patiënt• verlaagt de kwaliteit van leven van patiënten• verhoogt de kost van elke patiënt aan de samenleving• geneest minder patiënten• verandert niets aan de levensduur van patiënten

**Welke behandeling moet volgens u terugbetaald worden?***Kies één behandeling.*☐ Nieuwe behandeling 1☐ Nieuwe behandeling 2**Hoe zeker bent u van uw keuze?***Kies één antwoord.*☐ Helemaal niet zeker☐ Niet zeker☐ Zeker☐ Heel zeker**Indien u niet zeker bent, waarom twijfelt u?***Kies slechts één antwoord*

- ☐ Beide nieuwe behandelingen zijn even goed. Het maakt niet uit welke wordt terugbetaald.
- ☐ Geen van beide behandelingen moet worden terugbetaald.
- ☐ De keuze is moeilijk.
- ☐ Andere:



Stel dat er tegelijk twee nieuwe behandelingen op de markt komen voor eenzelfde ziekte. Er bestaat al een behandeling die volledig wordt terugbetaald door het ziekenfonds.

U mag nu zelf beslissen welke van de twee nieuwe behandelingen terugbetaald zal worden door het ziekenfonds.

Er is slechts geld om één van de twee nieuwe behandelingen terug te betalen. De patiënten die de behandeling willen die u niet kiest, moeten die zelf betalen.

NIEUWE BEHANDELING 1	NIEUWE BEHANDELING 2
<p>De nieuwe behandeling, in vergelijking met de reeds beschikbare behandeling,</p> <ul style="list-style-type: none">• geeft evenveel ongemak voor de patiënt• verlaagt de kwaliteit van leven van patiënten• verandert niets aan de kost van elke patiënt aan de samenleving• geneest minder patiënten• verlengt het leven van patiënten	<p>De nieuwe behandeling, in vergelijking met de reeds beschikbare behandeling,</p> <ul style="list-style-type: none">• geeft meer ongemak voor de patiënt• verandert niets aan de kwaliteit van leven van patiënten• verhoogt de kost van elke patiënt aan de samenleving• geneest minder patiënten• verandert niets aan de levensduur van patiënten

Welke behandeling moet volgens u terugbetaald worden?

Kies één behandeling.

☐ Nieuwe behandeling 1

☐ Nieuwe behandeling 2

Hoe zeker bent u van uw keuze?

Kies één antwoord.

☐ Helemaal niet zeker

☐ Niet zeker

☐ Zeker

☐ Heel zeker

**Indien u niet zeker bent, waarom twijfelt u?***Kies slechts één antwoord*

- ☐ Beide nieuwe behandelingen zijn even goed. Het maakt niet uit welke wordt terugbetaald.
- ☐ Geen van beide behandelingen moet worden terugbetaald.
- ☐ De keuze is moeilijk.
- ☐ Andere:

Wat is het hoogste opleidingsniveau dat u hebt afgemaakt (slechts één antwoord)

- ☐ Ik heb de lagere school niet afgemaakt
- ☐ Lagere school
- ☐ Lager middelbaar onderwijs (tot en met het 3e jaar middelbaar)
- ☐ Hoger middelbaar onderwijs (tot en met het 6e jaar middelbaar)
- ☐ Hoger niet-universitair onderwijs
- ☐ Universitair onderwijs

Hoe is uw gezondheidstoestand in het algemeen? (slechts één antwoord)

- ☐ Zeer goed
- ☐ Goed
- ☐ Matig (redelijk)
- ☐ Slecht
- ☐ Zeer slecht

Lijdt u zelf aan een ernstige ziekte?

- ☐ Ja
- ☐ Nee



Lijdt iemand die u dierbaar is aan een ernstige ziekte?

- ☐ Ja
☐ Nee

Vindt u momenteel dat wat u zelf moet betalen voor gezondheidszorg, na tussenkomst van het ziekenfonds of hospitalisatieverzekeringen,

- ☐ makkelijk in uw budget past
☐ moeilijk in uw budget past
☐ onmogelijk in uw budget past
☐ Ik weet het niet

Hebt u bedenkingen bij deze vragenlijst?

.....

Dank voor uw deelname. In november worden de resultaten van de enquête, na statistische analyse, gepubliceerd op de website van het KCE (www.kce.fgov.be).



LAAT UW STEM HOREN: NEEM DEEL AAN HET BURGERLABO OVER GEZONDHEIDSZORG

U heeft zopas deelgenomen aan een online-enquête van het Federaal Kenniscentrum voor de Gezondheidszorg (KCE).

De Koning Boudewijnstichting doet u hierbij een voorstel om nog een stapje verder te gaan. Zij nodigt u uit om deel te nemen aan een simulatie van het besluitvormingsproces. Dat zal gebeuren in het kader van een BurgerLabo.

Waar gaat het over? Een Burgerlabo biedt aan een divers samengestelde groep van burgers de mogelijkheid om te debatteren over de voorwaarden en criteria voor terugbetalingsbeslissingen. Het zal ook gaan over verbeteringen die aan het huidige systeem kunnen worden aangebracht.

De Stichting zal—een 30-tal deelnemers selecteren uit de groep van kandidaten die zich op de KBS-website als belangstellenden aanmelden. Zij zullen gedurende drie weekends een aantal concrete behandelingen bespreken en de beslissingscriteria voor terugbetaling bepalen en afwegen. Zij kunnen bijkomende informatie inwinnen en hebben de kans om in gesprek te gaan met experts. Doel is het opstellen en verfijnen van criteria die volgens deze groep van burgers noodzakelijk zijn voor een goed gebruik van de middelen in de gezondheidszorg.

Dit zijn de data van de drie weekends:

- 1ste weekend: 5-6-7 september 2014
- 2de weekend: 4 en 5 oktober 2014
- 3de weekend: 15 en 16 november 2014

De Stichting staat borg voor een professionele en aangename omkadering. Alle kosten die verbonden zijn met de deelname aan de drie weekends, worden uiteraard door de Stichting terugbetaald.

Als u uw stem wil laten horen en wil deelnemen aan deze verrijkende ervaring, gelieve Mevrouw Pascale Prête te contacteren:

Tel.: 02-549 02 92

Email: prete.p@kbs-frb.be

Appendix 7.2. French version

Code personnel:

Quels nouveaux traitements médicaux faut-il rembourser ?

Bienvenue dans cette enquête sur le remboursement des soins de santé.

Par cette enquête, nous souhaitons connaître **votre opinion** sur ce qu'il faut prendre en compte pour décider de rembourser un nouveau traitement.

En pratique :

- Remplir ce questionnaire vous prendra 15 à 20 minutes.
- Votre participation est volontaire et vos réponses seront traitées de manière anonyme.
- Vous pouvez décider à quelles questions vous souhaitez répondre ou pas mais il est important que vous répondiez à un maximum de questions pour que nous puissions avoir les résultats les plus fiables possibles.



- A côté de certains mots apparaîtra un petit numéro, par exemple, « traitement¹ ». Ces mots sont expliqués en bas de la page.

Il n'y a pas de bonne ni de mauvaise réponse. Si vous n'êtes pas certain(e) de votre choix, donnez la réponse qui vous semble la plus proche de votre opinion.

Vous êtes

- ☐ Un homme
☐ Une femme

Vous avez

- ☐ Entre 20-29 ans
☐ Entre 30-39 ans
☐ Entre 40-49 ans
☐ Entre 50-59 ans
☐ Entre 60-69 ans
☐ Entre 70-79 ans
☐ Entre 80-89 ans

Avez-vous des enfants?

- ☐ Oui
☐ Non

Vous habitez la plupart du temps / principalement (1 seule réponse possible)

- ☐ Seul(e)

- ☐ Avec une ou plusieurs personnes

Vous vivez avec (plusieurs réponses possibles)

- ☐ Votre conjoint(e)/mari/femme
☐ Votre/vos enfants
☐ L'/les enfant(s) de votre conjoint(e)/ mari / femme
☐ (un de) vos parents / beaux parents
☐ En communauté (y compris maison de repos, institution, etc.)
☐ Autre :.....

¹ **Un traitement** peut être une opération, un médicament, une prothèse, une manipulation.



Avez-vous une activité professionnelle rémunérée? (1 seule réponse possible)

☐ Oui

Mon statut principal est... (1 seule réponse possible)

- ☐ Ouvrier/ère
- ☐ Employé(e)
- ☐ Fonctionnaire
- ☐ Indépendant(e)
- ☐ Apprenti(e)
- ☐ Stagiaire
- ☐ Intérimaire
- ☐ Autre:

☐ Non (plusieurs réponses possibles)

- ☐ Je travaille sans être payé(e), par exemple comme femme/homme au foyer bénévole
- ☐ Je suis sans emploi
- ☐ Je suis malade ou invalide
- ☐ Je suis étudiant(e)
- ☐ Je suis pensionné(e)
- ☐ J'aide un(e) indépendant(e)
- ☐ Autre:



Nous payons des impôts pour que les mutualités puissent rembourser les soins quand quelqu'un est malade.

Si vous pouviez choisir comment cet argent doit être utilisé, à quels traitements donneriez-vous priorité ?

Etape 1 : Choisissez les traitements auxquels vous donneriez priorité pour bénéficier d'un remboursement en mettant pour chacun une croix dans la case correspondante

Plusieurs réponses possibles

Etape 2 : Ensuite, classez les traitements que vous avez choisis par ordre d'importance.

1= Le principe le plus important pour vous

2= Le deuxième plus important pour vous

3= Le troisième plus important pour vous

... et ainsi de suite

Il n'y a pas de bonne ni de mauvaise réponse. Il s'agit de votre opinion personnelle

Je donnerais priorité au remboursement ...	Oui	Ordre d'importance pour vous
des traitements qui sauvent d'une mort imminente. La cause de la mort imminente, le coût du traitement ou l'âge de la personne sont moins importants.	<input type="checkbox"/>	
des traitements qui diminuent la douleur sévère. La gravité de la maladie à l'origine de la douleur ou le coût du traitement sont moins importants.	<input type="checkbox"/>	
des traitements des maladies qui touchent beaucoup de personnes. La gravité de la maladie, le coût du traitement ou l'âge de la personne sont moins importants.	<input type="checkbox"/>	
des traitements des maladies rares. Le coût du traitement, l'âge de la personne ou la gravité de la maladie sont moins importants.	<input type="checkbox"/>	
des traitements très chers. La gravité de la maladie ou l'âge de la personne sont moins importants.	<input type="checkbox"/>	
des traitements de maladies graves ^m . Le coût du traitement ou l'âge de la personne sont moins importants.	<input type="checkbox"/>	

^m **Maladie grave** : Une maladie peut être grave car elle nécessite un traitement lourd pour les patients ou parce que la maladie entraîne des conséquences graves pour le patient, comme un décès prématuré, des malfonctionnements, des douleurs physiques et/ou des souffrances psychiques.



Voici deux groupes de patients. Chaque groupe de patients dispose déjà d'un traitementⁿ. Ce traitement implique un certain niveau de contrainte^o et leur donne une certaine qualité de vie^p et une certaine espérance de vie.

Les patients du groupe 1	Les patients du groupe 2
ont actuellement une qualité de vie de 8 sur 10 ^q	ont actuellement une qualité de vie de 5 sur 10 ^r
trouvent le traitement très contraignant	trouvent le traitement peu contraignant
ont entre 18 ans et 64 ans	ont plus de 80 ans
ne mourront plus de la maladie	ne mourront plus de la maladie

D'après vous, pour quels patients est-il le plus important de développer un nouveau traitement qui sera meilleur? Vous décidez vous-même de ce qui est 'meilleur'.

ⁿ Un **traitement** peut être une opération, un médicament, une prothèse, une manipulation.

^o Les **contraintes du traitement pour le patient** comprennent la fréquence d'utilisation (par exemple, prendre un médicament une ou plusieurs fois par jour), le mode d'administration (par exemple, des pilules, une injection ou une administration par quelqu'un d'autre), le lieu du traitement (par exemple, à l'hôpital ou à la maison).

^p La **qualité de vie** d'une personne malade comprend plusieurs aspects : pouvoir se déplacer, pouvoir s'occuper de soi (se laver et s'habiller seul), pouvoir exercer des activités de la vie de tous les jours (travailler ailleurs qu'à domicile, étudier, faire le ménage), avoir mal et/ou être anxieux ou dépressif. On estime à 10 sur 10 la qualité de vie d'une personne en parfaite santé. Lorsqu'on est mort, ce score est de 0 sur 10.

^q Une **qualité de vie de 8 sur 10** correspond à une situation dans laquelle la personne
n'a pas de difficulté à se déplacer,
n'a pas de difficulté à se laver ou s'habiller seule,
a quelques problèmes pour travailler, étudier ou effectuer des tâches ménagères
n'a pas de douleurs ou de plaintes, et
n'est pas anxieuse ou dépressive.

^r Une **qualité de vie de 5 sur 10** correspond à une situation dans laquelle la personne
a quelques difficultés à se déplacer,
a quelques difficultés à se laver ou s'habiller seule,
n'a pas de problèmes pour travailler, étudier ou effectuer des tâches ménagères
n'a pas de douleurs ou de plaintes, et
est modérément anxieuse ou dépressive.



Veillez sélectionner une seule des propositions suivantes :

☐ Les patients du groupe 1

☐ Les patients du groupe 2

Dans quelle mesure êtes-vous certain(e) de votre choix ?

Veillez sélectionner une seule des propositions suivantes :

☐ Pas du tout certain(e)

☐ Pas certain(e)

☐ Certain(e)

☐ Tout à fait certain(e)

Voici deux autres groupes de patients. Chaque groupe de patients dispose déjà d'un traitement.

Les patients du groupe 1

ont actuellement une qualité de vie de **8 sur 10**
trouvent le traitement **peu** contraignant
ont **plus de 80 ans**
mourront **presque immédiatement** à cause de la maladie

Les patients du groupe 2

ont actuellement une qualité de vie de **5 sur 10**
trouvent le traitement **très** contraignant
ont **plus de 80 ans**
ne mourront **plus** de la maladie

D'après vous, pour quels patients est-il le plus important de développer un nouveau traitement qui sera meilleur? Vous décidez vous-même de ce qui est 'meilleur'.

Veillez sélectionner une seule des propositions suivantes :

☐ Les patients du groupe 1

☐ Les patients du groupe 2

Dans quelle mesure êtes-vous certain(e) de votre choix ?

Veillez sélectionner une seule des propositions suivantes :

☐ Pas du tout certain(e)

☐ Pas certain(e)

☐ Certain(e)

☐ Tout à fait certain(e)



Voici deux autres groupes de patients. Chaque groupe de patients dispose déjà d'un traitement.

Les patients du groupe 1	Les patients du groupe 2
ont actuellement une qualité de vie de 5 sur 10 trouvent le traitement peu contraignant ont entre 18 ans et 64 ans mourront presque immédiatement à cause de la maladie	ont actuellement une qualité de vie de 2 sur 10^s trouvent le traitement très contraignant ont plus de 80 ans ne mourront plus de la maladie

D'après vous, pour quels patients est-il le plus important de développer un nouveau traitement qui sera meilleur? Vous décidez vous-même de ce qui est 'meilleur'.

Veillez sélectionner une seule des propositions suivantes :

<input type="checkbox"/> Les patients du groupe 1	<input type="checkbox"/> Les patients du groupe 2
---	---

Dans quelle mesure êtes-vous certain(e) de votre choix ?

Veillez sélectionner une seule des propositions suivantes :

☐ Pas du tout certain(e) ☐ Pas certain(e) ☐ Certain(e) ☐ Tout à fait certain(e)

^s Une **qualité de vie de 2 sur 10** correspond à une situation dans laquelle la personne a quelques difficultés à se déplacer, a quelques difficultés à se laver ou s'habiller seule, n'est pas capable de travailler, étudier ou effectuer des tâches ménagères a de sérieuses douleurs ou de plaintes, et n'est pas anxieuse ou dépressive.



Voici deux maladies.

MALADIE 1	MALADIE 2
est assez rare : elle touche entre 2 000 et 10 000 personnes ^t en Belgique chaque personne malade coûte peu à la société ^u	est assez fréquente : elle touche entre 10 000 et 100 000 personnes ^v en Belgique chaque personne malade coûte cher à la société

D'après vous, pour quel maladie est-il le plus important de développer un nouveau traitement qui sera meilleur ? Vous décidez vous-même de ce qui est 'meilleur'.

Veillez sélectionner une seule des propositions suivantes :

<input type="checkbox"/> Maladie 1	<input type="checkbox"/> Maladie 2
------------------------------------	------------------------------------

Dans quelle mesure êtes-vous certain(e) de votre choix ?

Veillez sélectionner une seule des propositions suivantes :

☐ Pas du tout certain(e) ☐ Pas certain(e) ☐ Certain(e) ☐ Tout à fait certain(e)

^t **Entre 2 000 et 10 000 personnes** en Belgique, c'est entre 1 personne sur 5 000 et 1 personne sur 1 000.

^u **Le coût pour la société** : Quand une personne est malade, cela peut avoir des conséquences sur ce qu'elle va coûter à la société. Il y a les dépenses pour les visites au médecin ou la consommation de médicaments qui sont remboursés. En plus, le malade peut être en arrêt maladie et en conséquence devenir à charge de la mutuelle, perdre son travail et toucher le chômage, recevoir des allocations pour handicap ou invalidité, recevoir des allocations familiales plus élevées... Tout cela a un impact sur les dépenses publiques.

^v **Entre 10 000 et 100 000 personnes** en Belgique, c'est entre 1 personne sur 1 000 et 1 personne sur 100.



Imaginons : **deux nouveaux traitements** arrivent sur le marché pour soigner **une même maladie**. Il existe pour le moment déjà un traitement qui est totalement remboursé par les mutualités.

Vous devez décider lequel de ces 2 nouveaux traitements va être remboursé par les mutualités.

Le budget ne permet d'en rembourser qu'un seul des deux. Les patients qui veulent le traitement que vous n'avez pas choisi, devront le payer entièrement de leur poche.

NOUVEAU TRAITEMENT 1	NOUVEAU TRAITEMENT 2
En comparaison avec le traitement qui est déjà remboursé, le nouveau traitement: <ul style="list-style-type: none">• présente autant de contraintes pour le malade• ne change rien à la qualité de vie des malades• diminue le coût de chaque malade pour la société• guérit autant de personnes• augmente la durée de vie des malades	En comparaison avec le traitement qui est déjà remboursé, le nouveau traitement: <ul style="list-style-type: none">• présente plus de contraintes pour le malade• améliore la qualité de vie des malades• augmente le coût de chaque malade pour la société• guérit moins de personnes• ne change pas la durée de vie des malades

Selon vous, quel traitement doit être remboursé ?

Veillez sélectionner une seule des propositions suivantes :

☐ Nouveau traitement 1

☐ Nouveau traitement 2

Dans quelle mesure êtes-vous certain(e) de votre choix ?

Veillez sélectionner une seule des propositions suivantes :

☐ Pas du tout certain(e)

☐ Pas certain(e)

☐ Certain(e)

☐ Tout à fait certain(e)

**Si vous n'êtes pas (du tout) certain, pourquoi hésitez-vous. ?**

Veillez sélectionner une seule des propositions suivantes :

- ☐ Les deux traitements se valent. Peu m'importe lequel sera finalement remboursé.
- ☐ Aucun des deux traitements ne doit être remboursé.
- ☐ Ce choix est difficile.
- ☐ Autre:

Imaginons : **deux nouveaux traitements** arrivent sur le marché pour soigner une **même maladie**. Il existe pour le moment déjà un traitement qui est totalement remboursé par les mutualités.

Vous devez décider lequel de ces 2 nouveaux traitements va être remboursé par les mutualités.

Le budget ne permet d'en rembourser qu'un seul des deux. Les patients qui veulent le traitement que vous n'avez pas choisi, devront le payer entièrement de leur poche.

NOUVEAU TRAITEMENT 1	NOUVEAU TRAITEMENT 2
<p>En comparaison avec le traitement qui est déjà remboursé, le nouveau traitement:</p> <ul style="list-style-type: none">• présente plus de contraintes pour le malade• ne change rien à la qualité de vie des malades• augmente le coût de chaque malade pour la société• guérit autant de personnes• augmente la durée de vie des malades	<p>En comparaison avec le traitement qui est déjà remboursé, le nouveau traitement:</p> <ul style="list-style-type: none">• présente autant de contraintes pour le malade• améliore la qualité de vie des malades• ne change pas le coût de chaque malade pour la société• guérit moins de personnes• ne change pas la durée de vie des malades

**Selon vous, quel traitement doit être remboursé ?**

Veillez sélectionner une seule des propositions suivantes :

☐ Nouveau traitement 1☐ Nouveau traitement 2**Dans quelle mesure êtes-vous certain(e) de votre choix ?**

Veillez sélectionner une seule des propositions suivantes :

☐ Pas du tout certain(e)☐ Pas certain(e)☐ Certain(e)☐ Tout à fait certain(e)**Si vous n'êtes pas (du tout) certain, pourquoi hésitez-vous. ?**

Veillez sélectionner une seule des propositions suivantes :

☐ Les deux traitements se valent. Peu m'importe lequel sera finalement remboursé.☐ Aucun des deux traitements ne doit être remboursé.☐ Ce choix est difficile.☐ Autre:



Imaginons : **deux nouveaux traitements** arrivent sur le marché pour soigner une **même maladie**. Il existe pour le moment déjà un traitement qui est totalement remboursé par les mutualités.

Vous devez décider lequel de ces 2 nouveaux traitements va être remboursé par les mutualités.

Le budget ne permet d'en rembourser qu'un seul des deux. Les patients qui veulent le traitement que vous n'avez pas choisi, devront le payer entièrement de leur poche.

NOUVEAU TRAITEMENT 1	NOUVEAU TRAITEMENT 2
En comparaison avec le traitement qui est déjà remboursé, le nouveau traitement: <ul style="list-style-type: none">• présente plus de contraintes pour le malade• diminue la qualité de vie des malades• augmente le coût de chaque malade pour la société• guérit moins de personnes• ne change pas la durée de vie des malades	En comparaison avec le traitement qui est déjà remboursé, le nouveau traitement: <ul style="list-style-type: none">• présente moins de contraintes pour le malade• améliore la qualité de vie des malades• diminue le coût de chaque malade pour la société• guérit plus de personnes• augmente la durée de vie des malades

Selon vous, quel traitement doit être remboursé ?

Veillez sélectionner une seule des propositions suivantes :

☐ Nouveau traitement 1

☐ Nouveau traitement 2

**Dans quelle mesure êtes-vous certain(e) de votre choix ?**

Veillez sélectionner une seule des propositions suivantes :

- ☐ Pas du tout certain(e) ☐ Pas certain(e) ☐ Certain(e) ☐ Tout à fait certain(e)

Si vous n'êtes pas (du tout) certain, pourquoi hésitez-vous. ?

Veillez sélectionner une seule des propositions suivantes :

- ☐ Les deux traitements se valent. Peu m'importe lequel sera finalement remboursé.
☐ Aucun des deux traitements ne doit être remboursé.
☐ Ce choix est difficile.
☐ Autre:

Imaginons : **deux nouveaux traitements** arrivent sur le marché pour soigner une **même maladie**. Il existe pour le moment déjà un traitement qui est totalement remboursé par les mutualités.

Vous devez décider lequel de ces 2 nouveaux traitements va être remboursé par les mutualités.

Le budget ne permet d'en rembourser qu'un seul des deux. Les patients qui veulent le traitement que vous n'avez pas choisi, devront le payer entièrement de leur poche.

NOUVEAU TRAITEMENT 1	NOUVEAU TRAITEMENT 2
En comparaison avec le traitement qui est déjà remboursé, le nouveau traitement: <ul style="list-style-type: none">• présente plus de contraintes pour le malade• améliore la qualité de vie des malades• ne change pas le coût de chaque malade pour la société• guérit plus de personnes• augmente la durée de vie des malades	En comparaison avec le traitement qui est déjà remboursé, le nouveau traitement: <ul style="list-style-type: none">• présente autant de contraintes pour le malade• diminue la qualité de vie des malades• augmente le coût de chaque malade pour la société• guérit moins de personnes• ne change pas la durée de vie des malades

**Selon vous, quel traitement doit être remboursé ?**

Veillez sélectionner une seule des propositions suivantes :

☐ Nouveau traitement 1☐ Nouveau traitement 2**Dans quelle mesure êtes-vous certain(e) de votre choix ?**

Veillez sélectionner une seule des propositions suivantes :

☐ Pas du tout certain(e) ☐ Pas certain(e) ☐ Certain(e) ☐ Tout à fait certain(e)**Si vous n'êtes pas (du tout) certain, pourquoi hésitez-vous. ?**

Veillez sélectionner une seule des propositions suivantes :

- ☐ Les deux traitements se valent. Peu m'importe lequel sera finalement remboursé.
- ☐ Aucun des deux traitements ne doit être remboursé.
- ☐ Ce choix est difficile.
- ☐ Autre:



Imaginons : **deux nouveaux traitements** arrivent sur le marché pour soigner une **même maladie**. Il existe pour le moment déjà un traitement qui est totalement remboursé par les mutualités.

Vous devez décider lequel de ces 2 nouveaux traitements va être remboursé par les mutualités.

Le budget ne permet d'en rembourser qu'un seul des deux. Les patients qui veulent le traitement que vous n'avez pas choisi, devront le payer entièrement de leur poche.

NOUVEAU TRAITEMENT 1	NOUVEAU TRAITEMENT 2
<p>En comparaison avec le traitement qui est déjà remboursé, le nouveau traitement:</p> <ul style="list-style-type: none">• présente autant de contraintes pour le malade• diminue la qualité de vie des malades• ne change pas le coût de chaque malade pour la société• guérit moins de personnes• augmente la durée de vie des malades	<p>En comparaison avec le traitement qui est déjà remboursé, le nouveau traitement:</p> <ul style="list-style-type: none">• présente plus de contraintes pour le malade• ne change rien à la qualité de vie des malades• augmente le coût de chaque malade pour la société• guérit moins de personnes• ne change pas la durée de vie des malades

Selon vous, quel traitement doit être remboursé ?

Veillez sélectionner une seule des propositions suivantes :

<input type="checkbox"/> Nouveau traitement 1	<input type="checkbox"/> Nouveau traitement 2
---	---

Dans quelle mesure êtes-vous certain(e) de votre choix ?

Veillez sélectionner une seule des propositions suivantes :

☐ Pas du tout certain(e) ☐ Pas certain(e) ☐ Certain(e) ☐ Tout à fait certain(e)

**Si vous n'êtes pas (du tout) certain, pourquoi hésitez-vous. ?**

Veillez sélectionner une seule des propositions suivantes :

- ☐ Les deux traitements se valent. Peu m'importe lequel sera finalement remboursé.
- ☐ Aucun des deux traitements ne doit être remboursé.
- ☐ Ce choix est difficile.
- ☐ Autre:

Quel est le plus haut niveau d'étude que vous ayez terminé: (une seule réponse possible)

- ☐ Je n'ai pas terminé l'école primaire
- ☐ J'ai terminé l'école primaire
- ☐ J'ai terminé l'école secondaire –niveau inférieur (jusqu'en 3ème secondaire)
- ☐ J'ai terminé l'école secondaire –niveau supérieur (jusqu'en 6ème secondaire)
- ☐ J'ai terminé un enseignement supérieur non universitaire
- ☐ J'ai terminé un l'enseignement universitaire

Comment percevez-vous votre état de santé en général ? (1 seule réponse possible)

- ☐ Très bon
- ☐ Bon
- ☐ Moyen
- ☐ Mauvais
- ☐ Très mauvais

Souffrez-vous d'une maladie grave ?

- ☐ Oui
- ☐ Non



Un(e) de vos proches souffre-t-il(elle) d'une maladie grave ?

- ☐ Oui
- ☐ Non

Actuellement, vous trouvez que ce que vous devez payer vous-même pour vos soins de santé, après remboursement par la mutualité ou une assurance hospitalisation, est ...

- ☐ Facilement supportable pour votre budget
- ☐ Difficilement supportable pour votre budget
- ☐ Impossible à supporter pour votre budget
- ☐ Je ne sais pas

Avez-vous des commentaires sur ce questionnaire ?

.....

Merci pour votre participation! Les résultats de l'enquête seront publiés après une analyse statistique, en novembre, sur le site web du KCE (<http://www.kce.fgov.be/fr>)



FAITES ENTENDRE VOTRE VOIX: PARTICIPEZ AU LABOCITOYEN SUR LES SOINS DE SANTÉ

Vous venez de participer à l'enquête en ligne du Centre d'expertise des soins de santé (KCE).

La Fondation Roi Baudouin vous propose d'aller un pas plus loin et vous invite à participer à une simulation de prise de décision dans le cadre d'un **LaboCitoyen**.

De quoi s'agit-il ? Le LaboCitoyen donne à un groupe diversifié de citoyens la possibilité de discuter des critères qui s'appliquent aux décisions de remboursement et des améliorations que l'on pourrait apporter au système actuel.

Parmi ceux d'entre vous qui auront marqué leur intérêt, la Fondation sélectionnera une trentaine de participants. Au cours de trois week-ends, les participants se réuniront autour d'un certain nombre de cas réels, s'informeront et pourront dialoguer avec des experts dans le but d'établir et affiner les critères nécessaires selon eux pour une bonne distribution des ressources des soins de santé.

Concrètement, voici les dates des 3 week-ends :

- 1^{er} week-end : 5-6-7 septembre 2014
- 2^{ème} week-end : 4 et 5 octobre 2014
- 3^{ème} week-end : 15 et 16 novembre 2014

La Fondation garantit un encadrement professionnel et agréable. Tous les frais liés à la participation à ces 3 week-ends sont évidemment pris en charge par la Fondation.

Si vous désirez faire entendre votre voix et participer à cette expérience enrichissante, veuillez contacter Madame Pascale Prête à la Fondation Roi Baudouin.

Tel. : 02-549 02 92

Email : prete.p@kbs-frb.be



APPENDIX 8. TABULAR DATA FOR SAMPLE DESCRIPTION

Appendix 8.1. Demographics of the general population sample

Table 5 – Age and gender distribution of the general population analysis sample (complete) compared to the respondents who didn't complete all choice sets (not complete).

	Completed all choice sets				Did not complete all choice sets			
	Female		Male		Female		Male	
	N	%	N	%	N	%	N	%
21-30	379	8.84%	261	6.09%	33	6.35%	28	5.38%
31-40	351	8.19%	323	7.53%	29	5.58%	32	6.15%
41-50	441	10.28%	384	8.96%	38	7.31%	37	7.12%
51-60	482	11.24%	467	10.89%	51	9.81%	57	10.96%
61-70	375	8.75%	387	9.03%	56	10.77%	47	9.04%
71-80	136	3.17%	176	4.10%	30	5.77%	42	8.08%
81-90	68	1.59%	58	1.35%	21	4.04%	19	3.65%

Table 6 – Age and gender distribution of the general population sample compared to the Belgian population

	Belgian population				Population sample			
	Female		Male		Female		Male	
	N	%	N	%	N	%	N	%
21-30	1627	8.14%	1629	8.15%	379	8.84%	261	6.09%
31-40	1690	8.45%	1706	8.53%	351	8.19%	323	7.53%
41-50	1828	9.14%	1875	9.38%	441	10.28%	384	8.96%
51-60	1815	9.08%	1815	9.08%	482	11.24%	467	10.89%
61-70	1483	7.42%	1414	7.07%	375	8.75%	387	9.03%
71-80	1056	5.28%	863	4.32%	136	3.17%	176	4.10%
81-90	754	3.77%	443	2.22%	68	1.59%	58	1.35%

Appendix 8.2. Demographics of the decision makers' sample

**Table 7 – Age and gender distribution of the decision makers' sample**

	Female		Male	
	N	%	N	%
20-29			<8	<5.00%
30-39	10	6.25%	<8	<5.00%
40-49	17	10.63%	13	8.13%
50-59	19	11.88%	42	26.25%
60-69	10	6.25%	33	20.63%
70-79			10	6.25%

Appendix 8.3. Comparison of the general population and decision makers' sample

Table 8 – Distribution of educational levels in the study sample

	Decision maker		Population sample	
	N	%	N	%
university	155	96.88%	780	18.19%
higher non-university	<8	<5.00%	1433	33.42%
upper secondary	<8	<5.00%	1301	30.34%
lower secondary			573	13.36%
primary			162	3.78%
no primary			36	0.84%
not provided by respondent			<8	<0.19%

**Table 9 – Self-reported health status**

	Decision maker		Population sample	
	N	%	N	%
very good	70	43.75%	1058	24.67%
good	74	46.25%	2241	52.26%
mediocre	16	10.00%	785	18.31%
bad			176	4.10%
very bad			25	0.58%
not provided by respondent			<8	<0.19%

Table 10 – Self-reported health status in the general population sample, compared to Health Interview Survey 2013

	Population sample	Health Interview Survey 2013
good or very good	76.94%	78.00%
mediocre	18.31%	16.80%
bad	4.10%	4.50%
very bad	0.58%	0.70%
not provided by respondent	<0.19%	

Table 11 – Affordability of health care

	Decision maker		Population sample	
	N	%	N	%
impossible			83	1.94%
difficult	10	6.25%	1031	24.04%
easy	140	87.50%	2519	58.75%
no idea	<8	<5.00%	359	8.37%
not provided by respondent	<8	<5.00%	296	6.90%

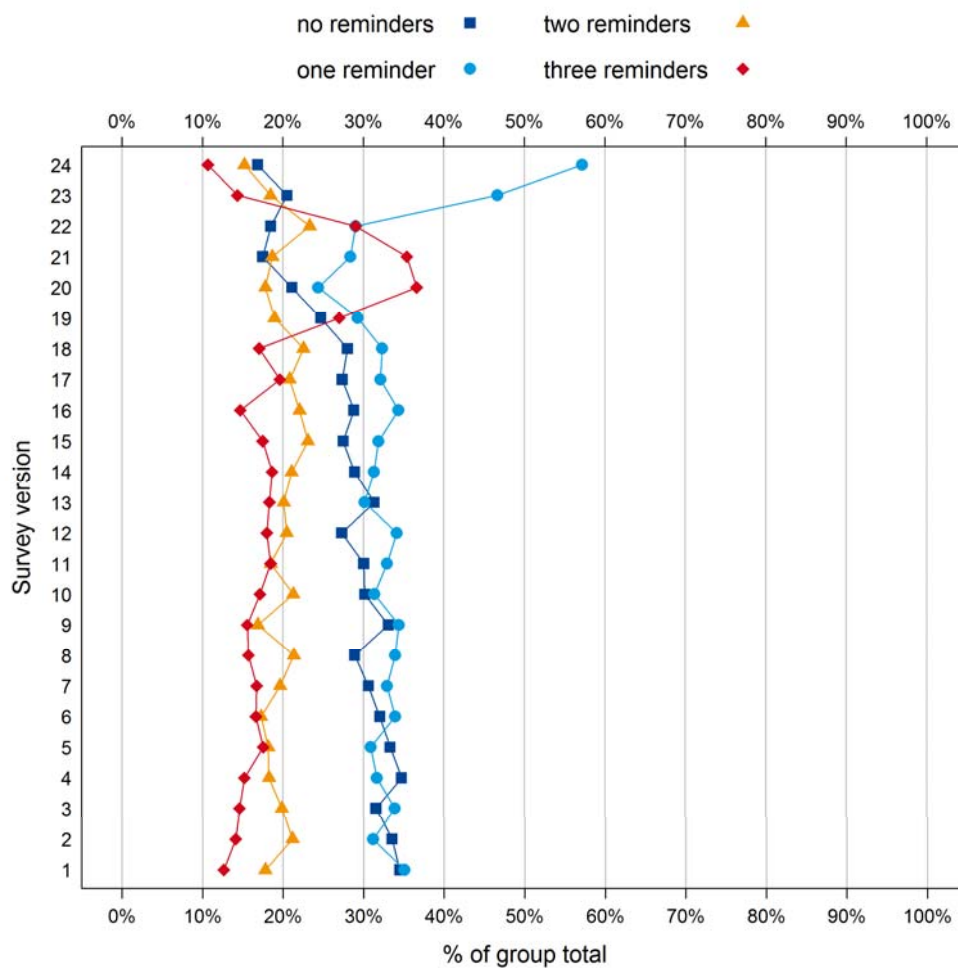
**Table 12 – Respondents' living conditions**

	Decision maker		Population sample	
	N	%	N	%
with partner	66	41.25%	1715	40.00%
with partner and children	59	36.88%	1143	26.66%
alone	17	10.63%	582	13.57%
with parents			301	7.02%
other	7	4.38%	247	5.76%
with children	7	4.38%	187	4.36%
with children from partner			113	2.64%
with partner, children, and children from partner	<8	<5.00%		



APPENDIX 9. SAMPLE DESCRIPTION BY NUMBER OF REMINDERS RECEIVED

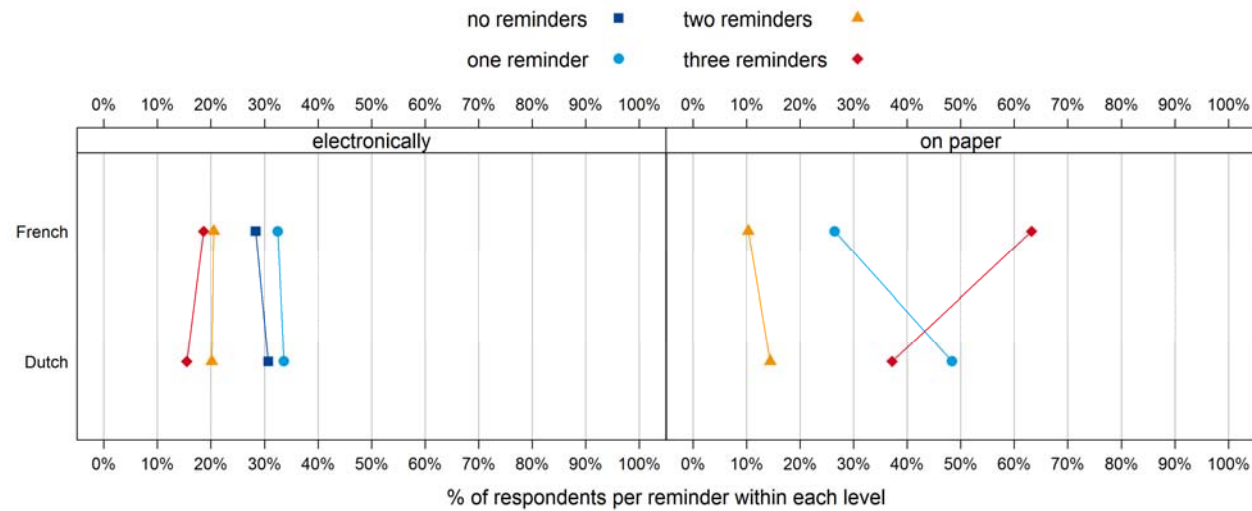
Distribution of responses by questionnaire version and by reminder



Note: Figures encompasses both paper and electronic responses

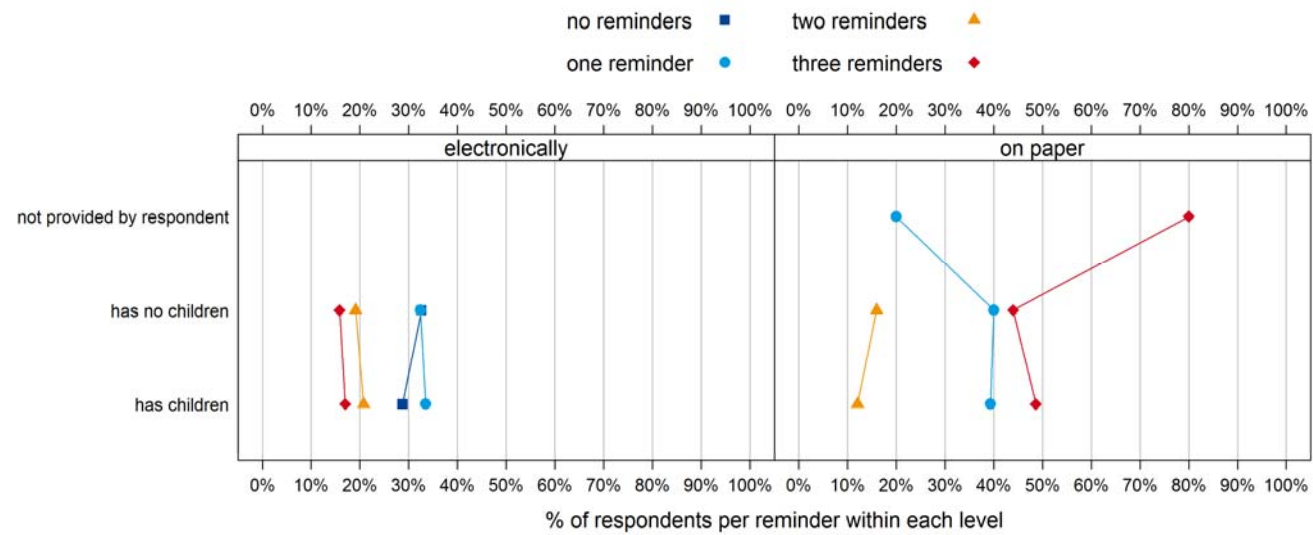


Appendix 9.2. Language



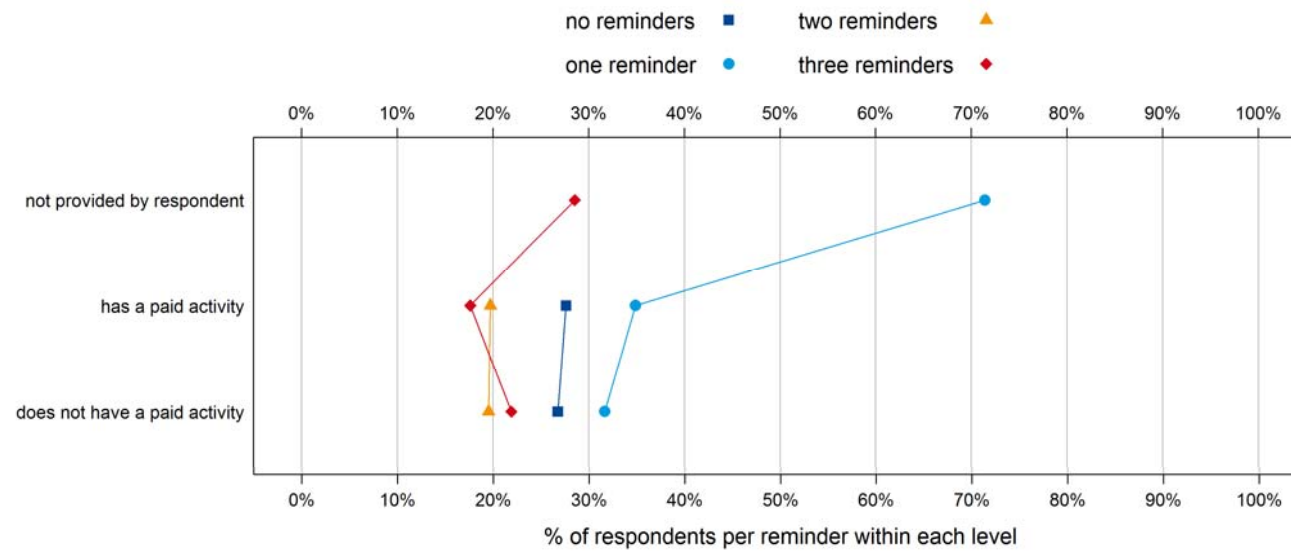


Appendix 9.3. Having children



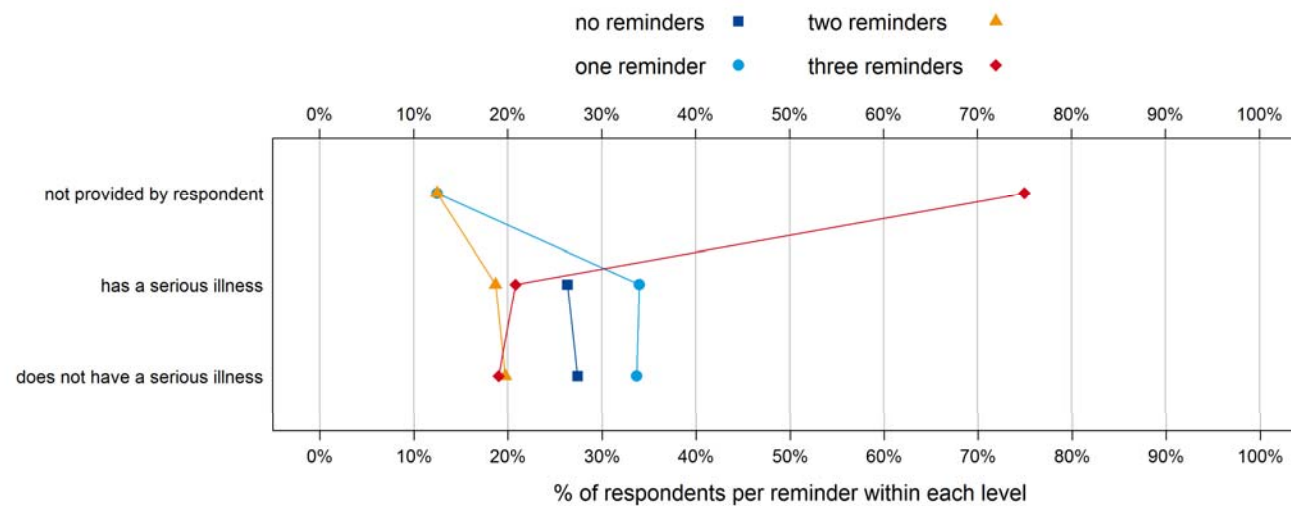


Appendix 9.4. Having a paid activity



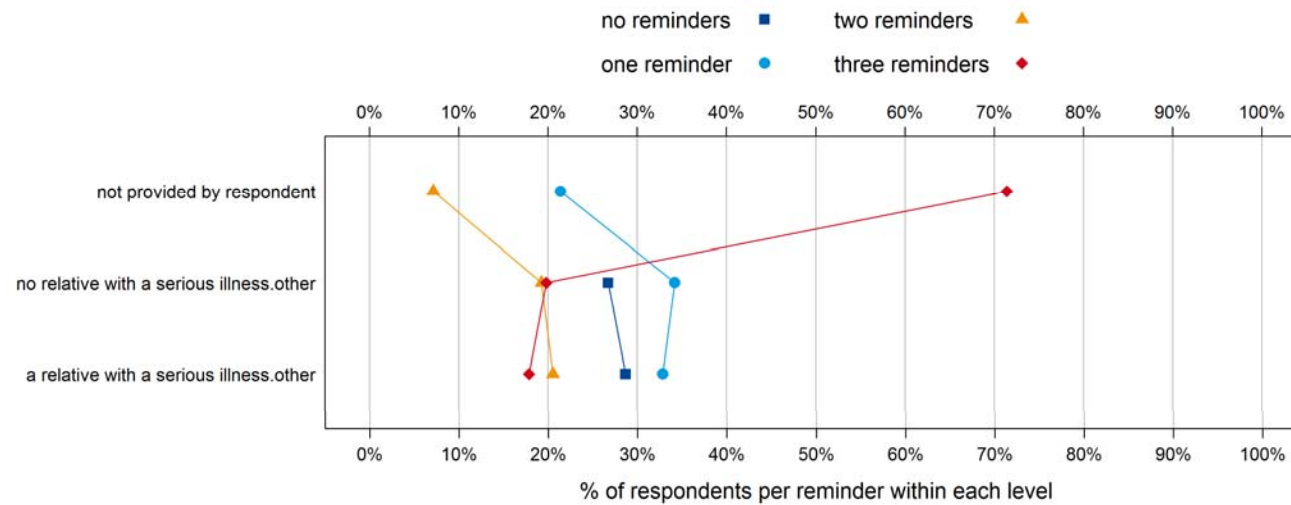


Appendix 9.6. Having a serious illness





Appendix 9.7. Having a relative with a serious illness

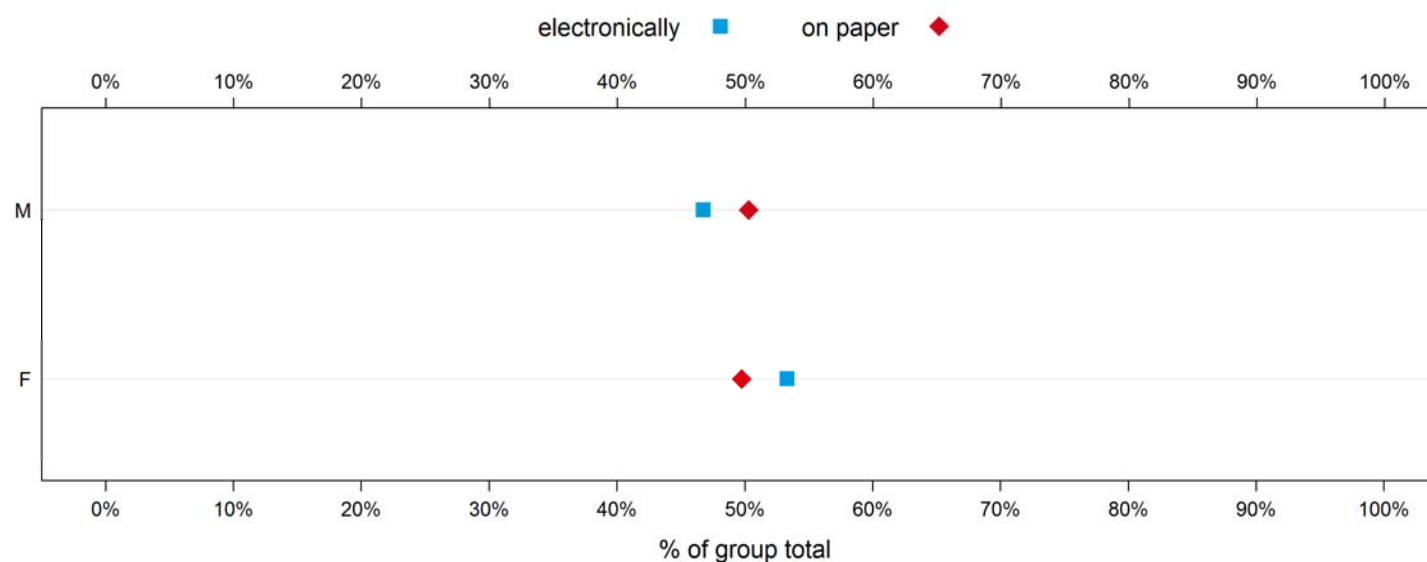




APPENDIX 10. SAMPLE DESCRIPTION BY RESPONSE MEDIUM

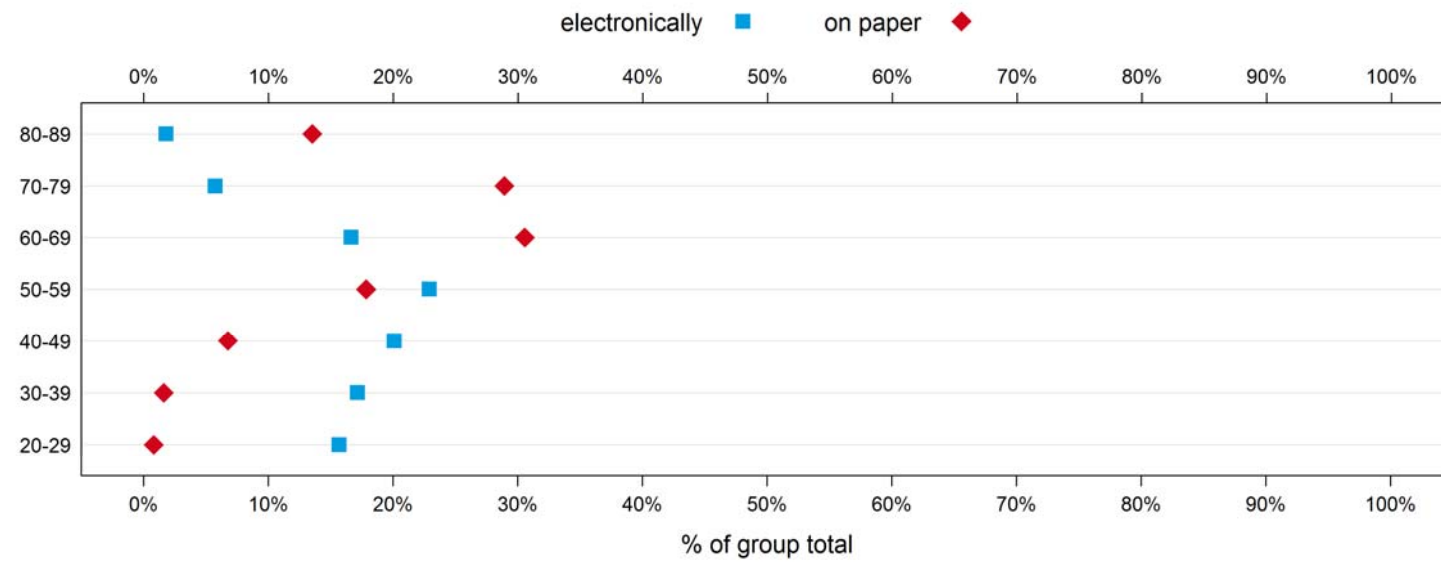
The graphs in this section show certain socio-demographic characteristics of the general population sample used for analysis separate for respondents answering the survey electronically or on paper. The sum of the percentages is 100% of electronically answered surveys and 100% of survey answered in paper.

Appendix 10.1. Gender by response medium



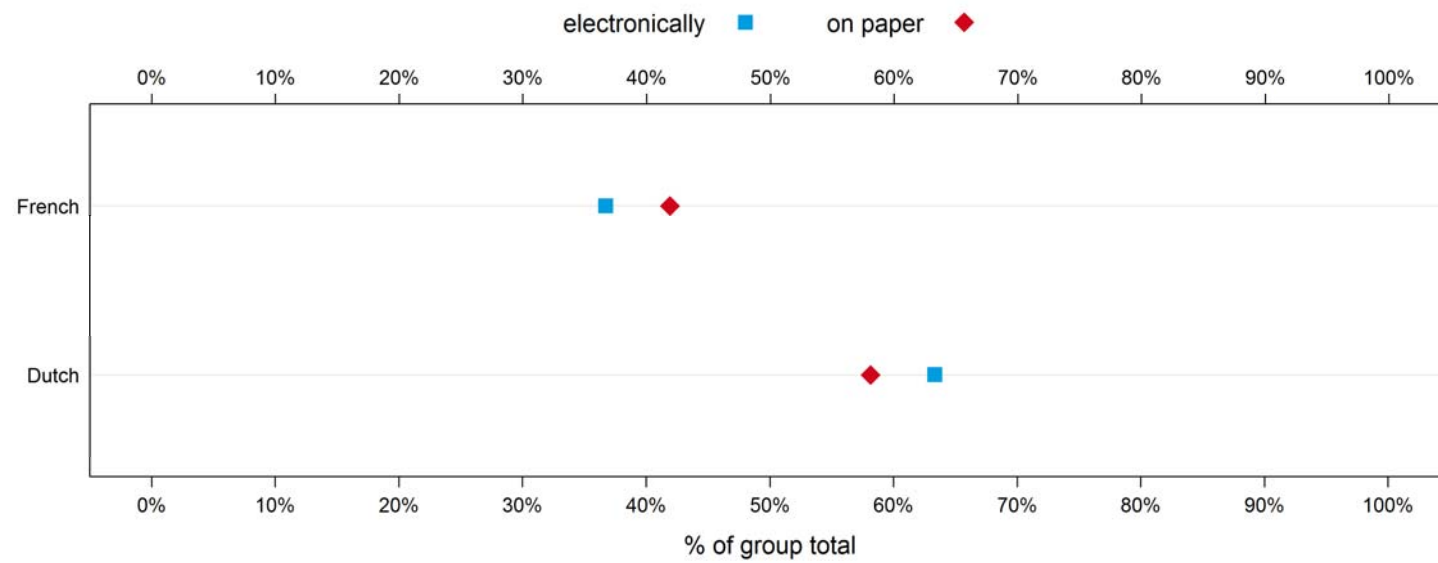


Appendix 10.2. Age category by response medium



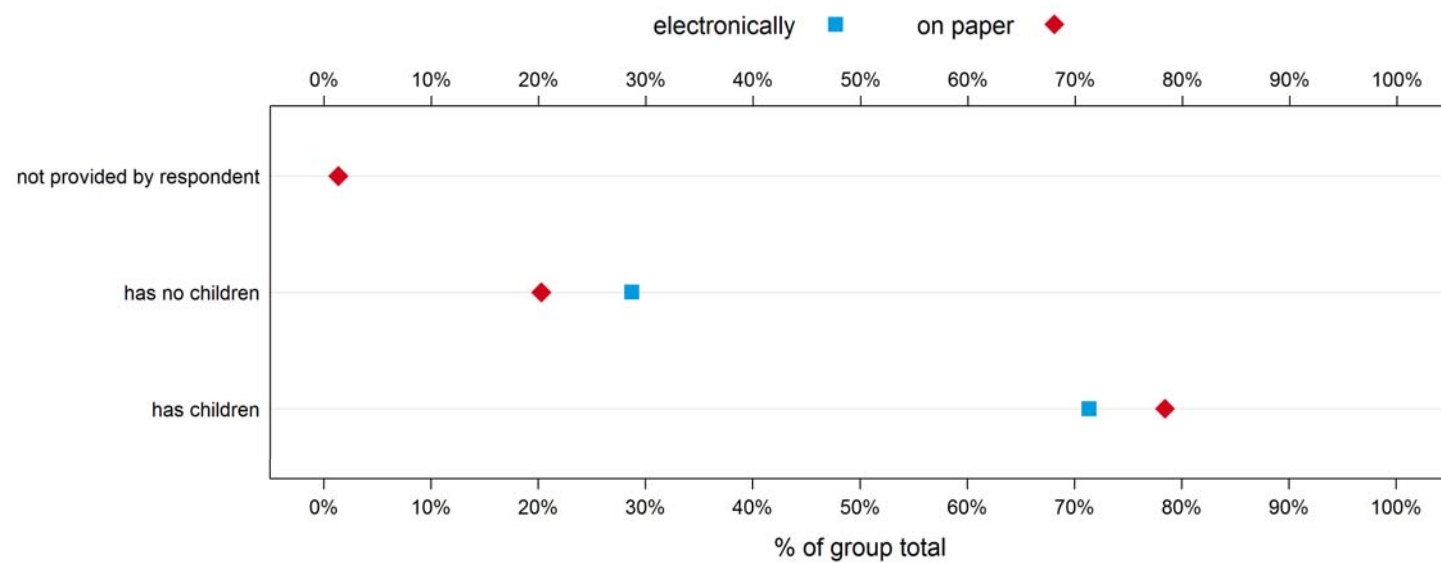


Appendix 10.3. Language by response medium



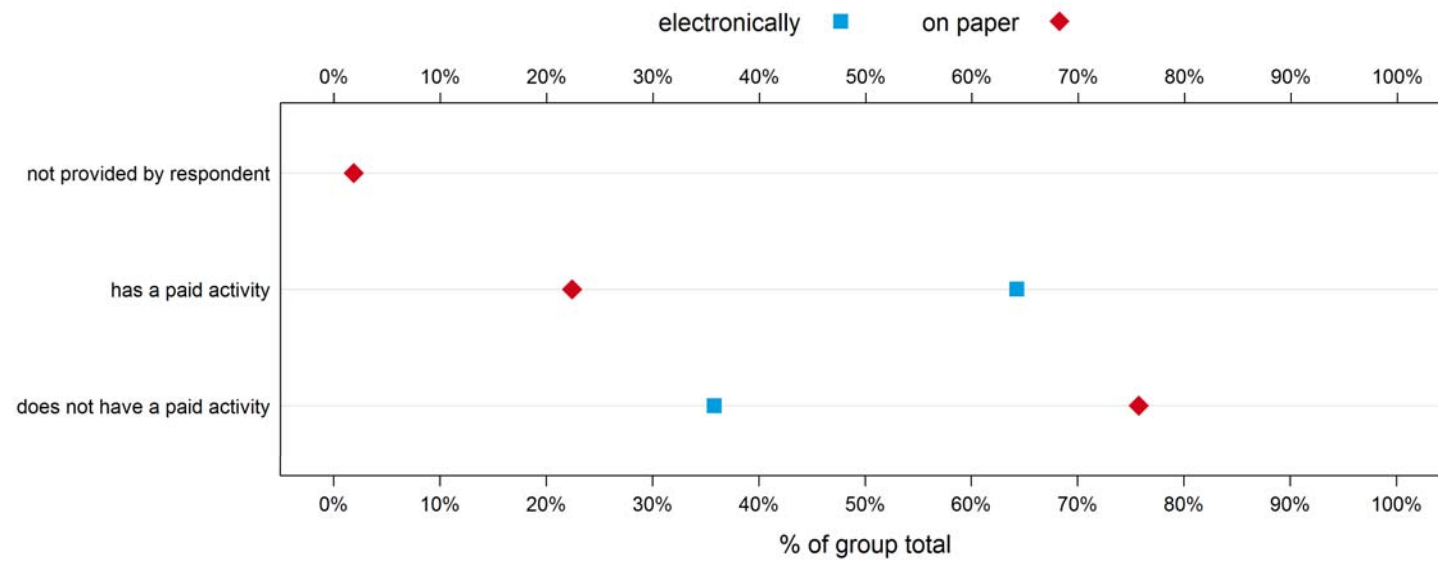


Appendix 10.4. Having children by response medium



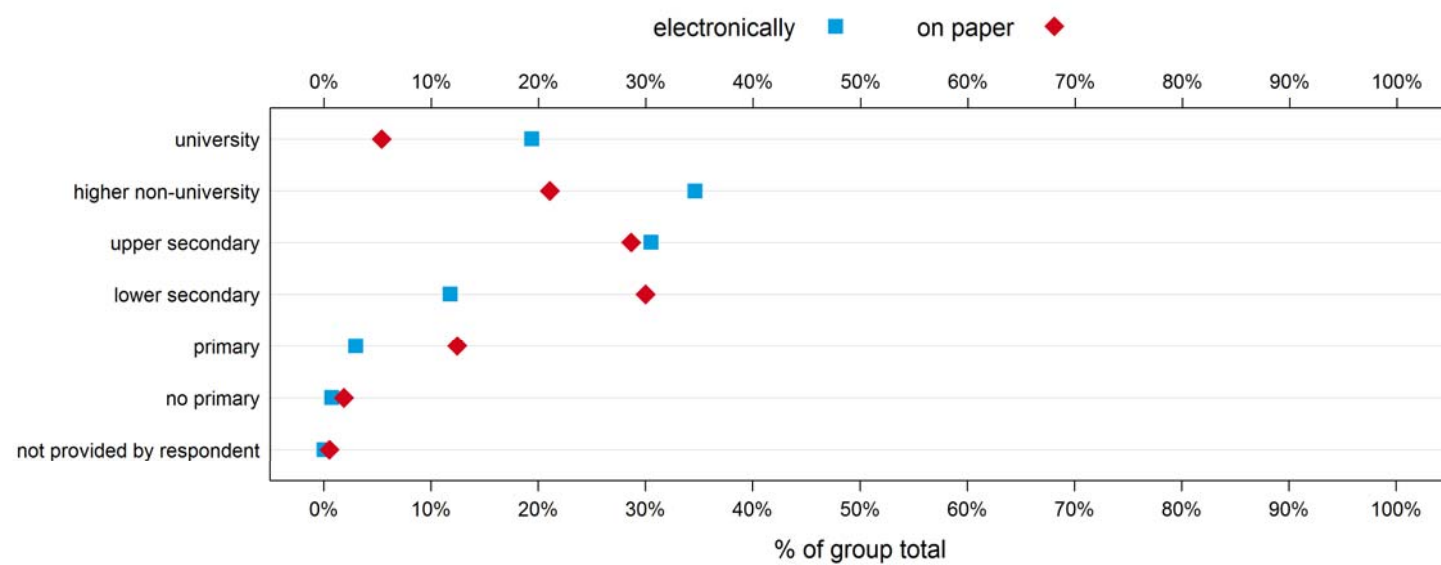


Appendix 10.5. Having a paid activity by response medium



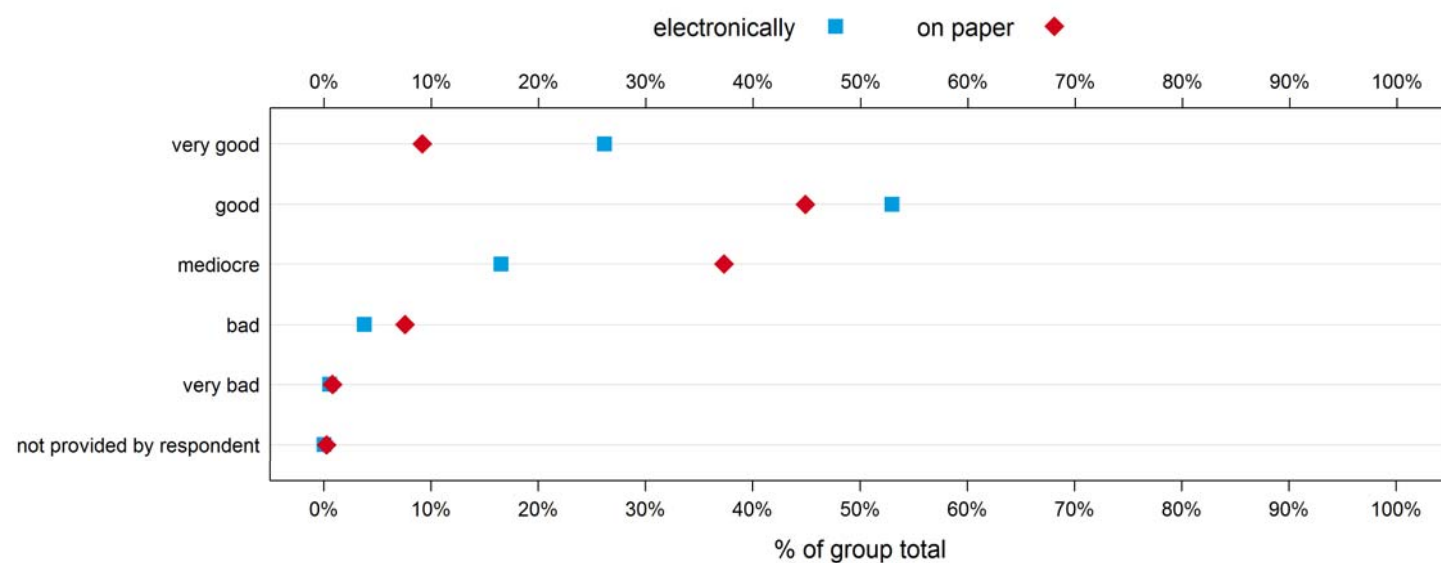


Appendix 10.6. Education by response medium



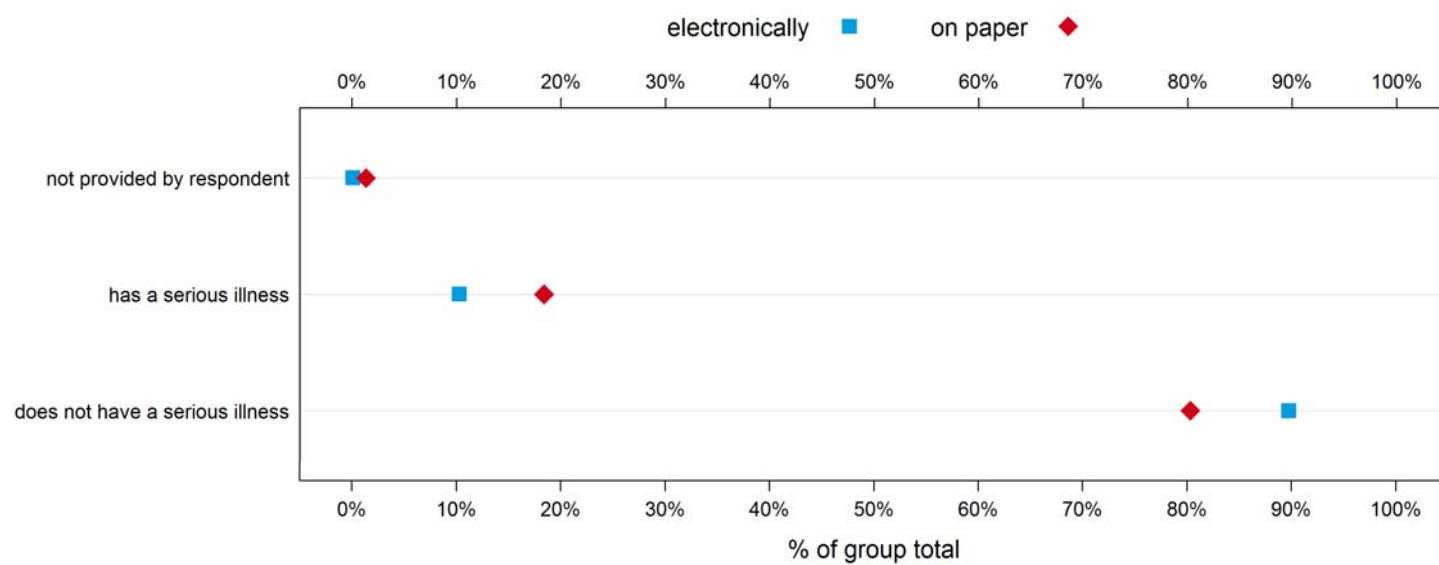


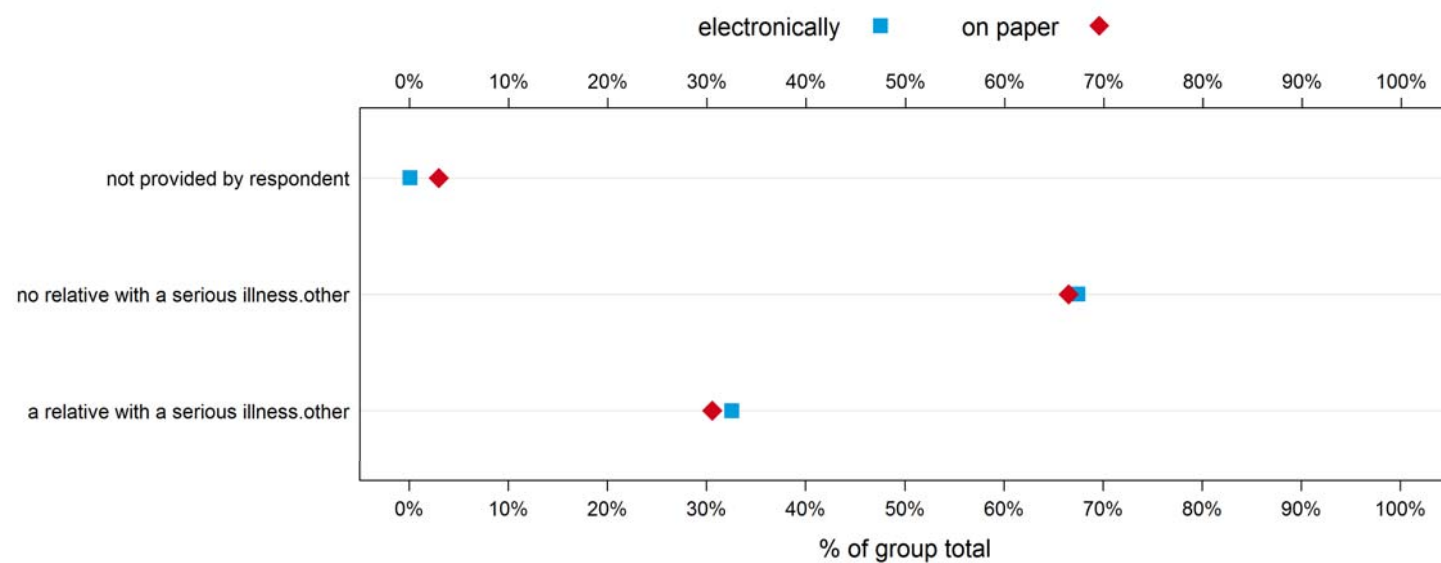
Appendix 10.7. Health status by response medium





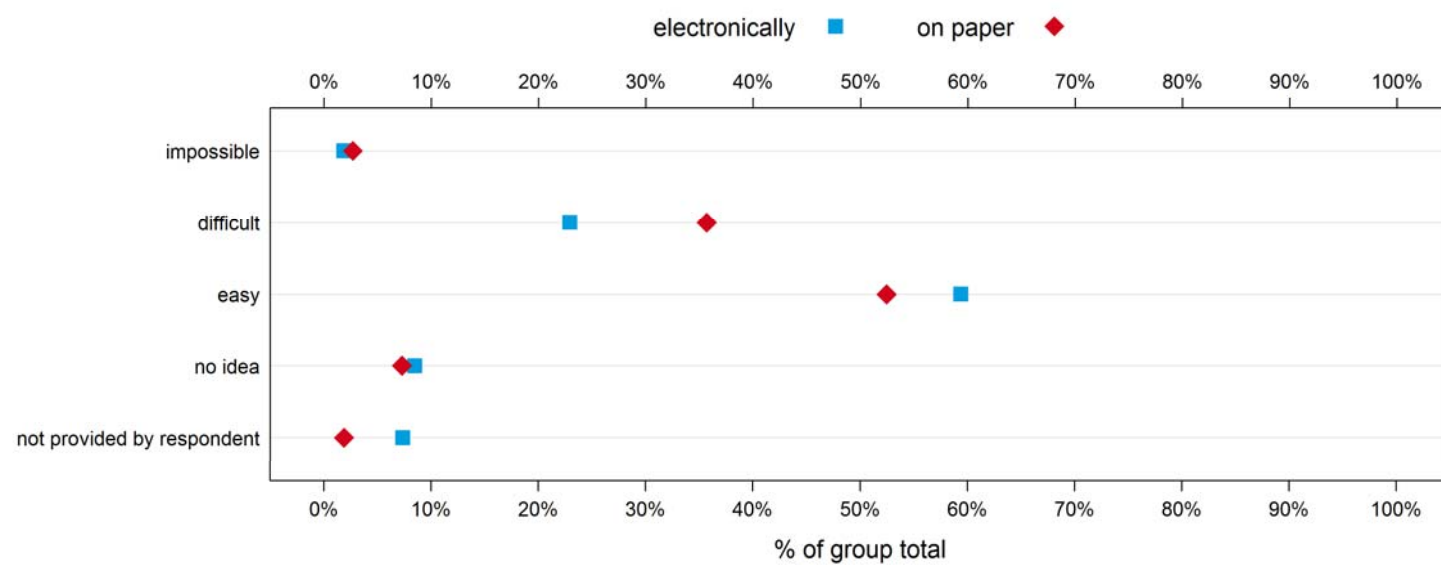
Appendix 10.8. Having a serious illness of knowing a relative with a serious illness







Appendix 10.9. Health budget by response medium





APPENDIX 11. THERAPEUTIC NEED BY PATIENT GROUP

Quality of life, given current treatment	Discomfort of current treatment	Age	Reduction in life expectancy due to the disease, despite current treatment	Therapeutic need value
2 out of 10	much	younger than 18y	die 5 years earlier	2,736
2 out of 10	much	younger than 18y	die almost immediately	1,274
2 out of 10	much	18y to 64y	die 5 years earlier	1,270
2 out of 10	much	18y to 64y	die almost immediately	1,189
5 out of 10	much	younger than 18y	die 5 years earlier	1,186
5 out of 10	much	younger than 18y	die almost immediately	1,087
5 out of 10	much	18y to 64y	die 5 years earlier	1,084
5 out of 10	much	18y to 64y	die almost immediately	1,003
2 out of 10	much	younger than 18y	no longer die	1,000
2 out of 10	much	18y to 64y	no longer die	0,989
5 out of 10	much	younger than 18y	no longer die	0,905
2 out of 10	little	younger than 18y	die 5 years earlier	0,803
2 out of 10	little	younger than 18y	die almost immediately	0,793
5 out of 10	much	18y to 64y	no longer die	0,789
8 out of 10	much	younger than 18y	die 5 years earlier	0,719
8 out of 10	much	younger than 18y	die almost immediately	0,714
2 out of 10	little	18y to 64y	die 5 years earlier	0,710
2 out of 10	little	18y to 64y	die almost immediately	0,708
8 out of 10	much	18y to 64y	die 5 years earlier	0,705
8 out of 10	much	18y to 64y	die almost immediately	0,629
5 out of 10	little	younger than 18y	die 5 years earlier	0,626
5 out of 10	little	younger than 18y	die almost immediately	0,607



2 out of 10	much	65y to 80y	die 5 years earlier	0,603
2 out of 10	much	65y to 80y	die almost immediately	0,590
5 out of 10	little	18y to 64y	die 5 years earlier	0,587
5 out of 10	little	18y to 64y	die almost immediately	0,522
2 out of 10	little	younger than 18y	no longer die	0,519
8 out of 10	much	younger than 18y	no longer die	0,508
2 out of 10	little	18y to 64y	no longer die	0,429
5 out of 10	much	65y to 80y	die 5 years earlier	0,424
5 out of 10	much	65y to 80y	die almost immediately	0,404
8 out of 10	much	18y to 64y	no longer die	0,401
5 out of 10	little	younger than 18y	no longer die	0,345
2 out of 10	much	65y to 80y	no longer die	0,322
5 out of 10	little	18y to 64y	no longer die	0,306
8 out of 10	little	younger than 18y	die 5 years earlier	0,238
8 out of 10	little	younger than 18y	die almost immediately	0,233
8 out of 10	little	18y to 64y	die 5 years earlier	0,229
8 out of 10	little	18y to 64y	die almost immediately	0,148
5 out of 10	much	65y to 80y	no longer die	0,145
2 out of 10	little	65y to 80y	die 5 years earlier	0,120
2 out of 10	little	65y to 80y	die almost immediately	0,110
8 out of 10	much	65y to 80y	die 5 years earlier	0,106
8 out of 10	much	65y to 80y	die almost immediately	0,031
8 out of 10	little	younger than 18y	no longer die	0,027
5 out of 10	little	65y to 80y	die 5 years earlier	-0,052
5 out of 10	little	65y to 80y	die almost immediately	-0,077
8 out of 10	little	18y to 64y	no longer die	-0,080
2 out of 10	little	65y to 80y	no longer die	-0,136



8 out of 10	much	65y to 80y	no longer die	-0,175
5 out of 10	little	65y to 80y	no longer die	-0,254
8 out of 10	little	65y to 80y	die 5 years earlier	-0,361
8 out of 10	little	65y to 80y	die almost immediately	-0,450
2 out of 10	much	80y and older	die 5 years earlier	-0,454
2 out of 10	much	80y and older	die almost immediately	-0,713
8 out of 10	little	65y to 80y	no longer die	-0,716
5 out of 10	much	80y and older	die 5 years earlier	-0,735
5 out of 10	much	80y and older	die almost immediately	-0,899
2 out of 10	much	80y and older	no longer die	-0,903
5 out of 10	much	80y and older	no longer die	-0,997
2 out of 10	little	80y and older	die 5 years earlier	-1,183
2 out of 10	little	80y and older	die almost immediately	-1,194
8 out of 10	much	80y and older	die 5 years earlier	-1,197
8 out of 10	much	80y and older	die almost immediately	-1,273
5 out of 10	little	80y and older	die 5 years earlier	-1,276
5 out of 10	little	80y and older	die almost immediately	-1,380
2 out of 10	little	80y and older	no longer die	-1,384
8 out of 10	much	80y and older	no longer die	-1,478
5 out of 10	little	80y and older	no longer die	-1,557
8 out of 10	little	80y and older	die 5 years earlier	-1,664
8 out of 10	little	80y and older	die almost immediately	-1,754
8 out of 10	little	80y and older	no longer die	-1,757



APPENDIX 12. SOCIETAL NEED BY DISEASE

Prevalence	Public expenditure	Societal need value
very frequent	much additional cost	1,090
rather frequent	much additional cost	0,850
not so frequent	much additional cost	0,305
very frequent	little additional cost	0,049
rare	much additional cost	-0,162
rather frequent	little additional cost	-0,192
not so frequent	little additional cost	-0,737
rare	little additional cost	-1,203



APPENDIX 13. ADDED VALUE BY NEW INTERVENTION

New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value
less	improvement	reduces the cost	cures more	increase	2,667
less	improvement	does not change the cost	cures more	increase	2,432
as much	improvement	reduces the cost	cures more	increase	2,374
as much	improvement	does not change the cost	cures more	increase	2,140
less	improvement	increases the cost	cures more	increase	2,001
more	improvement	reduces the cost	cures more	increase	1,991
less	improvement	reduces the cost	cures an equal number	increase	1,946
less	improvement	reduces the cost	cures more	does not change	1,850
less	no change	reduces the cost	cures more	increase	1,828
more	improvement	does not change the cost	cures more	increase	1,757
less	improvement	does not change the cost	cures an equal number	increase	1,711
as much	improvement	increases the cost	cures more	increase	1,708
as much	improvement	reduces the cost	cures an equal number	increase	1,653
less	improvement	does not change the cost	cures more	does not change	1,615
less	no change	does not change the cost	cures more	increase	1,594
as much	improvement	reduces the cost	cures more	does not change	1,557
as much	no change	reduces the cost	cures more	increase	1,536
as much	improvement	does not change the cost	cures an equal number	increase	1,419
more	improvement	increases the cost	cures more	increase	1,325
as much	improvement	does not change the cost	cures more	does not change	1,323
as much	no change	does not change the cost	cures more	increase	1,301
less	improvement	increases the cost	cures an equal number	increase	1,280
more	improvement	reduces the cost	cures an equal number	increase	1,270
less	improvement	increases the cost	cures more	does not change	1,184
more	improvement	reduces the cost	cures more	does not change	1,174



New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value
less	no change	increases the cost	cures more	increase	1,162
more	no change	reduces the cost	cures more	increase	1,153
less	improvement	reduces the cost	cures an equal number	does not change	1,128
less	no change	reduces the cost	cures an equal number	increase	1,107
more	improvement	does not change the cost	cures an equal number	increase	1,036
less	no change	reduces the cost	cures more	does not change	1,011
less	reduction	reduces the cost	cures more	increase	1,009
as much	improvement	increases the cost	cures an equal number	increase	0,987
less	improvement	reduces the cost	cures fewer	increase	0,977
more	improvement	does not change the cost	cures more	does not change	0,940
more	no change	does not change the cost	cures more	increase	0,919
less	improvement	does not change the cost	cures an equal number	does not change	0,894
as much	improvement	increases the cost	cures more	does not change	0,891
less	no change	does not change the cost	cures an equal number	increase	0,873
as much	no change	increases the cost	cures more	increase	0,870
as much	improvement	reduces the cost	cures an equal number	does not change	0,836
as much	no change	reduces the cost	cures an equal number	increase	0,815
less	no change	does not change the cost	cures more	does not change	0,777
less	reduction	does not change the cost	cures more	increase	0,775
less	improvement	does not change the cost	cures fewer	increase	0,743
as much	no change	reduces the cost	cures more	does not change	0,719
as much	reduction	reduces the cost	cures more	increase	0,717
as much	improvement	reduces the cost	cures fewer	increase	0,685
more	improvement	increases the cost	cures an equal number	increase	0,604
as much	improvement	does not change the cost	cures an equal number	does not change	0,601
as much	no change	does not change the cost	cures an equal number	increase	0,580



New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value
more	improvement	increases the cost	cures more	does not change	0,508
more	no change	increases the cost	cures more	increase	0,487
as much	no change	does not change the cost	cures more	does not change	0,484
as much	reduction	does not change the cost	cures more	increase	0,482
less	improvement	increases the cost	cures an equal number	does not change	0,462
more	improvement	reduces the cost	cures an equal number	does not change	0,453
as much	improvement	does not change the cost	cures fewer	increase	0,450
less	no change	increases the cost	cures an equal number	increase	0,441
more	no change	reduces the cost	cures an equal number	increase	0,432
less	no change	increases the cost	cures more	does not change	0,345
less	reduction	increases the cost	cures more	increase	0,343
more	no change	reduces the cost	cures more	does not change	0,336
more	reduction	reduces the cost	cures more	increase	0,334
less	improvement	increases the cost	cures fewer	increase	0,311
more	improvement	reduces the cost	cures fewer	increase	0,302
less	no change	reduces the cost	cures an equal number	does not change	0,290
less	reduction	reduces the cost	cures an equal number	increase	0,288
more	improvement	does not change the cost	cures an equal number	does not change	0,219
more	no change	does not change the cost	cures an equal number	increase	0,198
less	reduction	reduces the cost	cures more	does not change	0,192
as much	improvement	increases the cost	cures an equal number	does not change	0,170
less	improvement	reduces the cost	cures fewer	does not change	0,160
as much	no change	increases the cost	cures an equal number	increase	0,149
less	no change	reduces the cost	cures fewer	increase	0,139
more	no change	does not change the cost	cures more	does not change	0,101
more	reduction	does not change the cost	cures more	increase	0,100



New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value
more	improvement	does not change the cost	cures fewer	increase	0,068
less	no change	does not change the cost	cures an equal number	does not change	0,056
less	reduction	does not change the cost	cures an equal number	increase	0,054
as much	no change	increases the cost	cures more	does not change	0,053
as much	reduction	increases the cost	cures more	increase	0,051
as much	improvement	increases the cost	cures fewer	increase	0,019
as much	no change	reduces the cost	cures an equal number	does not change	-0,003
as much	reduction	reduces the cost	cures an equal number	increase	-0,004
less	reduction	does not change the cost	cures more	does not change	-0,042
less	improvement	does not change the cost	cures fewer	does not change	-0,074
less	no change	does not change the cost	cures fewer	increase	-0,095
as much	reduction	reduces the cost	cures more	does not change	-0,100
as much	improvement	reduces the cost	cures fewer	does not change	-0,132
as much	no change	reduces the cost	cures fewer	increase	-0,153
more	improvement	increases the cost	cures an equal number	does not change	-0,213
more	no change	increases the cost	cures an equal number	increase	-0,234
as much	no change	does not change the cost	cures an equal number	does not change	-0,237
as much	reduction	does not change the cost	cures an equal number	increase	-0,239
more	no change	increases the cost	cures more	does not change	-0,330
more	reduction	increases the cost	cures more	increase	-0,332
as much	reduction	does not change the cost	cures more	does not change	-0,335
more	improvement	increases the cost	cures fewer	increase	-0,364
as much	improvement	does not change the cost	cures fewer	does not change	-0,367
less	no change	increases the cost	cures an equal number	does not change	-0,376
less	reduction	increases the cost	cures an equal number	increase	-0,378
more	no change	reduces the cost	cures an equal number	does not change	-0,385



New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value
more	reduction	reduces the cost	cures an equal number	increase	-0,387
as much	no change	does not change the cost	cures fewer	increase	-0,388
less	reduction	increases the cost	cures more	does not change	-0,474
more	reduction	reduces the cost	cures more	does not change	-0,483
less	improvement	increases the cost	cures fewer	does not change	-0,506
more	improvement	reduces the cost	cures fewer	does not change	-0,515
less	no change	increases the cost	cures fewer	increase	-0,527
less	reduction	reduces the cost	cures an equal number	does not change	-0,529
more	no change	reduces the cost	cures fewer	increase	-0,536
more	no change	does not change the cost	cures an equal number	does not change	-0,620
more	reduction	does not change the cost	cures an equal number	increase	-0,622
as much	no change	increases the cost	cures an equal number	does not change	-0,669
as much	reduction	increases the cost	cures an equal number	increase	-0,670
less	no change	reduces the cost	cures fewer	does not change	-0,678
less	reduction	reduces the cost	cures fewer	increase	-0,680
more	reduction	does not change the cost	cures more	does not change	-0,718
more	improvement	does not change the cost	cures fewer	does not change	-0,749
less	reduction	does not change the cost	cures an equal number	does not change	-0,763
as much	reduction	increases the cost	cures more	does not change	-0,766
more	no change	does not change the cost	cures fewer	increase	-0,771
as much	improvement	increases the cost	cures fewer	does not change	-0,798
as much	no change	increases the cost	cures fewer	increase	-0,819
as much	reduction	reduces the cost	cures an equal number	does not change	-0,822
less	no change	does not change the cost	cures fewer	does not change	-0,912
less	reduction	does not change the cost	cures fewer	increase	-0,914
as much	no change	reduces the cost	cures fewer	does not change	-0,971



New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value
as much	reduction	reduces the cost	cures fewer	increase	-0,972
more	no change	increases the cost	cures an equal number	does not change	-1,051
more	reduction	increases the cost	cures an equal number	increase	-1,053
as much	reduction	does not change the cost	cures an equal number	does not change	-1,056
more	reduction	increases the cost	cures more	does not change	-1,149
more	improvement	increases the cost	cures fewer	does not change	-1,181
less	reduction	increases the cost	cures an equal number	does not change	-1,195
more	no change	increases the cost	cures fewer	increase	-1,202
more	reduction	reduces the cost	cures an equal number	does not change	-1,204
as much	no change	does not change the cost	cures fewer	does not change	-1,205
as much	reduction	does not change the cost	cures fewer	increase	-1,207
less	no change	increases the cost	cures fewer	does not change	-1,344
less	reduction	increases the cost	cures fewer	increase	-1,346
more	no change	reduces the cost	cures fewer	does not change	-1,353
more	reduction	reduces the cost	cures fewer	increase	-1,355
more	reduction	does not change the cost	cures an equal number	does not change	-1,439
as much	reduction	increases the cost	cures an equal number	does not change	-1,488
less	reduction	reduces the cost	cures fewer	does not change	-1,497
more	no change	does not change the cost	cures fewer	does not change	-1,588
more	reduction	does not change the cost	cures fewer	increase	-1,590
as much	no change	increases the cost	cures fewer	does not change	-1,637
as much	reduction	increases the cost	cures fewer	increase	-1,638
less	reduction	does not change the cost	cures fewer	does not change	-1,732
as much	reduction	reduces the cost	cures fewer	does not change	-1,790
more	reduction	increases the cost	cures an equal number	does not change	-1,870
more	no change	increases the cost	cures fewer	does not change	-2,019



New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value
more	reduction	increases the cost	cures fewer	increase	-2,021
as much	reduction	does not change the cost	cures fewer	does not change	-2,024
less	reduction	increases the cost	cures fewer	does not change	-2,163
more	reduction	reduces the cost	cures fewer	does not change	-2,172
more	reduction	does not change the cost	cures fewer	does not change	-2,407
as much	reduction	increases the cost	cures fewer	does not change	-2,456
more	reduction	increases the cost	cures fewer	does not change	-2,838



APPENDIX 14. CHOICE SET SUBGROUP ANALYSIS THERAPEUTIC NEED DOMAIN

Appendix 14.1. Choice set analysis per number of reminders

Appendix 14.1.1. Model fit per number of reminders

Actual and predicted percentage of choice for each alternative per number of reminders

	N	Alternative 1		Alternative 2	
		Actual	Predicted	Actual	Predicted
no reminders	1170	56.8%	59.8%	43.2%	40.2%
one reminder	1446	58.6%	60.9%	41.4%	39.1%
two reminders	842	59.1%	61.2%	40.9%	38.8%
three reminders	830	59.8%	60.8%	40.2%	39.2%

Goodness of fit statistics

	X ² observed versus predicted	% of responses correctly predicted by model
no reminders	13.31 (df=1; p < 0.01)	75.8%
one reminder	9.81 (df=1; p < 0.01)	75.6%
two reminders	4.53 (df=1;0.03)	75.6%
three reminders	0.87 (df=1;0.35)	73.7%



Appendix 14.1.2. Estimated model parameters per number of reminders

Model summary by number of reminders

	Attribute	Level	Estimated coefficient ^a	Standard Error	t-value	Pr(> t)	Significance level
no reminders	age	80y and older	-1.360	0.058			
		65y to 80y	0.039	0.043	0.906	0.365	
		18y to 64y	0.543	0.057	9.579	0.000	***
		younger than 18y	0.778	0.057	13.719	0.000	***
	quality of life	8 out of 10	-0.331	0.051			
		5 out of 10	0.069	0.039	1.796	0.073	.
		2 out of 10	0.261	0.036	7.324	0.000	***
	life expectancy	no longer die	-0.158	0.038			
		die 5 years earlier	0.043	0.043	1.011	0.312	
		die almost immediately	0.115	0.039	2.910	0.004	**
	discomfort	little	-0.253	0.037			
		much	0.253	0.027	9.472	0.000	***
one reminder	age	80y and older	-1.285	0.049			
		65y to 80y	-0.003	0.040	-0.072	0.943	
		18y to 64y	0.655	0.052	12.486	0.000	***
		younger than 18y	0.633	0.049	12.787	0.000	***
	quality of life	8 out of 10	-0.342	0.045			
		5 out of 10	0.044	0.035	1.274	0.203	
		2 out of 10	0.298	0.032	9.219	0.000	***
	life expectancy	no longer die	-0.242	0.036			
		die 5 years earlier	0.171	0.039	4.332	0.000	***
		die almost immediately	0.071	0.035	2.061	0.039	*
	discomfort	little	-0.254	0.034			
		much	0.254	0.024	10.459	0.000	***
two reminders	age	80y and older	-1.295	0.065			
		65y to 80y	-0.037	0.051	-0.724	0.469	
		18y to 64y	0.615	0.067	9.137	0.000	***
		younger than 18y	0.717	0.066	10.787	0.000	***



	Attribute	Level	Estimated coefficient [°]	Standard Error	t-value	Pr(> t)	Significance level
three reminders	quality of life	8 out of 10	-0.304	0.057			
		5 out of 10	0.094	0.045	2.070	0.038	*
		2 out of 10	0.210	0.042	5.040	0.000	***
	life expectancy	no longer die	-0.236	0.047			
		die 5 years earlier	0.098	0.051	1.919	0.055	
		die almost immediately	0.138	0.047	2.952	0.003	**
	discomfort	little	-0.236	0.042			
		much	0.236	0.031	7.604	0.000	***
	age	80y and older	-1.251	0.062			
		65y to 80y	0.026	0.051	0.506	0.613	
		18y to 64y	0.584	0.062	9.393	0.000	***
		younger than 18y	0.641	0.067	9.493	0.000	***
	quality of life	8 out of 10	-0.254	0.055			
		5 out of 10	0.061	0.044	1.378	0.168	
		2 out of 10	0.193	0.042	4.615	0.000	***
	life expectancy	no longer die	-0.096	0.045			
		die 5 years earlier	0.049	0.050	0.975	0.329	
		die almost immediately	0.048	0.047	1.017	0.309	
	discomfort	little	-0.215	0.043			
		much	0.215	0.031	6.964	0.000	***

[°] Results of a multinomial logistic regression model

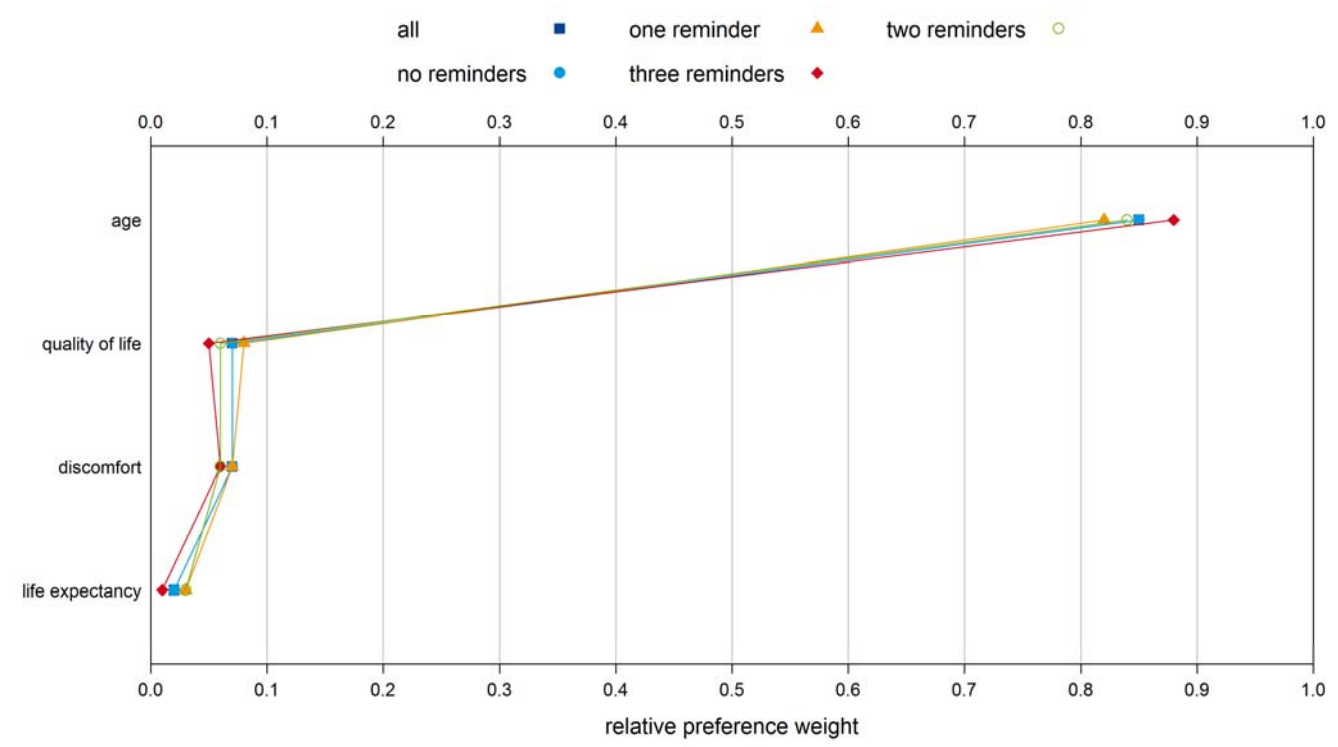
* significant on the 5% significance level

** significant on the 1% significance level

*** significant on the 0.1% significance level

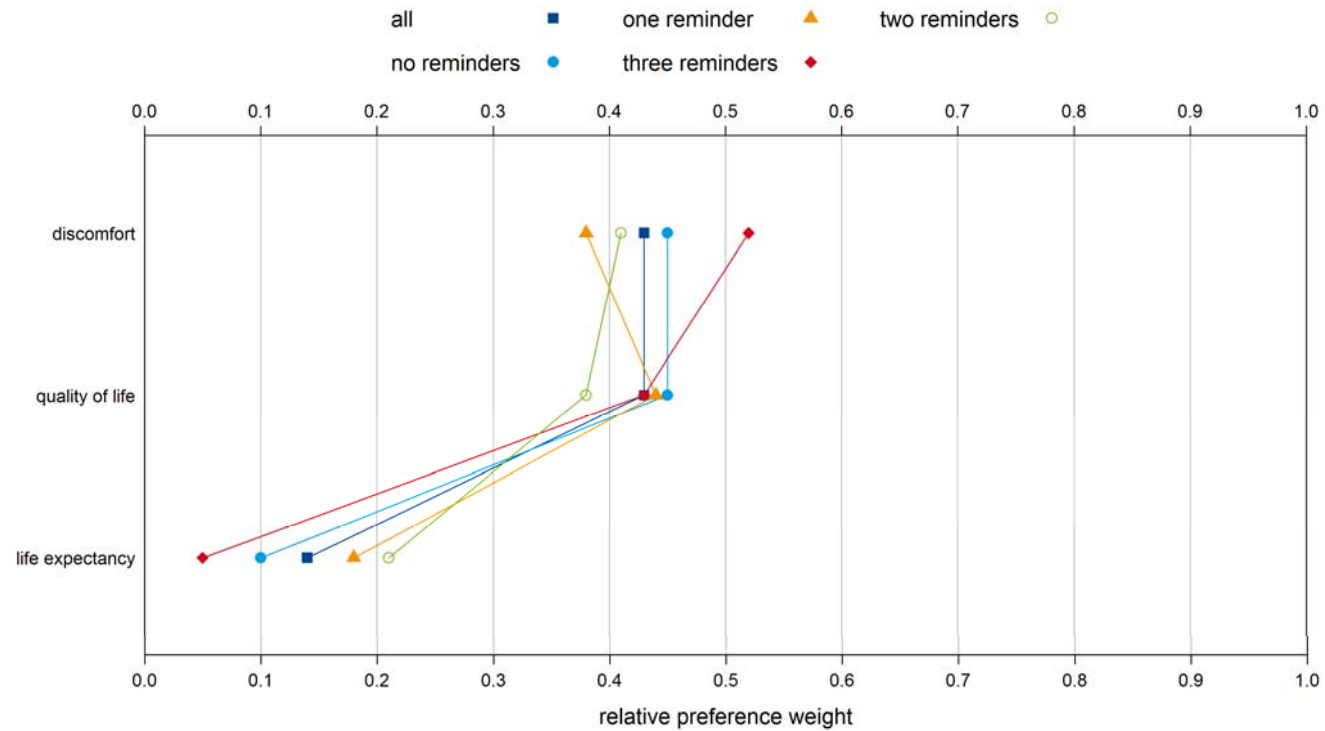


Appendix 14.1.3. Weights per number of reminders
Relative weights in function of number of reminders received





Relative weights in function of number of reminders received derived without age





Appendix 14.1.4. Therapeutic need value per number of reminders

Therapeutic need values per number of reminders

Quality of life, given current treatment	Discomfort of current treatment	Age	Reduction in life expectancy due to the disease, despite current treatment	Therapeutic need value no reminders	Therapeutic need value one reminder	Therapeutic need value two reminders	Therapeutic need value three reminders
2 out of 10	much	younger than 18y	die almost immediately	1.407	1.256	1.300	1.096
2 out of 10	much	younger than 18y	die 5 years earlier	1.336	1.355	1.261	1.097
2 out of 10	much	18y to 64y	die almost immediately	1.172	1.278	1.198	1.039
2 out of 10	much	18y to 64y	die 5 years earlier	1.101	1.377	1.159	1.040
5 out of 10	much	younger than 18y	die almost immediately	1.215	1.002	1.184	0.964
5 out of 10	much	younger than 18y	die 5 years earlier	1.144	1.101	1.145	0.965
5 out of 10	much	18y to 64y	die almost immediately	0.980	1.025	1.082	0.908
5 out of 10	much	18y to 64y	die 5 years earlier	0.909	1.124	1.043	0.909
2 out of 10	much	younger than 18y	no longer die	1.134	0.942	0.927	0.952
2 out of 10	much	18y to 64y	no longer die	0.899	0.965	0.825	0.895
5 out of 10	much	younger than 18y	no longer die	0.942	0.689	0.811	0.820
2 out of 10	little	younger than 18y	die almost immediately	0.902	0.748	0.829	0.666
2 out of 10	little	younger than 18y	die 5 years earlier	0.830	0.848	0.789	0.667
5 out of 10	much	18y to 64y	no longer die	0.707	0.711	0.709	0.764
8 out of 10	much	younger than 18y	die almost immediately	0.815	0.615	0.786	0.649
8 out of 10	much	younger than 18y	die 5 years earlier	0.744	0.715	0.747	0.650
2 out of 10	little	18y to 64y	die almost immediately	0.667	0.771	0.727	0.610
2 out of 10	little	18y to 64y	die 5 years earlier	0.595	0.870	0.687	0.611
8 out of 10	much	18y to 64y	die almost immediately	0.580	0.638	0.684	0.593
8 out of 10	much	18y to 64y	die 5 years earlier	0.509	0.737	0.645	0.594
5 out of 10	little	younger than 18y	die almost immediately	0.710	0.495	0.713	0.535
5 out of 10	little	younger than 18y	die 5 years earlier	0.638	0.594	0.674	0.536
2 out of 10	much	65y to 80y	die almost immediately	0.668	0.620	0.546	0.481
2 out of 10	much	65y to 80y	die 5 years earlier	0.596	0.719	0.507	0.482
5 out of 10	little	18y to 64y	die almost immediately	0.475	0.517	0.611	0.478
5 out of 10	little	18y to 64y	die 5 years earlier	0.403	0.617	0.572	0.479



Quality of life, given current treatment	Discomfort of current treatment	Age	Reduction in life expectancy due to the disease, despite current treatment	Therapeutic need value no reminders	Therapeutic need value one reminder	Therapeutic need value two reminders	Therapeutic need value three reminders
2 out of 10	little	younger than 18y	no longer die	0.629	0.435	0.456	0.522
8 out of 10	much	younger than 18y	no longer die	0.542	0.302	0.413	0.505
2 out of 10	little	18y to 64y	no longer die	0.394	0.458	0.353	0.466
5 out of 10	much	65y to 80y	die almost immediately	0.475	0.366	0.430	0.349
5 out of 10	much	65y to 80y	die 5 years earlier	0.404	0.466	0.391	0.350
8 out of 10	much	18y to 64y	no longer die	0.307	0.325	0.311	0.449
5 out of 10	little	younger than 18y	no longer die	0.436	0.182	0.340	0.391
2 out of 10	much	65y to 80y	no longer die	0.395	0.307	0.173	0.337
5 out of 10	little	18y to 64y	no longer die	0.201	0.204	0.238	0.335
8 out of 10	little	younger than 18y	die almost immediately	0.310	0.108	0.315	0.220
8 out of 10	little	younger than 18y	die 5 years earlier	0.238	0.208	0.276	0.221
8 out of 10	little	18y to 64y	die almost immediately	0.075	0.131	0.213	0.164
8 out of 10	little	18y to 64y	die 5 years earlier	0.003	0.230	0.174	0.165
5 out of 10	much	65y to 80y	no longer die	0.202	0.053	0.057	0.206
2 out of 10	little	65y to 80y	die almost immediately	0.162	0.113	0.075	0.051
2 out of 10	little	65y to 80y	die 5 years earlier	0.091	0.212	0.035	0.052
8 out of 10	much	65y to 80y	die almost immediately	0.076	-0.020	0.032	0.035
8 out of 10	much	65y to 80y	die 5 years earlier	0.004	0.079	-0.007	0.036
8 out of 10	little	younger than 18y	no longer die	0.037	-0.205	-0.058	0.076
5 out of 10	little	65y to 80y	die almost immediately	-0.030	-0.141	-0.041	-0.080
5 out of 10	little	65y to 80y	die 5 years earlier	-0.101	-0.042	-0.080	-0.079
8 out of 10	little	18y to 64y	no longer die	-0.198	-0.183	-0.160	0.020
2 out of 10	little	65y to 80y	no longer die	-0.111	-0.201	-0.299	-0.093
8 out of 10	much	65y to 80y	no longer die	-0.197	-0.333	-0.341	-0.109
5 out of 10	little	65y to 80y	no longer die	-0.303	-0.454	-0.414	-0.224
8 out of 10	little	65y to 80y	die almost immediately	-0.430	-0.527	-0.439	-0.395
8 out of 10	little	65y to 80y	die 5 years earlier	-0.501	-0.428	-0.478	-0.394
8 out of 10	little	65y to 80y	no longer die	-0.703	-0.841	-0.812	-0.539

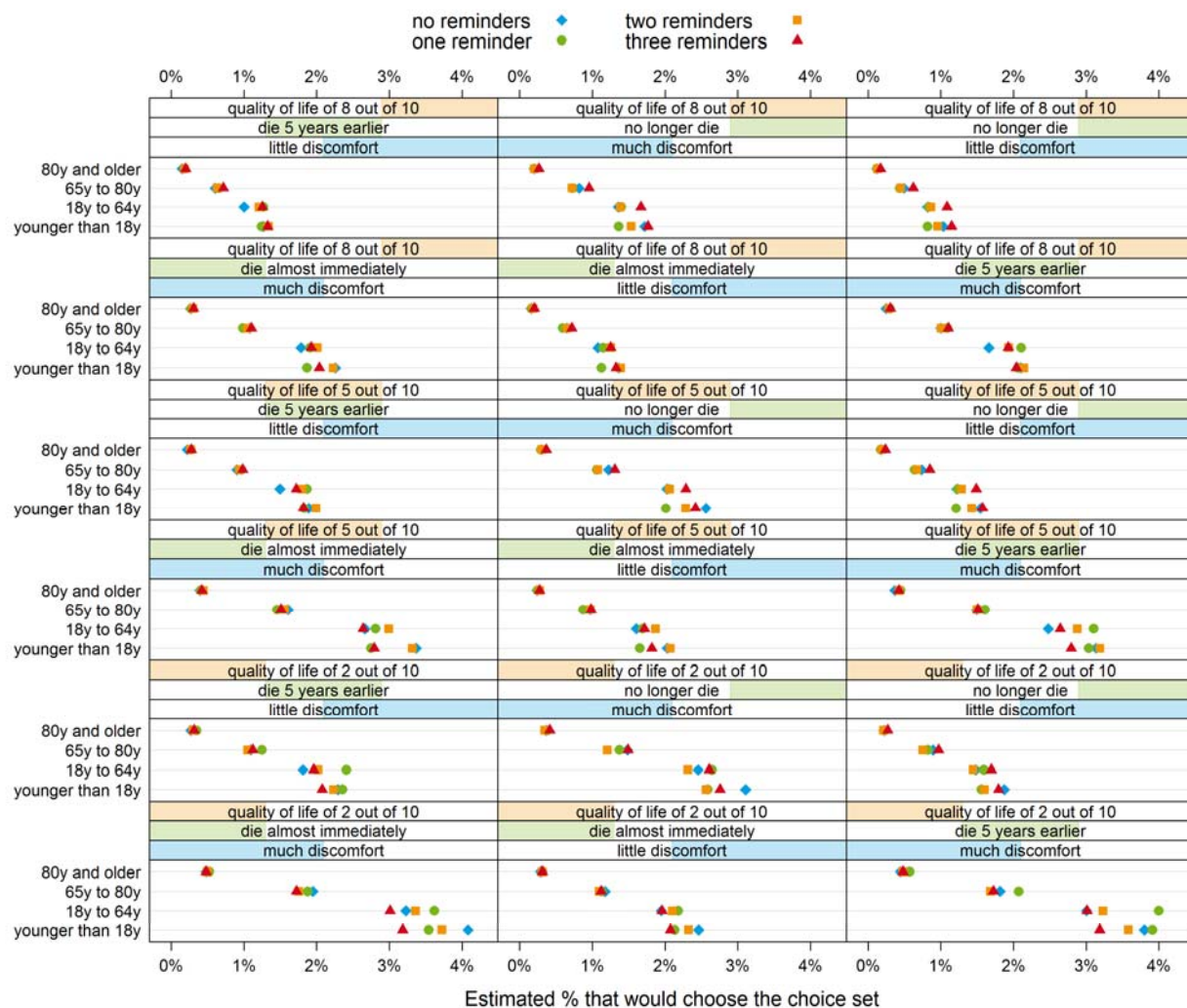


Quality of life, given current treatment	Discomfort of current treatment	Age	Reduction in life expectancy due to the disease, despite current treatment	Therapeutic need value no reminders	Therapeutic need value one reminder	Therapeutic need value two reminders	Therapeutic need value three reminders
2 out of 10	much	80y and older	die almost immediately	-0.731	-0.662	-0.712	-0.796
2 out of 10	much	80y and older	die 5 years earlier	-0.803	-0.563	-0.752	-0.795
5 out of 10	much	80y and older	die almost immediately	-0.924	-0.916	-0.828	-0.928
5 out of 10	much	80y and older	die 5 years earlier	-0.995	-0.817	-0.867	-0.927
2 out of 10	much	80y and older	no longer die	-1.004	-0.976	-1.086	-0.940
5 out of 10	much	80y and older	no longer die	-1.197	-1.229	-1.201	-1.072
2 out of 10	little	80y and older	die almost immediately	-1.237	-1.170	-1.184	-1.226
2 out of 10	little	80y and older	die 5 years earlier	-1.308	-1.070	-1.223	-1.225
8 out of 10	much	80y and older	die almost immediately	-1.323	-1.303	-1.226	-1.242
8 out of 10	much	80y and older	die 5 years earlier	-1.395	-1.203	-1.265	-1.241
5 out of 10	little	80y and older	die almost immediately	-1.429	-1.423	-1.299	-1.357
5 out of 10	little	80y and older	die 5 years earlier	-1.500	-1.324	-1.339	-1.356
2 out of 10	little	80y and older	no longer die	-1.510	-1.483	-1.557	-1.370
8 out of 10	much	80y and older	no longer die	-1.596	-1.616	-1.599	-1.386
5 out of 10	little	80y and older	no longer die	-1.702	-1.736	-1.673	-1.501
8 out of 10	little	80y and older	die almost immediately	-1.829	-1.810	-1.697	-1.672
8 out of 10	little	80y and older	die 5 years earlier	-1.900	-1.710	-1.737	-1.671
8 out of 10	little	80y and older	no longer die	-2.102	-2.123	-2.071	-1.816



Appendix 14.1.5. Probabilities of choosing a scenario per number of reminders

Probabilities of choosing a scenario as having a higher therapeutic need out of the full set of scenarios per number of reminders





Appendix 14.2. Choice set analysis per age category

Appendix 14.2.1. Model fit per age category

Actual and predicted percentage of choice for each alternative per age category

	N	Alternative 1		Alternative 2	
		Actual	Predicted	Actual	Predicted
20-29	617	59.8%	61.6%	40.2%	38.4%
30-39	678	57.4%	60.4%	42.6%	39.6%
40-49	812	59.7%	62.4%	40.3%	37.6%
50-59	963	58.7%	60.6%	41.3%	39.4%
60-69	765	58.5%	60.4%	41.5%	39.6%
70-79	331	56.0%	58.0%	44.0%	42.0%
80-89	121	53.1%	55.8%	46.9%	44.2%

Goodness of fit statistics

	X ² observed versus predicted	% of responses correctly predicted by model
20-29	2.7 (df=1; p=0.1)	75.7%
30-39	7.65 (df=1; p < 0.01)	75.7%
40-49	7.38 (df=1; p < 0.01)	77.9%
50-59	4.04 (df=1; p=0.04)	76.2%
60-69	3.44 (df=1; p=0.06)	76.3%
70-79	1.68 (df=1; p=0.19)	72.8%
80-89	1.07 (df=1; p=0.3)	64.0%



Appendix 14.2.2. Estimated model parameters per age category

Model summary by age category

	Attribute	Level	Estimated coefficient ^a	Standard Error	t-value	Pr(> t)	Significance level
20-29	age	80y and older	-1.378	0.084			
		65y to 80y	-0.132	0.060	-2.197	0.028	*
		18y to 64y	0.700	0.081	8.598	0.000	***
		younger than 18y	0.811	0.082	9.941	0.000	***
	quality of life	8 out of 10	-0.457	0.072			
		5 out of 10	0.039	0.054	0.730	0.465	
		2 out of 10	0.418	0.051	8.118	0.000	***
	life expectancy	no longer die	-0.318	0.056			
		die 5 years earlier	0.113	0.062	1.820	0.069	.
		die almost immediately	0.205	0.056	3.680	0.000	***
	discomfort	little	-0.282	0.052			
		much	0.282	0.038	7.495	0.000	***
30-39	age	80y and older	-1.351	0.076			
		65y to 80y	-0.109	0.057	-1.900	0.057	.
		18y to 64y	0.705	0.077	9.113	0.000	***
		younger than 18y	0.754	0.075	10.021	0.000	***
	quality of life	8 out of 10	-0.368	0.066			
		5 out of 10	0.030	0.050	0.605	0.545	
		2 out of 10	0.338	0.048	7.061	0.000	***
	life expectancy	no longer die	-0.186	0.051			
		die 5 years earlier	0.030	0.057	0.517	0.605	
		die almost immediately	0.156	0.052	3.002	0.003	**
	discomfort	little	-0.250	0.049			
		much	0.250	0.035	7.071	0.000	***
40-49	age	80y and older	-1.462	0.073			
		65y to 80y	0.031	0.053	0.576	0.564	
		18y to 64y	0.735	0.072	10.145	0.000	***
		younger than 18y	0.696	0.070	10.011	0.000	***



	Attribute	Level	Estimated coefficient ^a	Standard Error	t-value	Pr(> t)	Significance level
50-59	quality of life	8 out of 10	-0.330	0.062			
		5 out of 10	0.096	0.049	1.972	0.049	*
		2 out of 10	0.234	0.044	5.269	0.000	***
	life expectancy	no longer die	-0.277	0.050			
		die 5 years earlier	0.138	0.053	2.599	0.009	**
		die almost immediately	0.138	0.049	2.852	0.004	**
	discomfort	little	-0.303	0.047			
		much	0.303	0.033	9.080	0.000	***
	age	80y and older	-1.362	0.062			
		65y to 80y	-0.033	0.048	-0.679	0.497	
		18y to 64y	0.701	0.063	11.057	0.000	***
		younger than 18y	0.694	0.062	11.118	0.000	***
	quality of life	8 out of 10	-0.290	0.055			
		5 out of 10	0.065	0.043	1.520	0.129	
		2 out of 10	0.225	0.039	5.711	0.000	***
	life expectancy	no longer die	-0.155	0.044			
		die 5 years earlier	0.083	0.048	1.730	0.084	.
		die almost immediately	0.073	0.044	1.669	0.095	.
	discomfort	little	-0.206	0.040			
		much	0.206	0.029	6.994	0.000	***
60-69	age	80y and older	-1.354	0.068			
		65y to 80y	0.111	0.055	2.028	0.043	*
		18y to 64y	0.518	0.068	7.607	0.000	***
		younger than 18y	0.724	0.070	10.387	0.000	***
	quality of life	8 out of 10	-0.250	0.062			
		5 out of 10	0.081	0.049	1.670	0.095	.
		2 out of 10	0.169	0.044	3.828	0.000	***
	life expectancy	no longer die	-0.175	0.050			
		die 5 years earlier	0.133	0.054	2.482	0.013	*
		die almost immediately	0.042	0.049	0.843	0.399	
	discomfort	little	-0.198	0.046			



Attribute		Level	Estimated coefficient [°]	Standard Error	t-value	Pr(> t)	Significance level
70-79	age	much	0.198	0.033	6.028	0.000	***
		80y and older	-1.046	0.083			
		65y to 80y	0.319	0.083	3.818	0.000	***
		18y to 64y	0.299	0.091	3.287	0.001	**
		younger than 18y	0.428	0.096	4.445	0.000	***
	quality of life	8 out of 10	-0.136	0.082			
		5 out of 10	0.043	0.068	0.644	0.520	
		2 out of 10	0.092	0.062	1.475	0.140	
	life expectancy	no longer die	0.051	0.066			
		die 5 years earlier	-0.040	0.077	-0.518	0.604	
		die almost immediately	-0.011	0.069	-0.159	0.874	
	discomfort	little	-0.228	0.065			
		much	0.228	0.047	4.837	0.000	***
80-89	age	80y and older	-0.443	0.113			
		65y to 80y	-0.086	0.138	-0.622	0.534	
		18y to 64y	0.051	0.148	0.342	0.732	
		younger than 18y	0.478	0.152	3.152	0.002	**
	quality of life	8 out of 10	-0.379	0.139			
		5 out of 10	0.186	0.100	1.867	0.062	.
		2 out of 10	0.193	0.099	1.948	0.051	.
	life expectancy	no longer die	-0.066	0.119			
		die 5 years earlier	0.143	0.121	1.180	0.238	
		die almost immediately	-0.077	0.107	-0.720	0.471	
	discomfort	little	-0.240	0.104			
		much	0.240	0.074	3.252	0.001	**

[°] Results of a multinomial logistic regression model

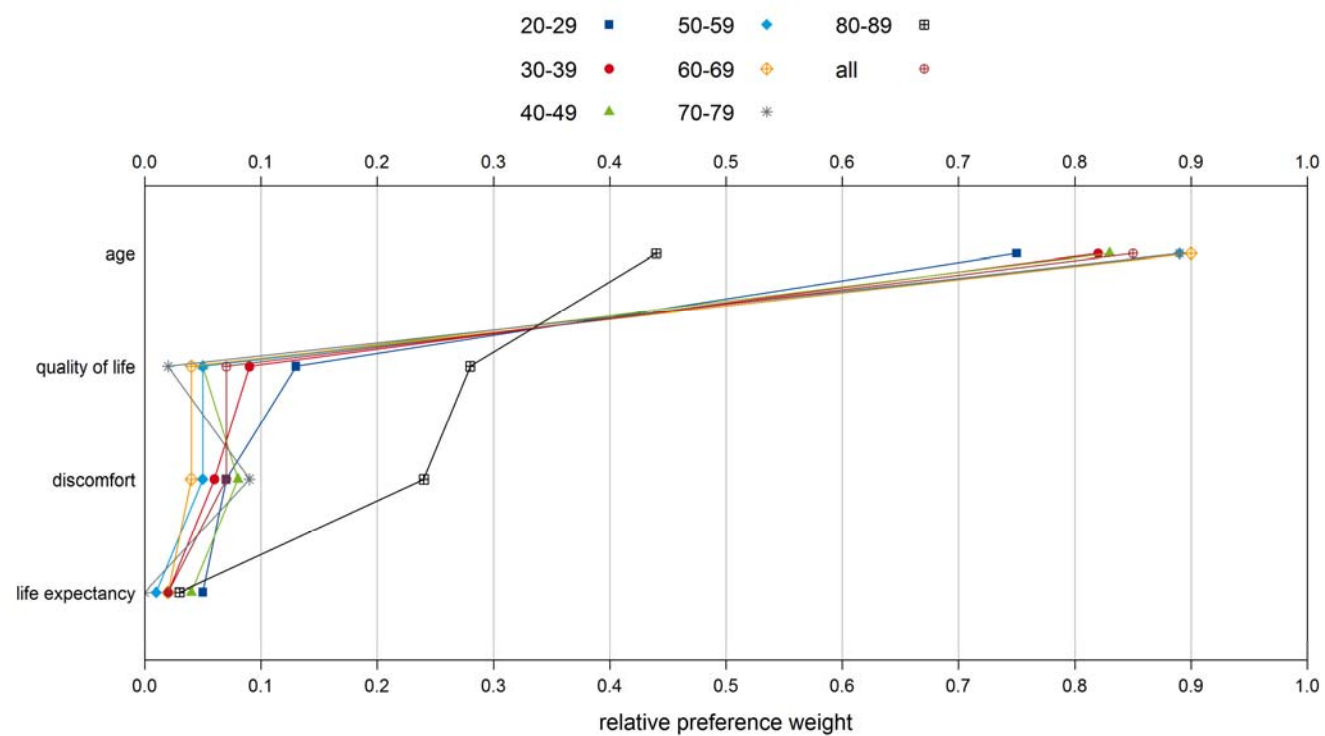
* significant on the 5% significance level

** significant on the 1% significance level

*** significant on the 0.1% significance level

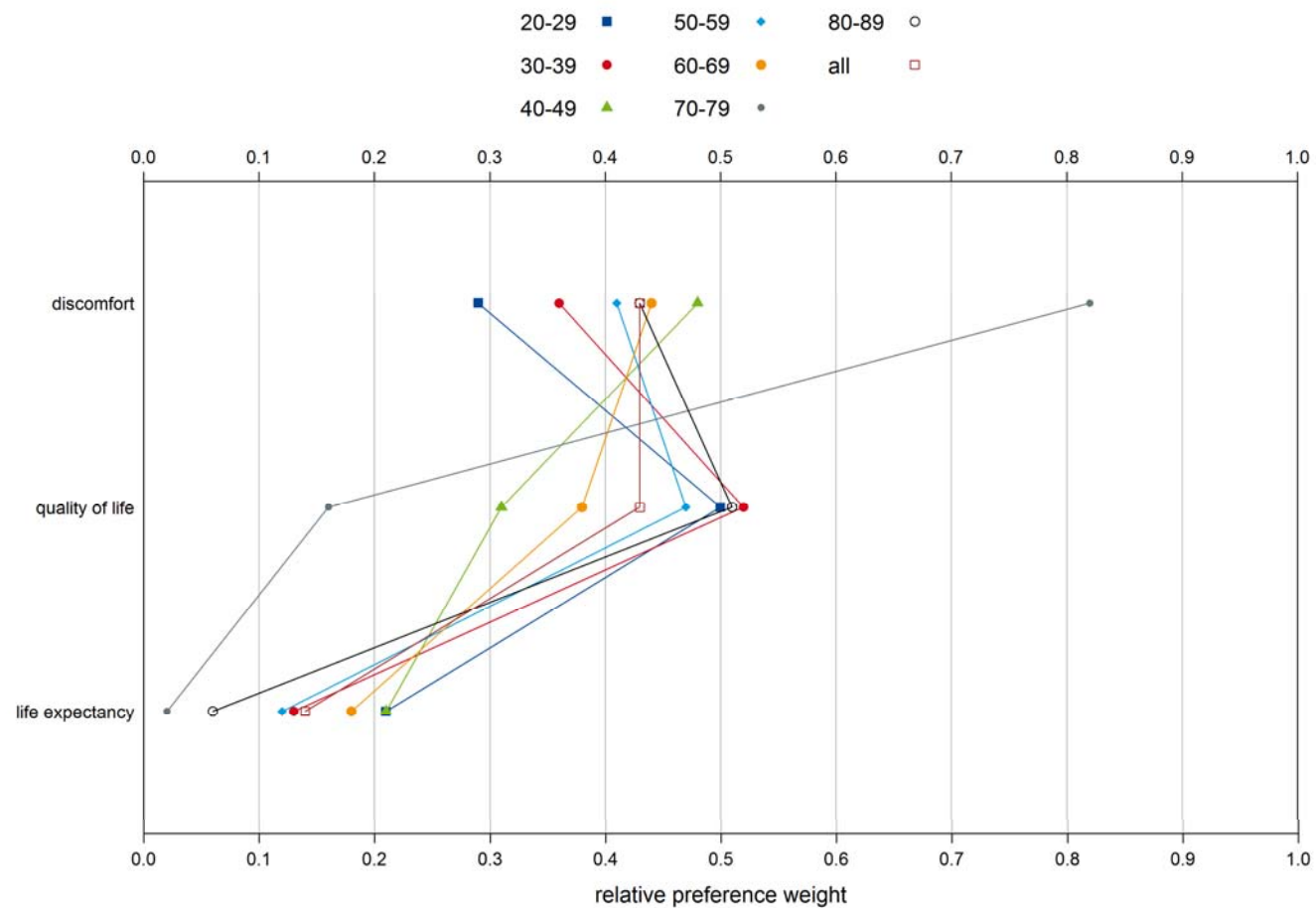
Appendix 14.2.3. Weights per age category

Relative weights in function of age category received





Relative weights in function of age category received derived without age





Appendix 14.2.4. Therapeutic need value per age category

Therapeutic need values per age category

Quality of life, given current treatment	Discomfort of current treatment	Age	Reduction in life expectancy due to the disease, despite current treatment	Therapeutic need value 20-29	Therapeutic need value 30-39	Therapeutic need value 40-49	Therapeutic need value 50-59	Therapeutic need value 60-69	Therapeutic need value 70-79	Therapeutic need value 80-89
2 out of 10	much	younger than 18y	die 5 years earlier	1.623	1.372	1.372	1.208	1.224	0.709	1.054
2 out of 10	much	younger than 18y	die almost immediately	1.715	1.498	1.372	1.198	1.133	0.738	0.834
2 out of 10	much	18y to 64y	die 5 years earlier	1.512	1.323	1.410	1.214	1.018	0.580	0.627
2 out of 10	much	18y to 64y	die almost immediately	1.605	1.449	1.410	1.204	0.927	0.608	0.407
5 out of 10	much	younger than 18y	die 5 years earlier	1.244	1.064	1.234	1.048	1.137	0.661	1.048
5 out of 10	much	younger than 18y	die almost immediately	1.337	1.191	1.234	1.038	1.045	0.689	0.827
2 out of 10	much	younger than 18y	no longer die	1.192	1.157	0.956	0.970	0.916	0.800	0.845
5 out of 10	much	18y to 64y	die 5 years earlier	1.133	1.016	1.273	1.054	0.931	0.531	0.620
5 out of 10	much	18y to 64y	die almost immediately	1.226	1.142	1.273	1.044	0.839	0.560	0.400
2 out of 10	much	18y to 64y	no longer die	1.081	1.108	0.995	0.976	0.711	0.670	0.418
5 out of 10	much	younger than 18y	no longer die	0.814	0.849	0.819	0.810	0.829	0.751	0.838
2 out of 10	little	younger than 18y	die 5 years earlier	1.059	0.872	0.765	0.796	0.828	0.252	0.574
2 out of 10	little	younger than 18y	die almost immediately	1.152	0.998	0.765	0.786	0.736	0.281	0.353
5 out of 10	much	18y to 64y	no longer die	0.703	0.800	0.858	0.816	0.623	0.621	0.411
8 out of 10	much	younger than 18y	die 5 years earlier	0.748	0.666	0.808	0.693	0.806	0.482	0.483
8 out of 10	much	younger than 18y	die almost immediately	0.841	0.792	0.808	0.683	0.714	0.510	0.262
2 out of 10	little	18y to 64y	die 5 years earlier	0.948	0.823	0.803	0.803	0.622	0.123	0.146
2 out of 10	little	18y to 64y	die almost immediately	1.041	0.949	0.804	0.792	0.530	0.151	-0.074
2 out of 10	much	65y to 80y	die 5 years earlier	0.680	0.509	0.706	0.481	0.611	0.600	0.491
5 out of 10	little	younger than 18y	die 5 years earlier	0.681	0.564	0.627	0.637	0.740	0.204	0.567
2 out of 10	much	65y to 80y	die almost immediately	0.773	0.635	0.706	0.470	0.520	0.628	0.270
5 out of 10	little	younger than 18y	die almost immediately	0.774	0.691	0.628	0.626	0.649	0.232	0.346



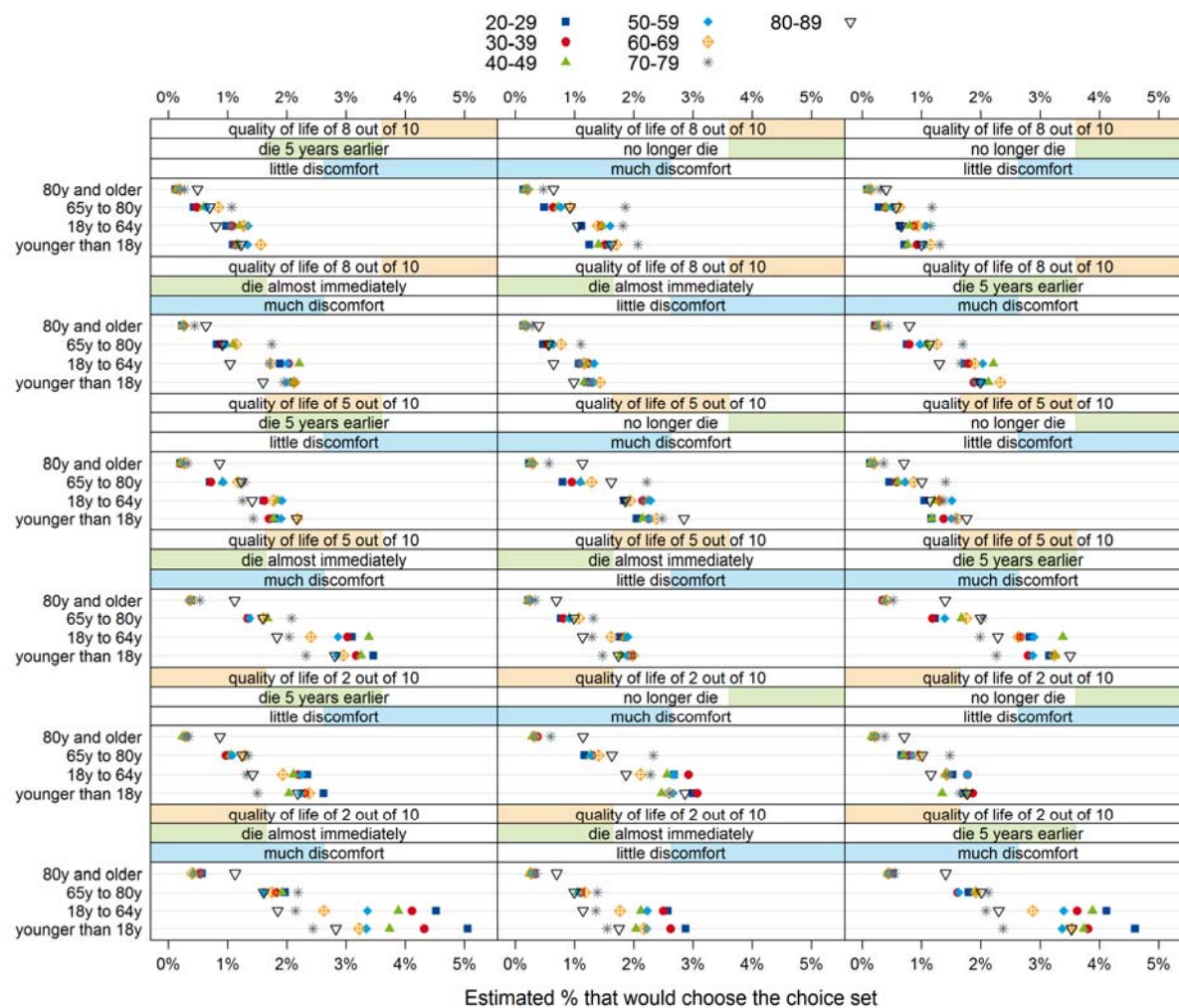
Quality of life, given current treatment	Discomfort of current treatment	Age	Reduction in life expectancy due to the disease, despite current treatment	Therapeutic need value 20-29	Therapeutic need value 30-39	Therapeutic need value 40-49	Therapeutic need value 50-59	Therapeutic need value 60-69	Therapeutic need value 70-79	Therapeutic need value 80-89
8 out of 10	much	18y to 64y	die 5 years earlier	0.637	0.617	0.847	0.699	0.600	0.352	0.055
8 out of 10	much	18y to 64y	die almost immediately	0.730	0.743	0.847	0.689	0.508	0.381	-0.165
2 out of 10	little	younger than 18y	no longer die	0.628	0.656	0.349	0.558	0.520	0.343	0.364
5 out of 10	little	18y to 64y	die 5 years earlier	0.570	0.515	0.666	0.643	0.534	0.074	0.140
5 out of 10	little	18y to 64y	die almost immediately	0.663	0.642	0.666	0.633	0.443	0.103	-0.081
8 out of 10	much	younger than 18y	no longer die	0.317	0.450	0.393	0.455	0.498	0.572	0.273
5 out of 10	much	65y to 80y	die 5 years earlier	0.302	0.202	0.569	0.321	0.524	0.551	0.484
5 out of 10	much	65y to 80y	die almost immediately	0.395	0.328	0.569	0.311	0.432	0.580	0.263
2 out of 10	little	18y to 64y	no longer die	0.517	0.608	0.388	0.564	0.314	0.213	-0.063
2 out of 10	much	65y to 80y	no longer die	0.249	0.294	0.291	0.242	0.303	0.690	0.281
5 out of 10	little	younger than 18y	no longer die	0.250	0.349	0.212	0.398	0.432	0.294	0.358
8 out of 10	much	18y to 64y	no longer die	0.206	0.402	0.432	0.461	0.292	0.442	-0.154
5 out of 10	little	18y to 64y	no longer die	0.139	0.300	0.251	0.404	0.227	0.165	-0.070
8 out of 10	little	younger than 18y	die 5 years earlier	0.184	0.166	0.201	0.282	0.409	0.025	0.002
5 out of 10	much	65y to 80y	no longer die	-0.129	-0.014	0.153	0.082	0.216	0.641	0.275
8 out of 10	little	younger than 18y	die almost immediately	0.277	0.292	0.202	0.271	0.318	0.053	-0.219
2 out of 10	little	65y to 80y	die 5 years earlier	0.116	0.009	0.099	0.069	0.215	0.143	0.010
2 out of 10	little	65y to 80y	die almost immediately	0.209	0.135	0.099	0.059	0.123	0.171	-0.210
8 out of 10	little	18y to 64y	die 5 years earlier	0.073	0.117	0.240	0.288	0.203	-0.105	-0.425
8 out of 10	little	18y to 64y	die almost immediately	0.166	0.243	0.240	0.278	0.112	-0.076	-0.646
8 out of 10	much	65y to 80y	die 5 years earlier	-0.195	-0.197	0.143	-0.034	0.193	0.372	-0.081
8 out of 10	much	65y to 80y	die almost immediately	-0.102	-0.071	0.143	-0.044	0.101	0.401	-0.302
8 out of 10	little	younger than 18y	no longer die	-0.246	-0.050	-0.214	0.043	0.101	0.115	-0.207
5 out of 10	little	65y to 80y	die 5 years earlier	-0.262	-0.299	-0.038	-0.091	0.127	0.094	0.003
5 out of 10	little	65y to 80y	die almost immediately	-0.169	-0.172	-0.038	-0.101	0.036	0.123	-0.217



Quality of life, given current treatment	Discomfort of current treatment	Age	Reduction in life expectancy due to the disease, despite current treatment	Therapeutic need value 20-29	Therapeutic need value 30-39	Therapeutic need value 40-49	Therapeutic need value 50-59	Therapeutic need value 60-69	Therapeutic need value 70-79	Therapeutic need value 80-89
2 out of 10	little	65y to 80y	no longer die	-0.314	-0.206	-0.316	-0.169	-0.093	0.233	-0.199
8 out of 10	little	18y to 64y	no longer die	-0.357	-0.099	-0.175	0.049	-0.104	-0.014	-0.635
8 out of 10	much	65y to 80y	no longer die	-0.625	-0.412	-0.273	-0.273	-0.115	0.462	-0.291
5 out of 10	little	65y to 80y	no longer die	-0.693	-0.514	-0.454	-0.329	-0.181	0.184	-0.206
8 out of 10	little	65y to 80y	die 5 years earlier	-0.758	-0.697	-0.464	-0.446	-0.204	-0.085	-0.562
8 out of 10	little	65y to 80y	die almost immediately	-0.665	-0.571	-0.464	-0.456	-0.295	-0.056	-0.782
2 out of 10	much	80y and older	die 5 years earlier	-0.566	-0.733	-0.786	-0.849	-0.854	-0.765	0.134
2 out of 10	much	80y and older	die almost immediately	-0.473	-0.607	-0.786	-0.859	-0.945	-0.736	-0.087
8 out of 10	little	65y to 80y	no longer die	-1.189	-0.913	-0.879	-0.684	-0.512	0.005	-0.771
5 out of 10	much	80y and older	die 5 years earlier	-0.944	-1.041	-0.924	-1.009	-0.941	-0.814	0.127
5 out of 10	much	80y and older	die almost immediately	-0.851	-0.915	-0.924	-1.019	-1.033	-0.785	-0.094
2 out of 10	much	80y and older	no longer die	-0.997	-0.949	-1.202	-1.087	-1.161	-0.675	-0.076
5 out of 10	much	80y and older	no longer die	-1.375	-1.256	-1.339	-1.247	-1.249	-0.723	-0.082
2 out of 10	little	80y and older	die 5 years earlier	-1.130	-1.234	-1.393	-1.260	-1.250	-1.222	-0.347
2 out of 10	little	80y and older	die almost immediately	-1.037	-1.107	-1.393	-1.270	-1.342	-1.193	-0.567
8 out of 10	much	80y and older	die 5 years earlier	-1.441	-1.440	-1.350	-1.364	-1.272	-0.993	-0.438
8 out of 10	much	80y and older	die almost immediately	-1.348	-1.313	-1.350	-1.374	-1.364	-0.964	-0.659
5 out of 10	little	80y and older	die 5 years earlier	-1.508	-1.541	-1.531	-1.420	-1.338	-1.270	-0.354
5 out of 10	little	80y and older	die almost immediately	-1.415	-1.415	-1.531	-1.430	-1.429	-1.242	-0.574
2 out of 10	little	80y and older	no longer die	-1.560	-1.449	-1.809	-1.499	-1.558	-1.132	-0.556
8 out of 10	much	80y and older	no longer die	-1.871	-1.655	-1.765	-1.602	-1.580	-0.902	-0.647
5 out of 10	little	80y and older	no longer die	-1.938	-1.756	-1.946	-1.658	-1.645	-1.180	-0.563
8 out of 10	little	80y and older	die 5 years earlier	-2.004	-1.940	-1.957	-1.775	-1.669	-1.450	-0.919
8 out of 10	little	80y and older	die almost immediately	-1.911	-1.814	-1.957	-1.785	-1.760	-1.421	-1.139
8 out of 10	little	80y and older	no longer die	-2.435	-2.155	-2.372	-2.013	-1.976	-1.359	-1.128



Probabilities of choosing a scenario as having a higher therapeutic need out of the full set of scenarios per age category





Appendix 14.3. Choice set analysis per health status

Appendix 14.3.1. Model fit per health status

Actual and predicted percentage of choice for each alternative per health status

	N	Alternative 1		Alternative 2	
		Actual	Predicted	Actual	Predicted
in good health	3299	58.7%	60.9%	41.3%	39.1%
not in good health	985	57.5%	59.7%	42.5%	40.3%

Goodness of fit statistics

	X ² observed versus predicted	% of responses correctly predicted by model
in good health	20.3 (df=1; p < 0.01)	75.7%
not in good health	6.1 (df=1; p = 0.01)	72.6%

Appendix 14.3.2. Estimated model parameters per health status

Model summary by health status

	Attribute	Level	Estimated coefficient ^o	Standard Error	t-value	Pr(> t)	Significance level
in good health	age	80y and older	-1.373	0.034			
		65y to 80y	-0.010	0.026	-0.383	0.701	
		18y to 64y	0.658	0.034	19.186	0.000	***
		younger than 18y	0.724	0.034	21.254	0.000	***
	quality of life	8 out of 10	-0.324	0.030			
		5 out of 10	0.039	0.023	1.677	0.094	.
		2 out of 10	0.285	0.021	13.242	0.000	***
	life expectancy	no longer die	-0.203	0.024			
		die 5 years earlier	0.069	0.026	2.651	0.008	**
		die almost immediately	0.134	0.024	5.685	0.000	***
	discomfort	little	-0.248	0.022			
		much	0.248	0.016	15.508	0.000	***



not in good health	age	80y and older	-1.101	0.053		
		65y to 80y	0.049	0.047	1.042	0.298
		18y to 64y	0.446	0.057	7.881	0.000 ***
		younger than 18y	0.605	0.058	10.498	0.000 ***
	quality of life	8 out of 10	-0.279	0.051		
		5 out of 10	0.142	0.040	3.587	0.000 ***
		2 out of 10	0.137	0.037	3.677	0.000 ***
	life expectancy	no longer die	-0.143	0.041		
		die 5 years earlier	0.183	0.045	4.041	0.000 ***
		die almost immediately	-0.040	0.041	-0.971	0.332
	discomfort	little	-0.224	0.038		
		much	0.224	0.028	8.065	0.000 ***

° Results of a multinomial logistic regression model

* significant on the 5% significance level

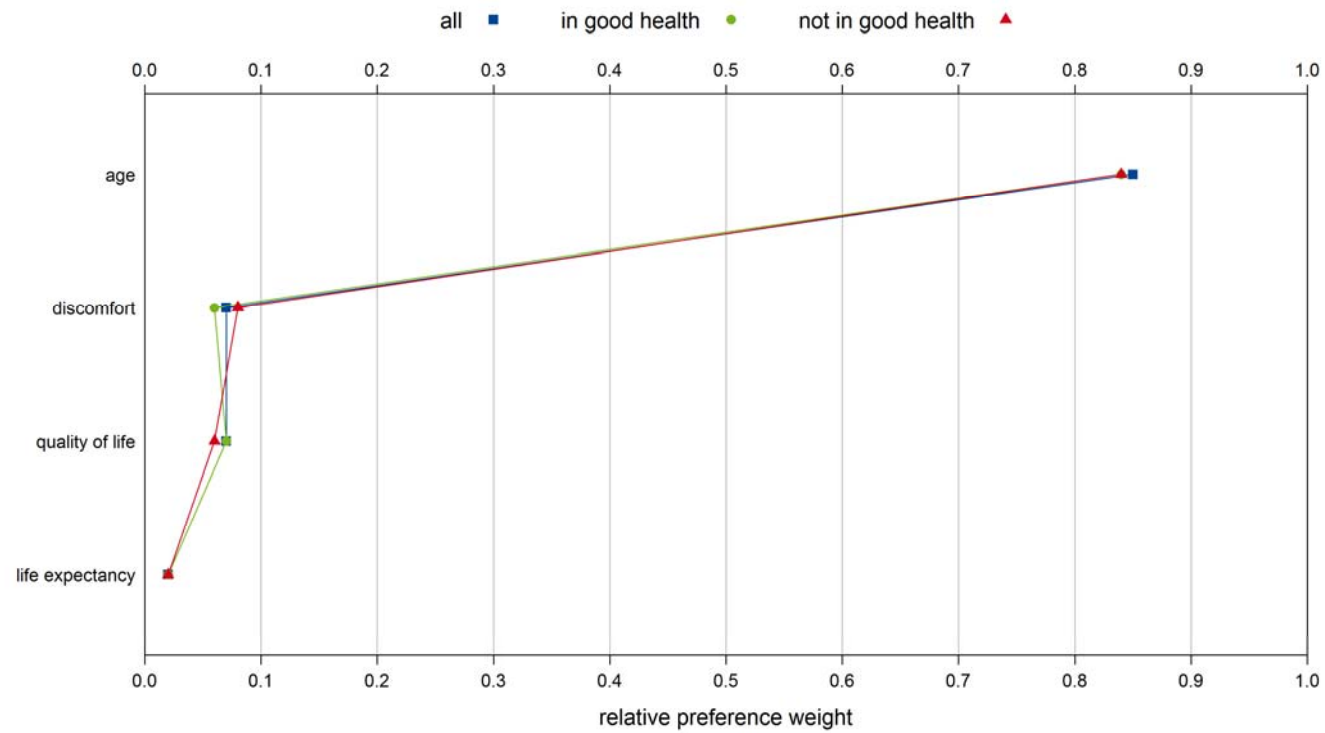
** significant on the 1% significance level

*** significant on the 0.1% significance level



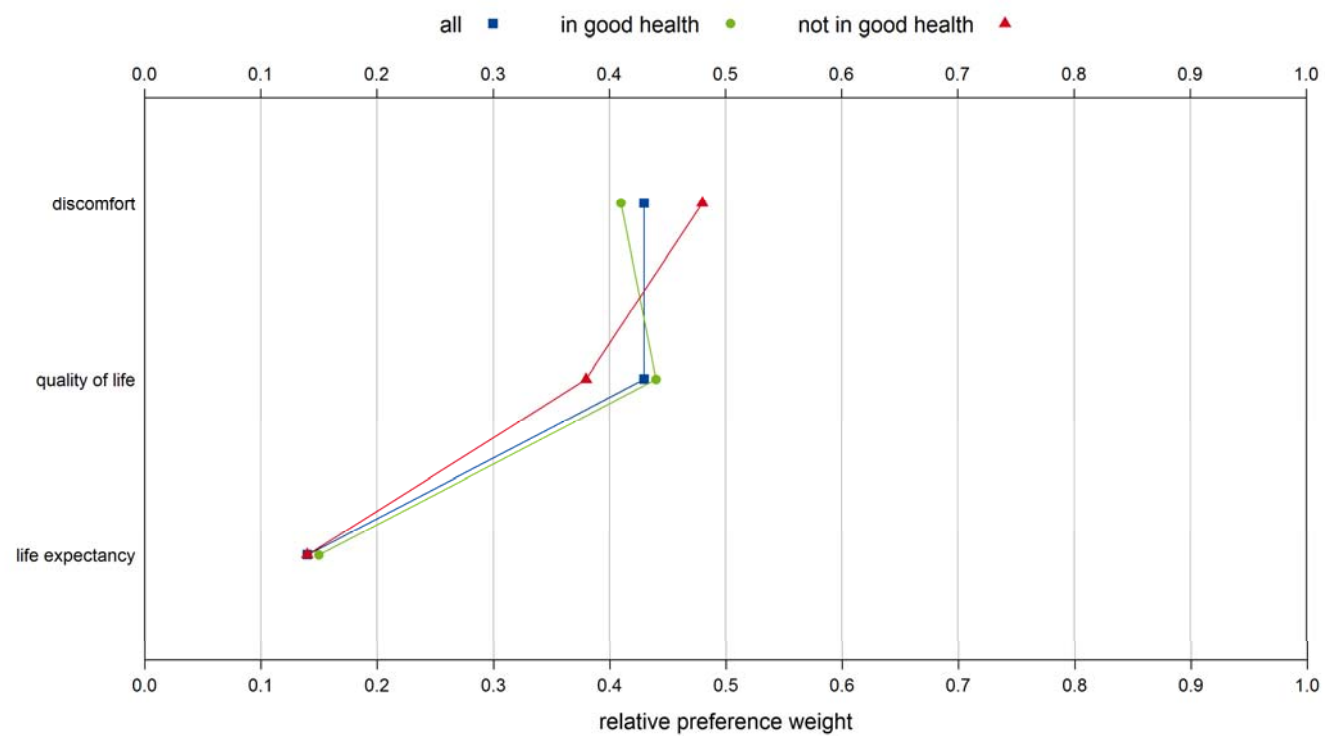
Appendix 14.3.3. Weights per health status

Relative weights in function of health status received





Relative weights in function of health status received derived without age



*Appendix 14.3.4. Therapeutic need value per health status***Therapeutic need values per health status**

Quality of life, given current treatment	Discomfort of current treatment	Age	Reduction in life expectancy due to the disease, despite current treatment	Therapeutic need value in good health	Therapeutic need value not in good health
2 out of 10	much	younger than 18y	die 5 years earlier	1.325	1.149
2 out of 10	much	younger than 18y	die almost immediately	1.391	0.926
2 out of 10	much	18y to 64y	die 5 years earlier	1.260	0.990
5 out of 10	much	younger than 18y	die 5 years earlier	1.080	1.154
2 out of 10	much	18y to 64y	die almost immediately	1.326	0.768
5 out of 10	much	younger than 18y	die almost immediately	1.145	0.932
5 out of 10	much	18y to 64y	die 5 years earlier	1.014	0.996
2 out of 10	much	younger than 18y	no longer die	1.054	0.822
5 out of 10	much	18y to 64y	die almost immediately	1.080	0.773
2 out of 10	much	18y to 64y	no longer die	0.988	0.664
5 out of 10	much	younger than 18y	no longer die	0.808	0.828
2 out of 10	little	younger than 18y	die 5 years earlier	0.829	0.700
8 out of 10	much	younger than 18y	die 5 years earlier	0.717	0.733
5 out of 10	much	18y to 64y	no longer die	0.743	0.670
2 out of 10	little	younger than 18y	die almost immediately	0.895	0.478
2 out of 10	little	18y to 64y	die 5 years earlier	0.764	0.542
8 out of 10	much	younger than 18y	die almost immediately	0.783	0.511
5 out of 10	little	younger than 18y	die 5 years earlier	0.583	0.706
8 out of 10	much	18y to 64y	die 5 years earlier	0.652	0.574
2 out of 10	much	65y to 80y	die 5 years earlier	0.592	0.593
2 out of 10	little	18y to 64y	die almost immediately	0.829	0.319
5 out of 10	little	younger than 18y	die almost immediately	0.649	0.484
8 out of 10	much	18y to 64y	die almost immediately	0.717	0.352
5 out of 10	little	18y to 64y	die 5 years earlier	0.518	0.547
2 out of 10	much	65y to 80y	die almost immediately	0.657	0.371
5 out of 10	much	65y to 80y	die 5 years earlier	0.346	0.599



Quality of life, given current treatment	Discomfort of current treatment	Age	Reduction in life expectancy due to the disease, despite current treatment	Therapeutic need value in good health	Therapeutic need value not in good health
2 out of 10	little	younger than 18y	no longer die	0.557	0.374
5 out of 10	little	18y to 64y	die almost immediately	0.584	0.325
8 out of 10	much	younger than 18y	no longer die	0.446	0.407
5 out of 10	much	65y to 80y	die almost immediately	0.412	0.376
2 out of 10	little	18y to 64y	no longer die	0.492	0.216
5 out of 10	little	younger than 18y	no longer die	0.312	0.380
8 out of 10	much	18y to 64y	no longer die	0.380	0.248
2 out of 10	much	65y to 80y	no longer die	0.320	0.267
8 out of 10	little	younger than 18y	die 5 years earlier	0.221	0.285
5 out of 10	little	18y to 64y	no longer die	0.246	0.221
8 out of 10	little	younger than 18y	die almost immediately	0.287	0.062
5 out of 10	much	65y to 80y	no longer die	0.074	0.273
8 out of 10	little	18y to 64y	die 5 years earlier	0.155	0.126
2 out of 10	little	65y to 80y	die 5 years earlier	0.095	0.145
8 out of 10	much	65y to 80y	die 5 years earlier	-0.017	0.177
8 out of 10	little	18y to 64y	die almost immediately	0.221	-0.096
2 out of 10	little	65y to 80y	die almost immediately	0.161	-0.078
8 out of 10	much	65y to 80y	die almost immediately	0.049	-0.045
5 out of 10	little	65y to 80y	die 5 years earlier	-0.150	0.150
8 out of 10	little	younger than 18y	no longer die	-0.051	-0.041
5 out of 10	little	65y to 80y	die almost immediately	-0.085	-0.072
8 out of 10	little	18y to 64y	no longer die	-0.116	-0.200
2 out of 10	little	65y to 80y	no longer die	-0.177	-0.181
8 out of 10	much	65y to 80y	no longer die	-0.288	-0.149
5 out of 10	little	65y to 80y	no longer die	-0.422	-0.176
8 out of 10	little	65y to 80y	die 5 years earlier	-0.513	-0.271
8 out of 10	little	65y to 80y	die almost immediately	-0.447	-0.493
2 out of 10	much	80y and older	die 5 years earlier	-0.771	-0.557

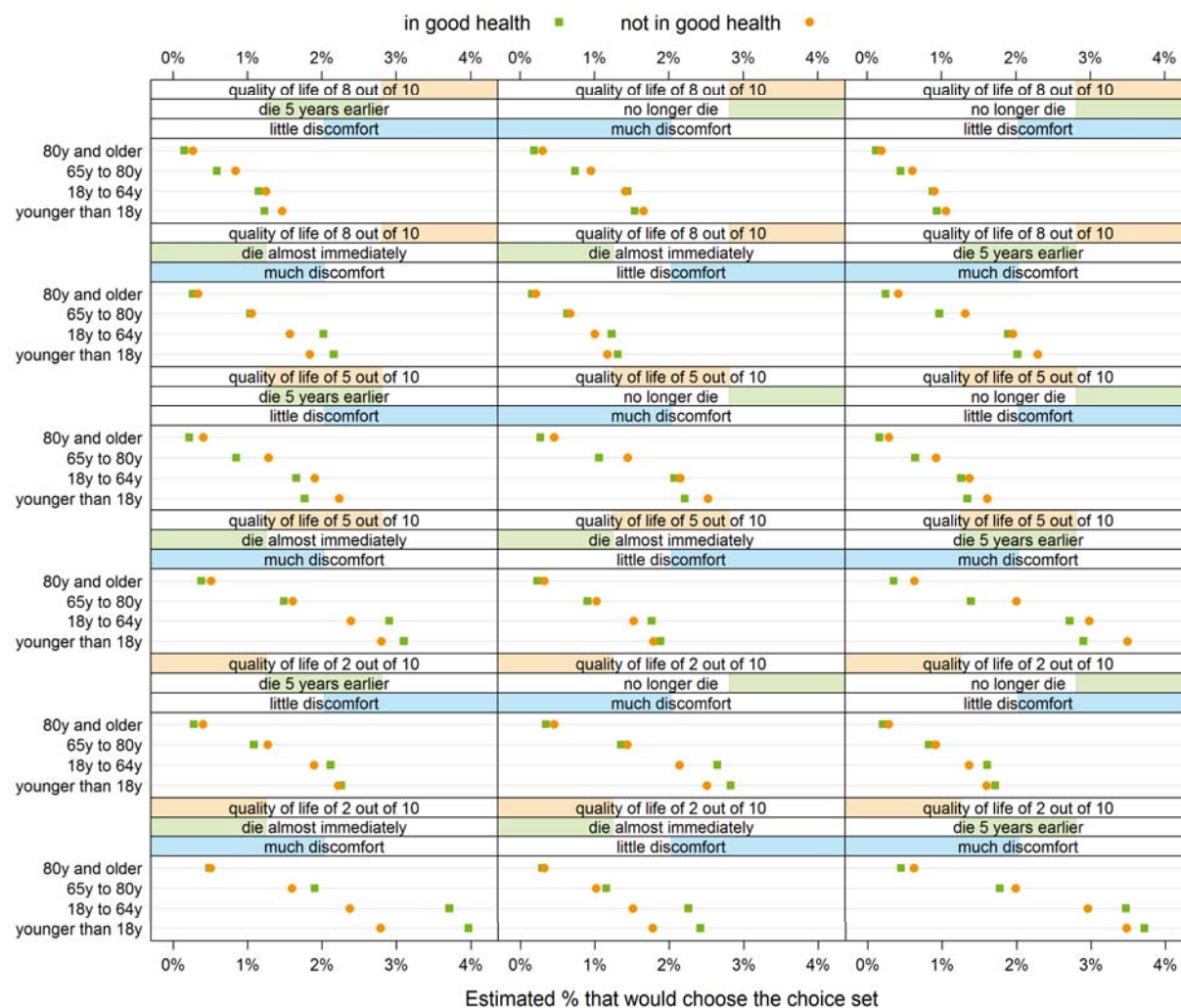


Quality of life, given current treatment	Discomfort of current treatment	Age	Reduction in life expectancy due to the disease, despite current treatment	Therapeutic need value in good health	Therapeutic need value not in good health
8 out of 10	little	65y to 80y	no longer die	-0.785	-0.597
2 out of 10	much	80y and older	die almost immediately	-0.705	-0.780
5 out of 10	much	80y and older	die 5 years earlier	-1.017	-0.551
5 out of 10	much	80y and older	die almost immediately	-0.951	-0.774
2 out of 10	much	80y and older	no longer die	-1.043	-0.883
5 out of 10	much	80y and older	no longer die	-1.288	-0.878
2 out of 10	little	80y and older	die 5 years earlier	-1.267	-1.006
8 out of 10	much	80y and older	die 5 years earlier	-1.379	-0.973
2 out of 10	little	80y and older	die almost immediately	-1.202	-1.228
8 out of 10	much	80y and older	die almost immediately	-1.314	-1.195
5 out of 10	little	80y and older	die 5 years earlier	-1.513	-1.000
5 out of 10	little	80y and older	die almost immediately	-1.447	-1.222
2 out of 10	little	80y and older	no longer die	-1.539	-1.332
8 out of 10	much	80y and older	no longer die	-1.651	-1.299
5 out of 10	little	80y and older	no longer die	-1.785	-1.326
8 out of 10	little	80y and older	die 5 years earlier	-1.876	-1.421
8 out of 10	little	80y and older	die almost immediately	-1.810	-1.643
8 out of 10	little	80y and older	no longer die	-2.147	-1.747



Appendix 14.3.5. Probabilities of choosing a scenario per health status

Probabilities of choosing a scenario as having a higher therapeutic need out of the full set of scenarios per health status





Appendix 14.4. Choice set analysis per certainty of the choices

Appendix 14.4.1. Model fit per certainty of the choices

Actual and predicted percentage of choice for each alternative per certainty of the choices

	N	Alternative 1		Alternative 2	
		Actual	Predicted	Actual	Predicted
uncertain	910	57.2%	59.0%	42.8%	41.0%
certain	3373	58.8%	61.1%	41.2%	38.9%

Goodness of fit statistics

	X ² observed versus predicted	% of responses correctly predicted by model
uncertain	3.71 (df=1;p = 0.05)	71.2%
certain	22.84 (df=1; p < 0.01)	76.5%



Appendix 14.4.2. Estimated model parameters per certainty of the choices

Model summary by certainty of the choices

	Attribute	Level	Estimated coefficient [°]	Standard Error	t-value	Pr(> t)	Significance level
uncertain	age	80y and older	-1.033	0.054			
		65y to 80y	0.066	0.048	1.387	0.166	
		18y to 64y	0.419	0.056	7.455	0.000	***
		younger than 18y	0.547	0.058	9.493	0.000	***
	quality of life	8 out of 10	-0.234	0.051			
		5 out of 10	0.082	0.040	2.030	0.042	*
		2 out of 10	0.152	0.038	4.053	0.000	***
	life expectancy	no longer die	-0.109	0.041			
		die 5 years earlier	0.073	0.045	1.625	0.104	
		die almost immediately	0.037	0.041	0.883	0.377	
	discomfort	little	-0.188	0.039			
		much	0.188	0.028	6.660	0.000	***
certain	age	80y and older	-1.382	0.034			
		65y to 80y	-0.014	0.026	-0.554	0.580	
		18y to 64y	0.666	0.034	19.328	0.000	***
		younger than 18y	0.730	0.034	21.497	0.000	***
	quality of life	8 out of 10	-0.336	0.030			
		5 out of 10	0.057	0.023	2.467	0.014	*
		2 out of 10	0.279	0.021	13.027	0.000	***
	life expectancy	no longer die	-0.211	0.023			
		die 5 years earlier	0.101	0.026	3.895	0.000	***
		die almost immediately	0.110	0.023	4.695	0.000	***
	discomfort	little	-0.257	0.022			
		much	0.257	0.016	16.148	0.000	***

[°] Results of a multinomial logistic regression model

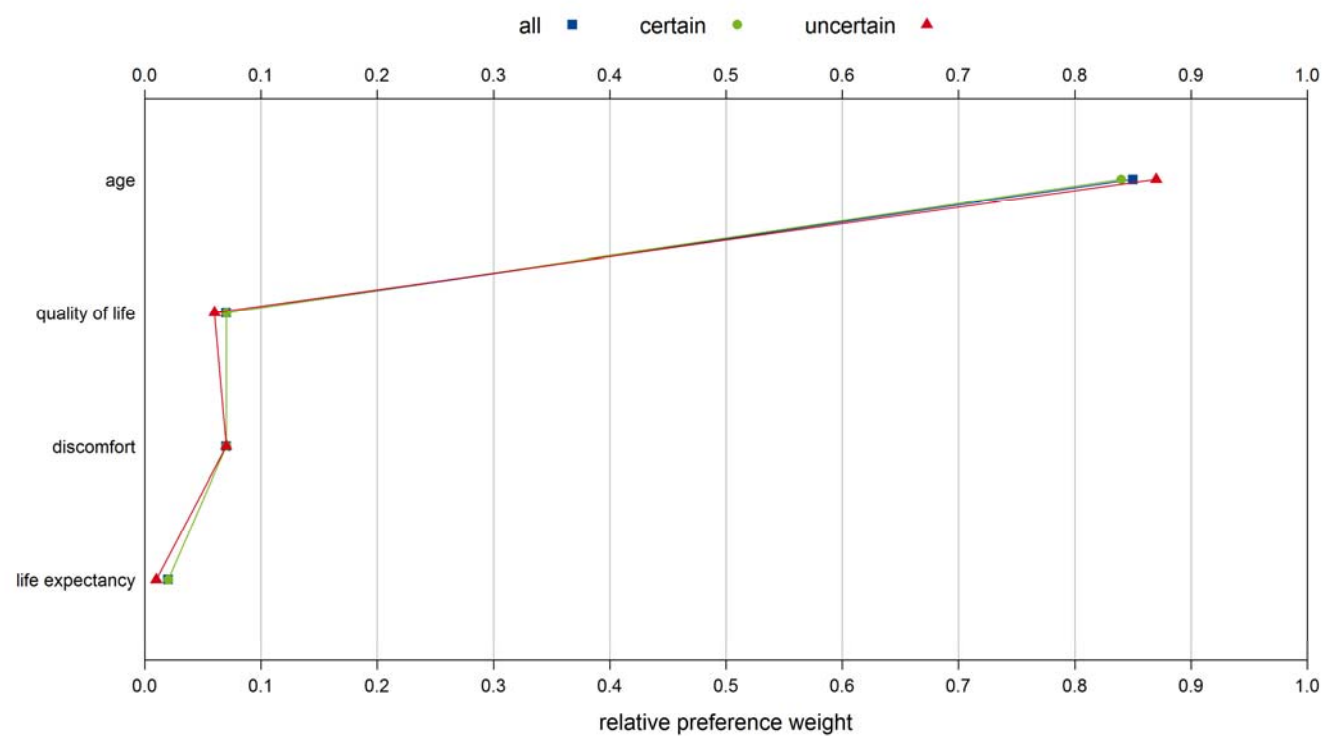
* significant on the 5% significance level

** significant on the 1% significance level

*** significant on the 0.1% significance level

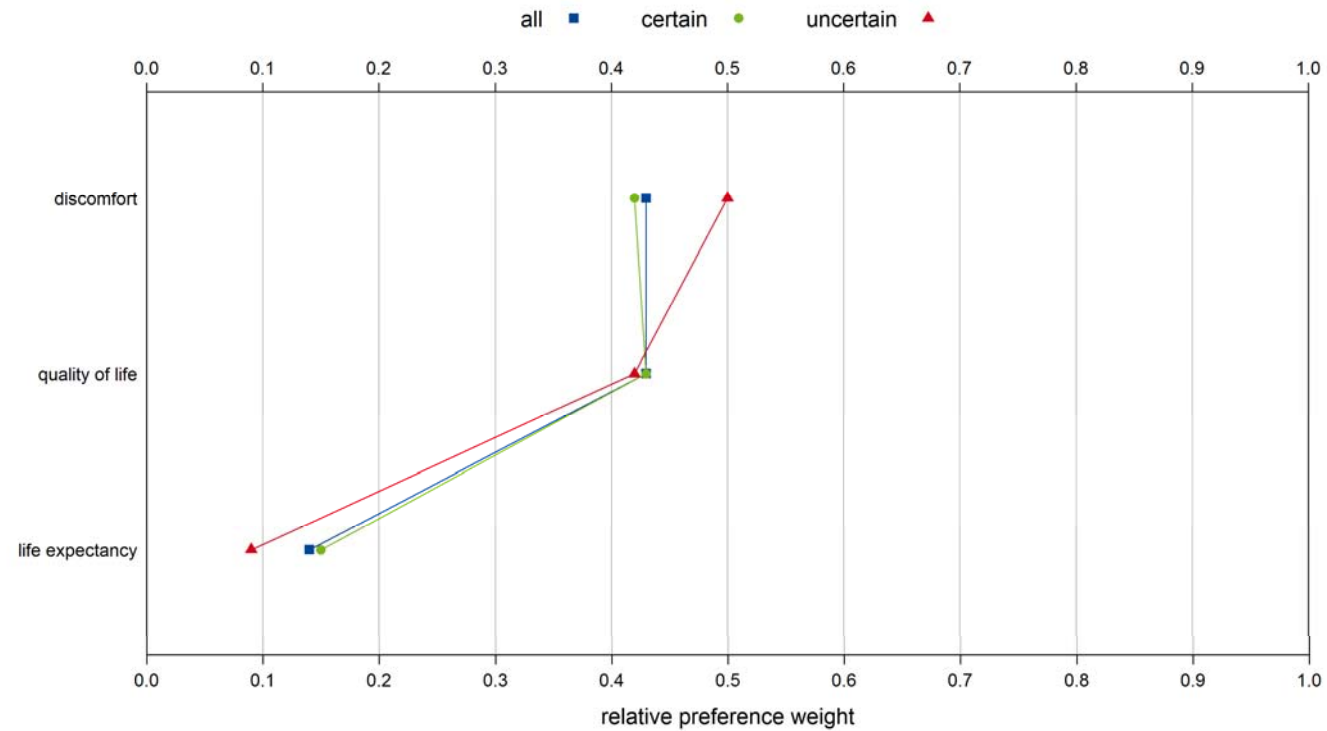


Appendix 14.4.3. Weights per certainty of the choices
Relative weights in function of certainty of the choices received





Relative weights in function of certainty of the choices received derived without age



*Appendix 14.4.4. Therapeutic need value per certainty of the choices***Therapeutic need values per certainty of the choices**

Quality of life, given current treatment	Discomfort of current treatment	Age	Reduction in life expectancy due to the disease, despite current treatment	Therapeutic need value uncertain	Therapeutic need value certain
2 out of 10	much	younger than 18y	die 5 years earlier	0.961	1.367
2 out of 10	much	younger than 18y	die almost immediately	0.924	1.376
2 out of 10	much	18y to 64y	die 5 years earlier	0.833	1.303
2 out of 10	much	18y to 64y	die almost immediately	0.796	1.311
5 out of 10	much	younger than 18y	die 5 years earlier	0.890	1.145
5 out of 10	much	younger than 18y	die almost immediately	0.854	1.154
5 out of 10	much	18y to 64y	die 5 years earlier	0.762	1.081
2 out of 10	much	younger than 18y	no longer die	0.779	1.054
5 out of 10	much	18y to 64y	die almost immediately	0.726	1.090
2 out of 10	much	18y to 64y	no longer die	0.651	0.990
5 out of 10	much	younger than 18y	no longer die	0.708	0.833
2 out of 10	little	younger than 18y	die 5 years earlier	0.584	0.853
2 out of 10	little	younger than 18y	die almost immediately	0.548	0.862
5 out of 10	much	18y to 64y	no longer die	0.580	0.768
8 out of 10	much	younger than 18y	die 5 years earlier	0.574	0.753
8 out of 10	much	younger than 18y	die almost immediately	0.538	0.762
2 out of 10	little	18y to 64y	die 5 years earlier	0.456	0.789
2 out of 10	little	18y to 64y	die almost immediately	0.420	0.798
5 out of 10	little	younger than 18y	die 5 years earlier	0.514	0.632
8 out of 10	much	18y to 64y	die 5 years earlier	0.446	0.689
5 out of 10	little	younger than 18y	die almost immediately	0.478	0.641
8 out of 10	much	18y to 64y	die almost immediately	0.410	0.697
2 out of 10	much	65y to 80y	die 5 years earlier	0.479	0.622
2 out of 10	much	65y to 80y	die almost immediately	0.443	0.631
5 out of 10	little	18y to 64y	die 5 years earlier	0.386	0.567
2 out of 10	little	younger than 18y	no longer die	0.402	0.541



Quality of life, given current treatment	Discomfort of current treatment	Age	Reduction in life expectancy due to the disease, despite current treatment	Therapeutic need value uncertain	Therapeutic need value certain
5 out of 10	little	18y to 64y	die almost immediately	0.349	0.576
8 out of 10	much	younger than 18y	no longer die	0.392	0.440
5 out of 10	much	65y to 80y	die 5 years earlier	0.409	0.401
5 out of 10	much	65y to 80y	die almost immediately	0.373	0.409
2 out of 10	little	18y to 64y	no longer die	0.274	0.476
5 out of 10	little	younger than 18y	no longer die	0.332	0.319
8 out of 10	much	18y to 64y	no longer die	0.264	0.376
2 out of 10	much	65y to 80y	no longer die	0.298	0.310
5 out of 10	little	18y to 64y	no longer die	0.204	0.255
8 out of 10	little	younger than 18y	die 5 years earlier	0.197	0.239
8 out of 10	little	younger than 18y	die almost immediately	0.161	0.248
5 out of 10	much	65y to 80y	no longer die	0.227	0.088
8 out of 10	little	18y to 64y	die 5 years earlier	0.069	0.175
8 out of 10	little	18y to 64y	die almost immediately	0.033	0.184
2 out of 10	little	65y to 80y	die 5 years earlier	0.103	0.109
2 out of 10	little	65y to 80y	die almost immediately	0.067	0.118
8 out of 10	much	65y to 80y	die 5 years earlier	0.093	0.008
8 out of 10	much	65y to 80y	die almost immediately	0.057	0.017
8 out of 10	little	younger than 18y	no longer die	0.016	-0.073
5 out of 10	little	65y to 80y	die 5 years earlier	0.032	-0.113
5 out of 10	little	65y to 80y	die almost immediately	-0.004	-0.104
8 out of 10	little	18y to 64y	no longer die	-0.112	-0.138
2 out of 10	little	65y to 80y	no longer die	-0.079	-0.204
8 out of 10	much	65y to 80y	no longer die	-0.089	-0.304
5 out of 10	little	65y to 80y	no longer die	-0.149	-0.426
8 out of 10	little	65y to 80y	die 5 years earlier	-0.284	-0.505
8 out of 10	little	65y to 80y	die almost immediately	-0.320	-0.497
8 out of 10	little	65y to 80y	no longer die	-0.466	-0.818

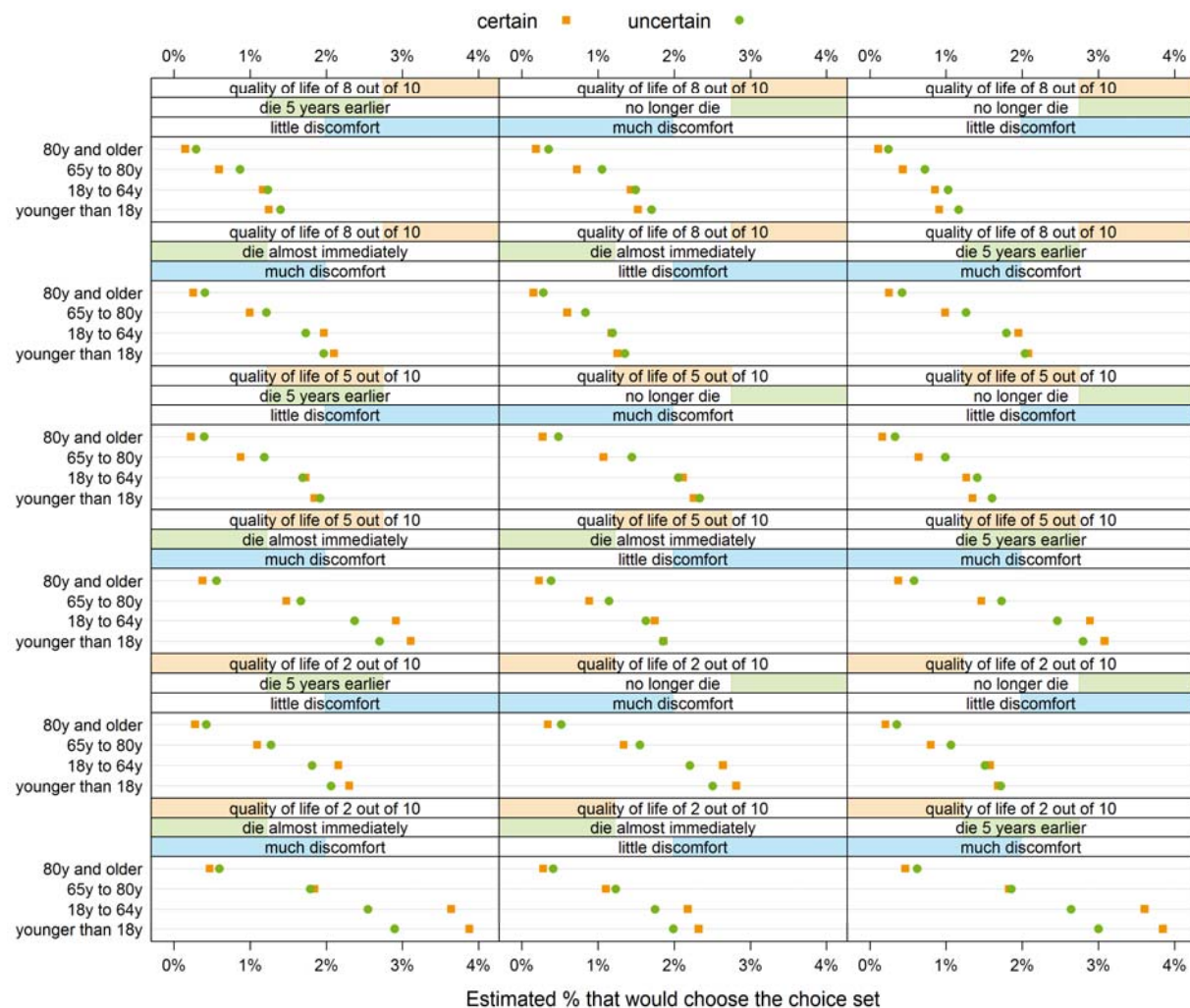


Quality of life, given current treatment	Discomfort of current treatment	Age	Reduction in life expectancy due to the disease, despite current treatment	Therapeutic need value uncertain	Therapeutic need value certain
2 out of 10	much	80y and older	die 5 years earlier	-0.619	-0.745
2 out of 10	much	80y and older	die almost immediately	-0.655	-0.737
5 out of 10	much	80y and older	die 5 years earlier	-0.690	-0.967
5 out of 10	much	80y and older	die almost immediately	-0.726	-0.958
2 out of 10	much	80y and older	no longer die	-0.801	-1.058
5 out of 10	much	80y and older	no longer die	-0.872	-1.280
2 out of 10	little	80y and older	die 5 years earlier	-0.996	-1.259
2 out of 10	little	80y and older	die almost immediately	-1.032	-1.250
8 out of 10	much	80y and older	die 5 years earlier	-1.006	-1.360
8 out of 10	much	80y and older	die almost immediately	-1.042	-1.351
5 out of 10	little	80y and older	die 5 years earlier	-1.066	-1.481
5 out of 10	little	80y and older	die almost immediately	-1.102	-1.472
2 out of 10	little	80y and older	no longer die	-1.178	-1.572
8 out of 10	much	80y and older	no longer die	-1.188	-1.672
5 out of 10	little	80y and older	no longer die	-1.248	-1.793
8 out of 10	little	80y and older	die 5 years earlier	-1.383	-1.873
8 out of 10	little	80y and older	die almost immediately	-1.419	-1.864
8 out of 10	little	80y and older	no longer die	-1.564	-2.186



Appendix 14.4.5. Probabilities of choosing a scenario per certainty of the choices

Probabilities of choosing a scenario as having a higher therapeutic need out of the full set of scenarios per certainty of the choices





APPENDIX 15. CHOICE SET SUBGROUP ANALYSIS SOCIETAL NEED DOMAIN

Appendix 15.1. Choice set analysis per number of reminders

Appendix 15.1.1. Model fit per number of reminders

Actual and predicted percentage of choice for each alternative per number of reminders

	N	Alternative 1		Alternative 2	
		Actual	Predicted	Actual	Predicted
no reminders	1170	48.4%	49.6%	51.6%	50.4%
one reminder	1446	51.9%	51.8%	48.1%	48.2%
two reminders	842	52.5%	51.4%	47.5%	48.6%
three reminders	830	50.1%	52.4%	49.9%	47.6%

Goodness of fit statistics

	X ² observed versus predicted	% of responses correctly predicted by model
no reminders	0.73 (df=1;p = 0.39)	71.70%
one reminder	0.02 (df=1;p = 0.89)	70.10%
two reminders	0.42 (df=1;p = 0.52)	72.30%
three reminders	1.77 (df=1;p = 0.18)	69.40%



Appendix 15.1.2. Estimated model parameters per number of reminders

Model summary by number of reminders

	Attribute	Level	Estimated coefficient ^o	Standard Error	t-value	Pr(> t)	Significance level
no reminders	prevalence	rare	-0.696	0.084			
		not so frequent	-0.373	0.073	-5.078	0.000	***
		rather frequent	0.438	0.075	5.853	0.000	***
		very frequent	0.631	0.077	8.180	0.000	***
	public expenditure	little additional cost	-0.546	0.048			
		much additional cost	0.546	0.038	14.544	0.000	***
one reminder	prevalence	rare	-0.665	0.072			
		not so frequent	-0.277	0.067	-4.102	0.000	***
		rather frequent	0.417	0.064	6.477	0.000	***
		very frequent	0.525	0.069	7.612	0.000	***
	public expenditure	little additional cost	-0.519	0.042			
		much additional cost	0.519	0.033	15.688	0.000	***
two reminders	prevalence	rare	-0.758	0.102			
		not so frequent	-0.171	0.086	-1.978	0.048	*
		rather frequent	0.338	0.087	3.879	0.000	***
		very frequent	0.591	0.089	6.627	0.000	***
	public expenditure	little additional cost	-0.562	0.056			
		much additional cost	0.562	0.044	12.845	0.000	***
three reminders	prevalence	rare	-0.636	0.099			
		not so frequent	0.017	0.086	0.201	0.841	
		rather frequent	0.071	0.082	0.862	0.388	
		very frequent	0.548	0.086	6.404	0.000	***
	public expenditure	little additional cost	-0.488	0.054			
		much additional cost	0.488	0.042	11.598	0.000	***

^o Results of a multinomial logistic regression model

* significant on the 5% significance level

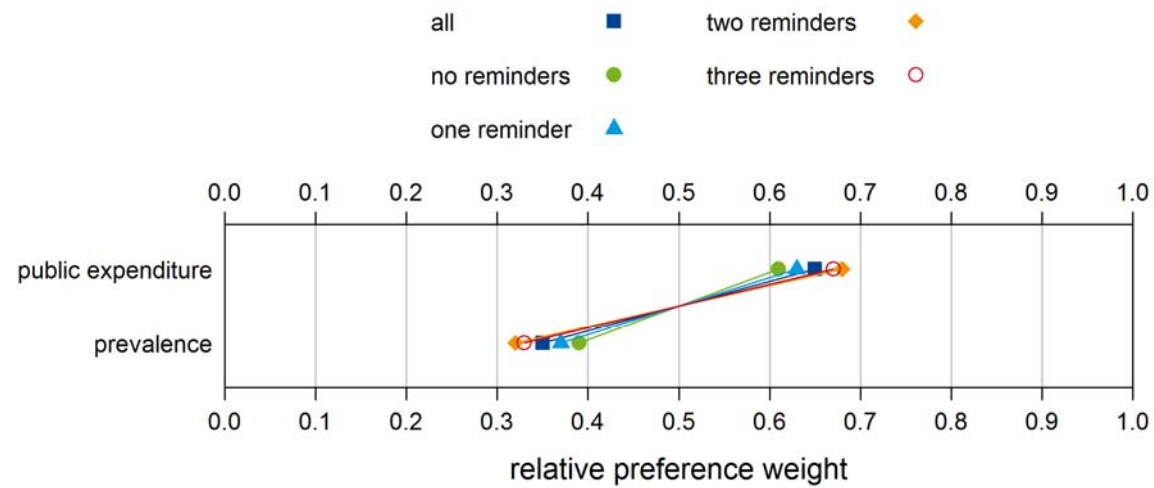
** significant on the 1% significance level

*** significant on the 0.1% significance level



Appendix 15.1.3. *Weights per number of reminders*

Relative weights in function of number of reminders received





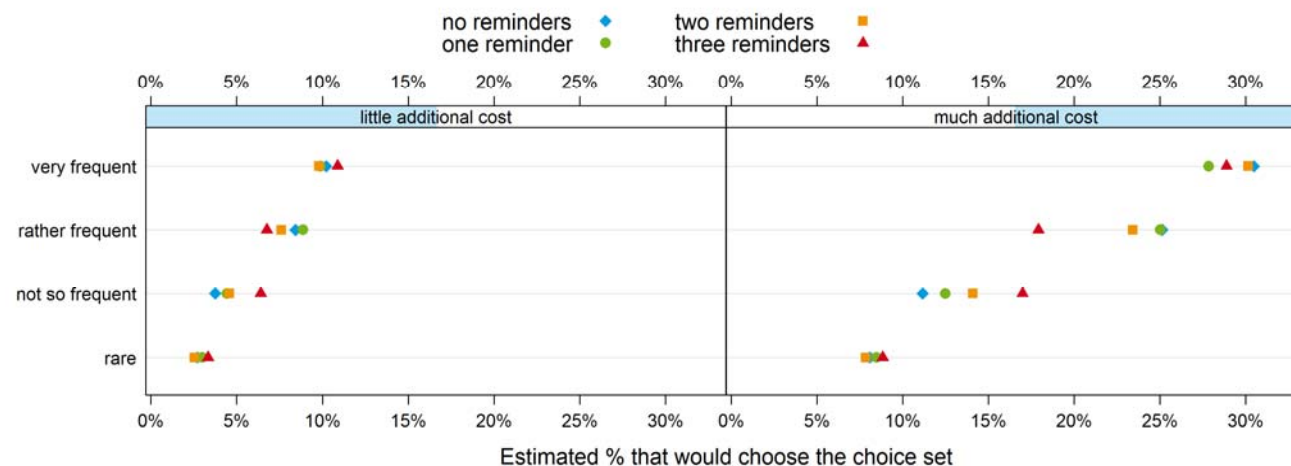
Appendix 15.1.4. Societal need value by number of reminders

Societal need values per number of reminders

Prevalence	Public expenditure	Societal need value no reminder	Societal need value one reminder	Societal need value two reminders	Societal need value three reminders
very frequent	much additional cost	1.177	1.044	1.153	1.036
rather frequent	much additional cost	0.984	0.936	0.900	0.559
not so frequent	much additional cost	0.173	0.242	0.392	0.505
very frequent	little additional cost	0.085	0.006	0.029	0.061
rare	much additional cost	-0.150	-0.147	-0.196	-0.149
rather frequent	little additional cost	-0.108	-0.102	-0.224	-0.417
not so frequent	little additional cost	-0.919	-0.796	-0.733	-0.471
rare	little additional cost	-1.242	-1.184	-1.320	-1.124

Appendix 15.1.5. Probabilities of choosing a scenario per number of reminders

Probabilities of choosing a scenario as having a higher societal need out of the full set of scenarios per number of reminders





Appendix 15.2. Choice set analysis per age category

Appendix 15.2.1. Model fit per age category

Actual and predicted percentage of choice for each alternative per age category

	N	Alternative 1		Alternative 2	
		Actual	Predicted	Actual	Predicted
20-29	617	52.4%	50.5%	47.6%	49.5%
30-39	678	46.3%	49.8%	53.7%	50.2%
40-49	812	48.9%	50.9%	51.1%	49.1%
50-59	963	51.8%	51.2%	48.2%	48.8%
60-69	765	51.9%	52.2%	48.1%	47.8%
70-79	331	58.1%	54.5%	41.9%	45.5%
80-89	121	43.0%	52.0%	57.0%	48.0%

Goodness of fit statistics

	X ² observed versus predicted	% of responses correctly predicted by model
20-29	0.86 (df=1;p = 0.35)	74.4%
30-39	3.24 (df=1;p = 0.07)	75.4%
40-49	1.29 (df=1;p = 0.26)	69.0%
50-59	0.15 (df=1;p = 0.69)	70.5%
60-69	0.04 (df=1;p = 0.85)	70.8%
70-79	1.77 (df=1;p = 0.18)	69.6%
80-89	3.98 (df=1;p = 0.05)	69.4%



Appendix 15.2.2. Estimated model parameters per age category

Model summary by age category

	Attribute	Level	Estimated coefficient ^a	Standard Error	t-value	Pr(> t)	Significance level
20-29	prevalence	rare	-0.742	0.120			
		not so frequent	-0.212	0.102	-2.072	0.038	*
		rather frequent	0.546	0.106	5.158	0.000	***
		very frequent	0.408	0.105	3.875	0.000	***
	public expenditure	little additional cost	-0.602	0.069			
		much additional cost	0.602	0.053	11.439	0.000	***
30-39	prevalence	rare	-0.923	0.123			
		not so frequent	-0.231	0.102	-2.270	0.023	*
		rather frequent	0.494	0.107	4.625	0.000	***
		very frequent	0.660	0.107	6.169	0.000	***
	public expenditure	little additional cost	-0.669	0.074			
		much additional cost	0.669	0.055	12.259	0.000	***
40-49	prevalence	rare	-0.579	0.097			
		not so frequent	-0.336	0.087	-3.856	0.000	***
		rather frequent	0.268	0.085	3.165	0.002	**
		very frequent	0.647	0.090	7.158	0.000	***
	public expenditure	little additional cost	-0.507	0.053			
		much additional cost	0.507	0.043	11.675	0.000	***
50-59	prevalence	rare	-0.652	0.089			
		not so frequent	-0.164	0.079	-2.080	0.038	*
		rather frequent	0.185	0.078	2.374	0.018	*
		very frequent	0.630	0.082	7.639	0.000	***
	public expenditure	little additional cost	-0.493	0.049			
		much additional cost	0.493	0.039	12.602	0.000	***
60-69	prevalence	rare	-0.691	0.101			
		not so frequent	-0.261	0.091	-2.860	0.004	**
		rather frequent	0.340	0.087	3.900	0.000	***
		very frequent	0.612	0.094	6.529	0.000	***
	public expenditure	little additional cost	-0.494	0.058			



	Attribute	Level	Estimated coefficient [°]	Standard Error	t-value	Pr(> t)	Significance level
70-79	prevalence	much additional cost	0.494	0.045	11.006	0.000	***
		rare	-0.594	0.152			
		not so frequent	-0.033	0.147	-0.224	0.823	
		rather frequent	0.284	0.126	2.252	0.024	*
		very frequent	0.343	0.131	2.615	0.009	**
	public expenditure	little additional cost	-0.471	0.088			
		much additional cost	0.471	0.067	7.073	0.000	***
80-89	prevalence	rare	-0.466	0.262			
		not so frequent	-0.318	0.218	-1.455	0.146	
		rather frequent	0.267	0.186	1.439	0.150	
		very frequent	0.516	0.229	2.250	0.024	*
	public expenditure	little additional cost	-0.226	0.139			
		much additional cost	0.226	0.104	2.161	0.031	*

[°] Results of a multinomial logistic regression model

* significant on the 5% significance level

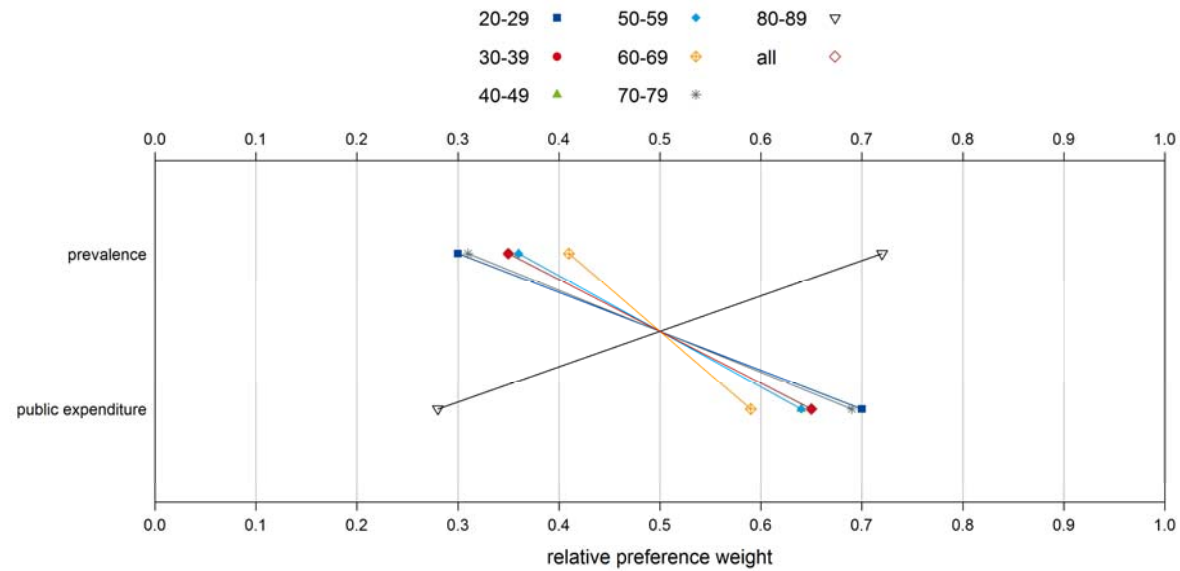
** significant on the 1% significance level

*** significant on the 0.1% significance level



Appendix 15.2.3. Weights per age category

Relative weights in function of age category received



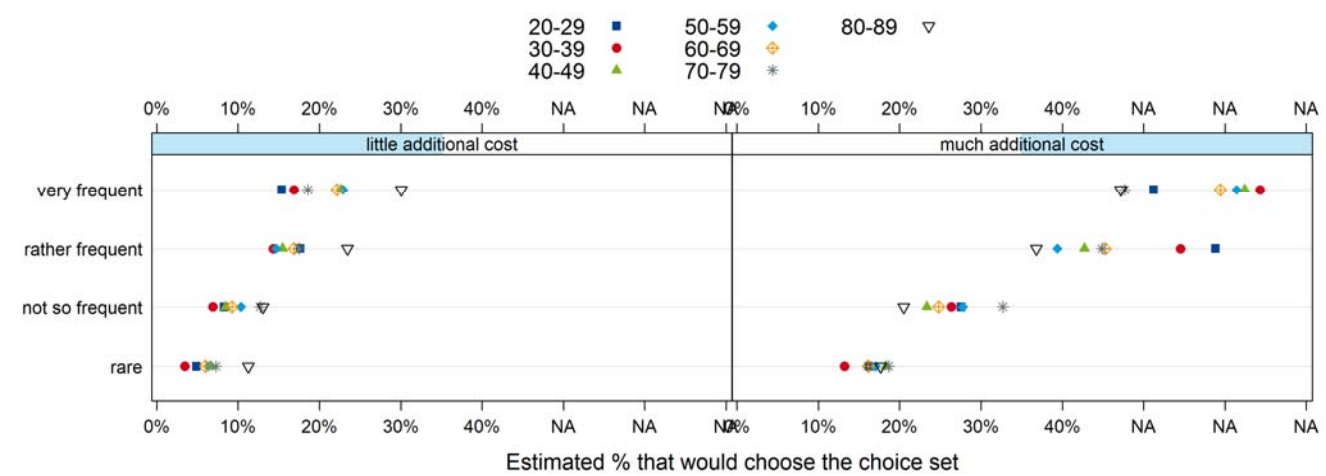
*Appendix 15.2.4. Societal need value per age category***Societal need values per age category**

Prevalence	Public expenditure	Societal need value 20-29	Societal need value 30-39	Societal need value 40-49	Societal need value 50-59	Societal need value 60-69	Societal need value 70-79	Societal need value 80-89
very frequent	much additional cost	1.010	1.328	1.155	1.123	1.106	0.815	0.741
rather frequent	much additional cost	1.148	1.163	0.775	0.679	0.833	0.755	0.493
not so frequent	much additional cost	0.390	0.437	0.171	0.329	0.232	0.439	-0.092
very frequent	little additional cost	-0.194	-0.009	0.140	0.137	0.119	-0.128	0.290
rather frequent	little additional cost	-0.056	-0.174	-0.239	-0.308	-0.154	-0.188	0.042
rare	much additional cost	-0.140	-0.254	-0.072	-0.158	-0.197	-0.123	-0.240
not so frequent	little additional cost	-0.814	-0.900	-0.843	-0.657	-0.755	-0.504	-0.543
rare	little additional cost	-1.344	-1.592	-1.086	-1.145	-1.184	-1.066	-0.691



Appendix 15.2.5. Probabilities of choosing a scenario per age category

Probabilities of choosing a scenario as having a higher societal need out of the full set of scenarios per age category





Appendix 15.3. Choice set analysis per health status

Appendix 15.3.1. Model fit per health status

Actual and predicted percentage of choice for each alternative per health status

	N	Alternative 1		Alternative 2	
		Actual	Predicted	Actual	Predicted
in good health	3299	49.6%	50.9%	50.4%	49.1%
not in good health	985	54.6%	52.9%	45.4%	47.1%

Goodness of fit statistics

	X ² observed versus predicted	% of responses correctly predicted by model
in good health	2.23 (df=1;p = 0.14)	71.1%
not in good health	1.09 (df=1;p = 0.3)	69.7%



Appendix 15.3.2. Estimated model parameters per health status

Model summary by health status

Attribute		Level	Estimated coefficient [°]	Standard Error	t-value	Pr(> t)	Significance level
in good health	prevalence	rare	-0.690	0.050			
		not so frequent	-0.283	0.043	-6.508	0.000	***
		rather frequent	0.375	0.043	8.662	0.000	***
		very frequent	0.598	0.045	13.164	0.000	***
	public expenditure	little additional cost	-0.536	0.028			
		much additional cost	0.536	0.022	24.371	0.000	***
not in good health	prevalence	rare	-0.675	0.087			
		not so frequent	0.014	0.081	0.172	0.864	
		rather frequent	0.188	0.075	2.511	0.012	*
		very frequent	0.473	0.079	6.011	0.000	***
	public expenditure	little additional cost	-0.488	0.049			
		much additional cost	0.488	0.038	12.702	0.000	***

[°] Results of a multinomial logistic regression model

* significant on the 5% significance level

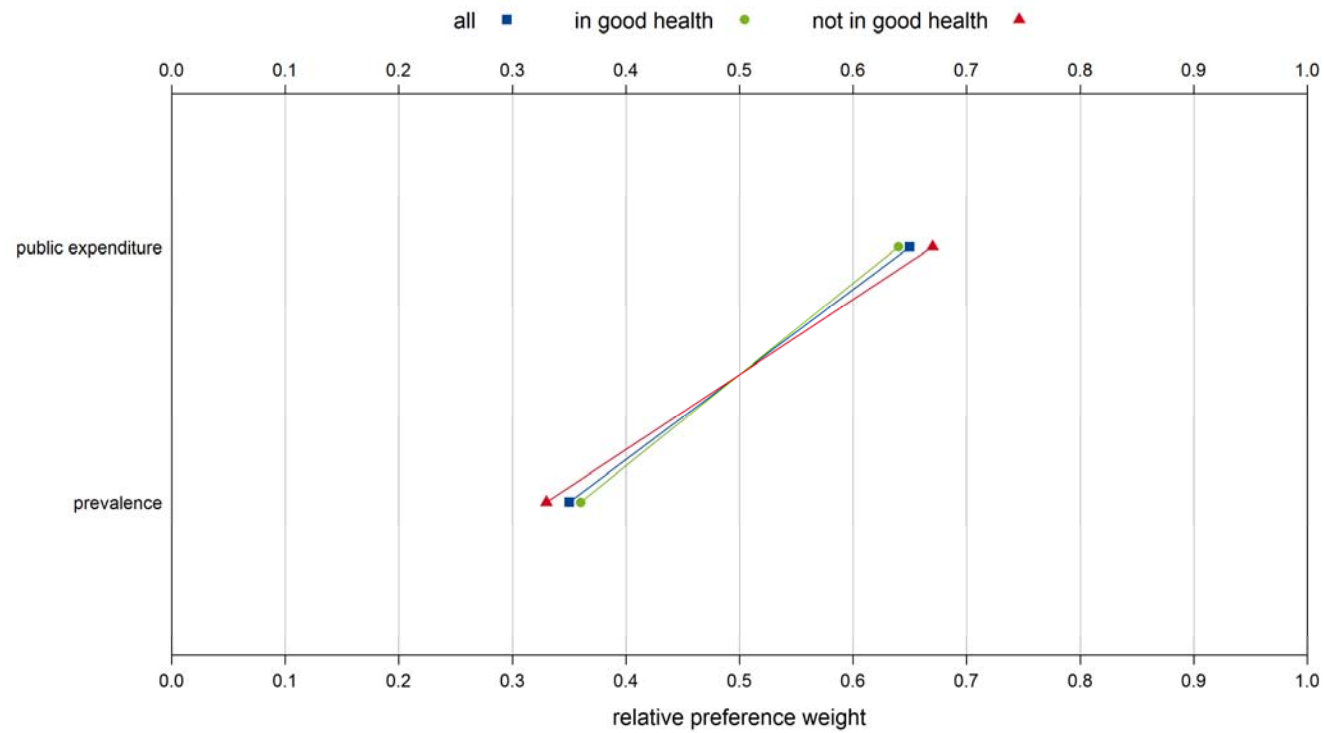
** significant on the 1% significance level

*** significant on the 0.1% significance level



Appendix 15.3.3. *Weights per health status*

Relative weights in function of health status received





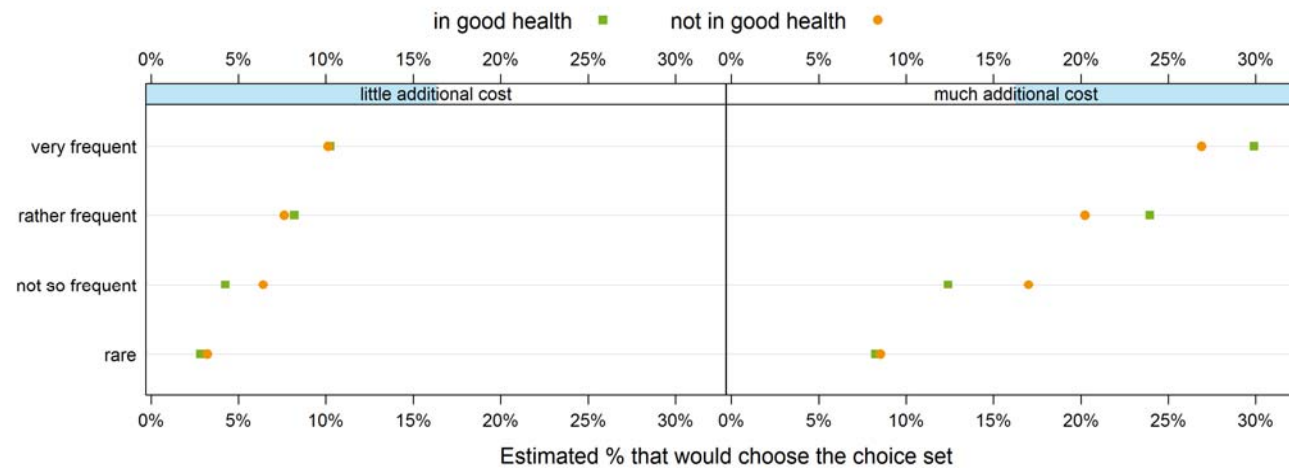
Appendix 15.3.4. Societal need value per health status

Societal need values per health status

Prevalence	Public expenditure	Societal need value good health	Societal need value not in good health
very frequent	much additional cost	1.133	0.962
rather frequent	much additional cost	0.911	0.676
not so frequent	much additional cost	0.253	0.502
very frequent	little additional cost	0.062	-0.015
rare	much additional cost	-0.154	-0.187
rather frequent	little additional cost	-0.160	-0.300
not so frequent	little additional cost	-0.819	-0.474
rare	little additional cost	-1.226	-1.164

Appendix 15.3.5. Probabilities of choosing a scenario per health status

Probabilities of choosing a scenario as having a higher societal need out of the full set of scenarios per health status





Appendix 15.4. Choice set analysis per certainty of the choices

Appendix 15.4.1. Model fit per certainty of the choices

Actual and predicted percentage of choice for each alternative per certainty of the choices

	N	Alternative 1		Alternative 2	
		Actual	Predicted	Actual	Predicted
uncertain	1034	54.1%	52.0%	45.9%	48.0%
certain	3249	49.6%	51.0%	50.4%	49.0%

Goodness of fit statistics

	X ² observed versus predicted	% of responses correctly predicted by model
uncertain	1.88 (df=1;p = 0.17)	64.9%
certain	2.35 (df=1;p = 0.13)	73.4%

Appendix 15.4.2. Estimated model parameters per certainty of the choices

Model summary by certainty of the choices

	Attribute	Level	Estimated coefficient ^o	Standard Error	t-value	Pr(> t)	Significance level
uncertain	prevalence	rare	-0.582	0.078			
		not so frequent	-0.171	0.071	-2.407	0.016	*
		rather frequent	0.357	0.072	4.942	0.000	***
		very frequent	0.397	0.076	5.220	0.000	***
	public expenditure	little additional cost	-0.343	0.045			
		much additional cost	0.343	0.036	9.618	0.000	***
certain	prevalence	rare	-0.712	0.052			
		not so frequent	-0.234	0.045	-5.146	0.000	***
		rather frequent	0.322	0.044	7.283	0.000	***
		very frequent	0.624	0.046	13.474	0.000	***
	public expenditure	little additional cost	-0.583	0.029			
		much additional cost	0.583	0.023	25.814	0.000	***

^o Results of a multinomial logistic regression model

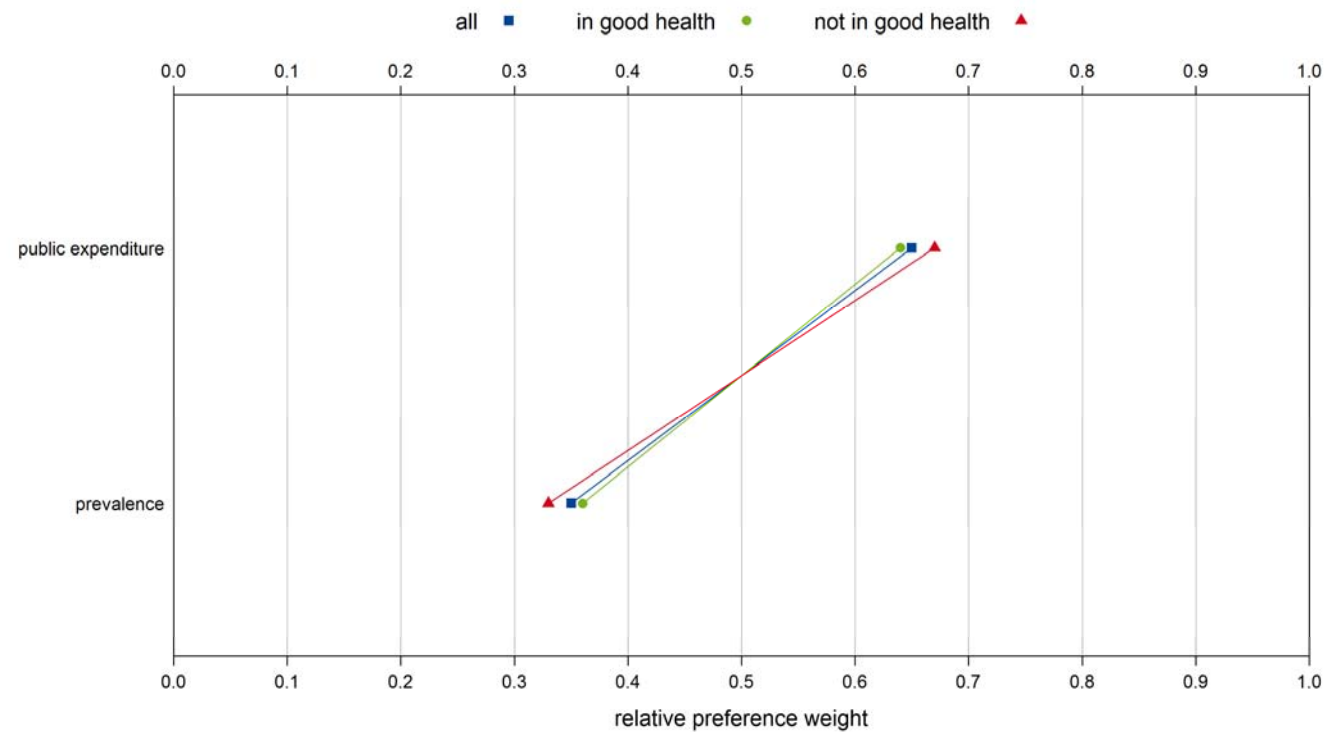
* significant on the 5% significance level

** significant on the 1% significance level

*** significant on the 0.1% significance level



Appendix 15.4.3. Weights per certainty of the choices
Relative weights in function of certainty of the choices received





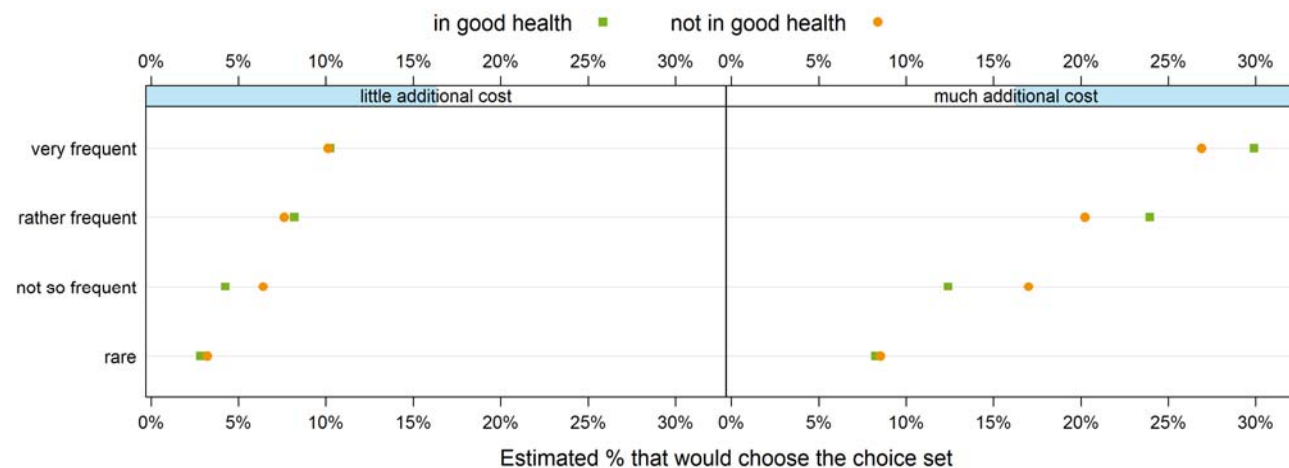
Appendix 15.4.4. Societal need value per certainty of the choices

Societal need values per certainty of the choices

Prevalence	Public expenditure	Societal need value uncertain	Societal need value certain
very frequent	much additional cost	0.740	1.207
rather frequent	much additional cost	0.700	0.905
not so frequent	much additional cost	0.171	0.349
very frequent	little additional cost	0.054	0.040
rather frequent	little additional cost	0.014	-0.261
rare	much additional cost	-0.239	-0.128
not so frequent	little additional cost	-0.514	-0.817
rare	little additional cost	-0.925	-1.295

Appendix 15.4.5. Probabilities of choosing a scenario per certainty of the choices

Probabilities of choosing a scenario as having a higher societal need out of the full set of scenarios per certainty of the choices





APPENDIX 16. CHOICE SET SUBGROUP ANALYSIS ADDED VALUE DOMAIN

Appendix 16.1. Choice set analysis per number of reminders

Appendix 16.1.1. Model fit per number of reminders

Actual and predicted percentage of choice for each alternative per number of reminders

	N	Alternative 1		Alternative 2	
		Actual	Predicted	Actual	Predicted
no reminders	1170	60.4%	61.2%	39.6%	38.8%
one reminder	1446	58.9%	60.4%	41.1%	39.6%
two reminders	842	59.5%	60.3%	40.5%	39.7%
three reminders	830	59.2%	60.6%	40.8%	39.4%

Goodness of fit statistics

	X ² observed versus predicted	% of responses correctly predicted by model
no reminders	1.19 (df=1;p = 0.27)	80.5%
one reminder	5.95 (df=1;p = 0.01)	79.5%
two reminders	0.79 (df=1;p = 0.37)	79.8%
three reminders	2.95 (df=1;p = 0.09)	79.6%



Appendix 16.1.2. Estimated model parameters per number of reminders

Model summary by number of reminders

	Attribute	Level	Estimated coefficient ^a	Standard Error	t-value	Pr(> t)	Significance level
no reminders	impact on societal cost	increases the cost	-0.393	0.038			
		does not change the cost	0.078	0.035	2.236	0.025	*
		reduces the cost	0.315	0.042	7.505	0.000	***
	change in quality of life	reduction	-0.878	0.047			
		no change	0.019	0.034	0.547	0.584	
		improvement	0.860	0.041	21.055	0.000	***
	change in life expectancy	does not change	-0.410	0.025			
		increase	0.410	0.026	15.944	0.000	***
	treatment discomfort	more	-0.397	0.034			
		as much	0.081	0.036	2.223	0.026	*
		less	0.316	0.034	9.175	0.000	***
	change in prevalence	cures fewer	-0.874	0.050			
		cures an equal number	0.060	0.035	1.742	0.082	
		cures more	0.814	0.040	20.560	0.000	***
one reminder	impact on societal cost	increases the cost	-0.348	0.033			
		does not change the cost	0.021	0.030	0.699	0.485	
		reduces the cost	0.327	0.036	9.049	0.000	***
	change in quality of life	reduction	-0.805	0.039			
		no change	-0.013	0.031	-0.418	0.676	
		improvement	0.818	0.036	22.890	0.000	***
	change in life expectancy	does not change	-0.405	0.023			
		increase	0.405	0.022	18.501	0.000	***
	treatment discomfort	more	-0.359	0.030			
		as much	0.018	0.032	0.564	0.573	
		less	0.340	0.030	11.234	0.000	***
	change in prevalence	cures fewer	-0.835	0.042			
		cures an equal number	0.087	0.030	2.870	0.004	**
		cures more	0.748	0.035	21.226	0.000	***
two reminders	impact on societal cost	increases the cost	-0.352	0.045			



Attribute		Level	Estimated coefficient [°]	Standard Error	t-value	Pr(> t)	Significance level
three reminders	change in quality of life	does not change the cost	0.077	0.041	1.851	0.064	
		reduces the cost	0.276	0.050	5.567	0.000	***
		reduction	-0.816	0.055			
	change in life expectancy	no change	-0.022	0.041	-0.543	0.587	
		improvement	0.838	0.049	17.101	0.000	***
		does not change	-0.455	0.031			
	treatment discomfort	increase	0.455	0.030	14.952	0.000	***
		more	-0.316	0.039			
		as much	-0.041	0.043	-0.953	0.341	
	change in prevalence	less	0.357	0.041	8.802	0.000	***
		cures fewer	-0.983	0.062			
		cures an equal number	0.072	0.040	1.821	0.069	
	impact on societal cost	cures more	0.911	0.050	18.358	0.000	***
		increases the cost	-0.377	0.044			
		does not change the cost	0.122	0.043	2.859	0.004	**
three reminders	change in quality of life	reduces the cost	0.255	0.051	4.975	0.000	***
		reduction	-0.814	0.053			
		no change	-0.004	0.041	-0.101	0.919	
	change in life expectancy	improvement	0.818	0.050	16.272	0.000	***
		does not change	-0.371	0.026			
		increase	0.371	0.030	12.376	0.000	***
	treatment discomfort	more	-0.316	0.041			
		as much	0.048	0.041	1.182	0.237	
		less	0.268	0.040	6.654	0.000	***
	change in prevalence	cures fewer	-0.901	0.059			
		cures an equal number	0.124	0.040	3.093	0.002	**
		cures more	0.777	0.049	15.825	0.000	***

[°] Results of a multinomial logistic regression model

* significant on the 5% significance level

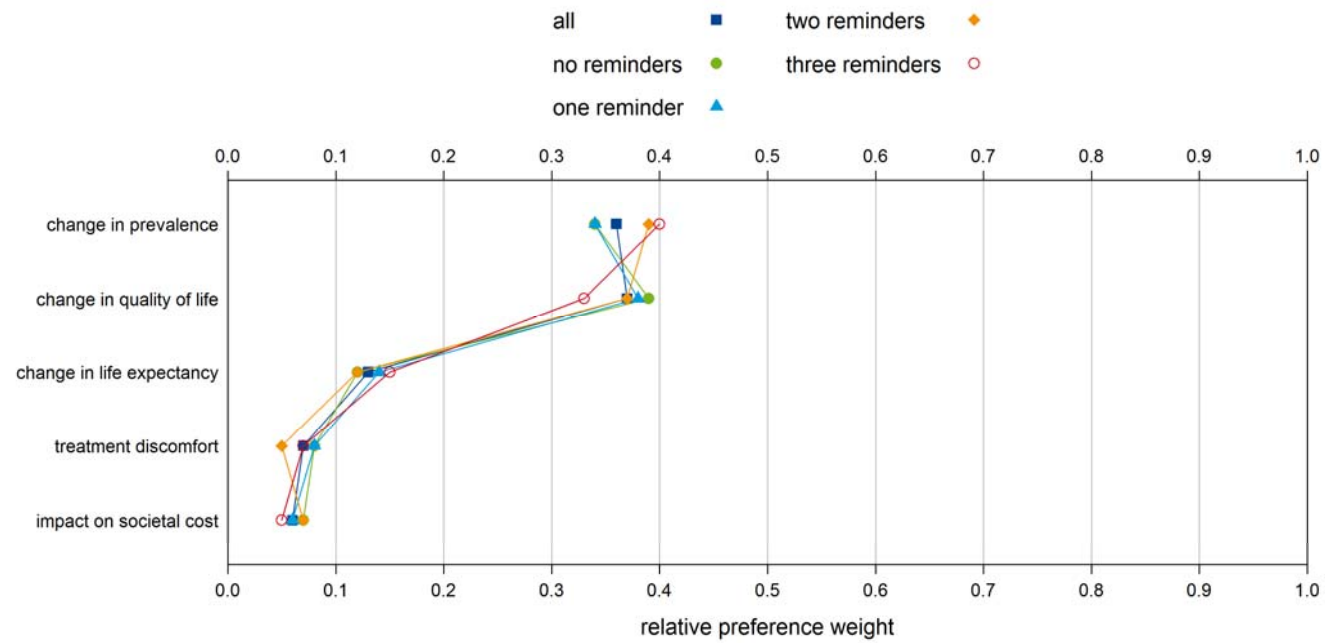
** significant on the 1% significance level

*** significant on the 0.1% significance level



Appendix 16.1.3. Weights per number of reminders

Relative weights in function of number of reminders received





Appendix 16.1.4. Added value per number of reminders

Added value assigned to new treatments, per number of reminders

New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value no reminder	Added value one reminder	Added value two reminders	Added value three reminders
less	improvement	reduces the cost	cures more	increase	2.715	2.638	2.836	2.489
less	improvement	does not change the cost	cures more	increase	2.479	2.333	2.637	2.356
as much	improvement	reduces the cost	cures more	increase	2.479	2.316	2.438	2.270
as much	improvement	does not change the cost	cures more	increase	2.243	2.010	2.239	2.136
less	improvement	increases the cost	cures more	increase	2.007	1.964	2.208	1.857
more	improvement	reduces the cost	cures more	increase	2.001	1.939	2.163	1.905
less	improvement	reduces the cost	cures an equal number	increase	1.961	1.977	1.998	1.837
less	improvement	reduces the cost	cures more	does not change	1.894	1.828	1.926	1.747
less	no change	reduces the cost	cures more	increase	1.874	1.808	1.976	1.667
more	improvement	does not change the cost	cures more	increase	1.765	1.633	1.964	1.771
less	improvement	does not change the cost	cures an equal number	increase	1.725	1.671	1.798	1.703
as much	improvement	increases the cost	cures more	increase	1.771	1.641	1.810	1.637
as much	improvement	reduces the cost	cures an equal number	increase	1.725	1.655	1.600	1.617
less	improvement	does not change the cost	cures more	does not change	1.658	1.523	1.727	1.613
less	no change	does not change the cost	cures more	increase	1.638	1.502	1.777	1.534
as much	improvement	reduces the cost	cures more	does not change	1.659	1.506	1.528	1.527
as much	no change	reduces the cost	cures more	increase	1.638	1.486	1.579	1.448
as much	improvement	does not change the cost	cures an equal number	increase	1.489	1.349	1.401	1.484
more	improvement	increases the cost	cures more	increase	1.294	1.264	1.535	1.272
as much	improvement	does not change the cost	cures more	does not change	1.422	1.200	1.329	1.394
as much	no change	does not change the cost	cures more	increase	1.402	1.180	1.380	1.314



New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value no reminder	Added value one reminder	Added value two reminders	Added value three reminders
less	improvement	increases the cost	cures an equal number	increase	1.253	1.302	1.370	1.204
more	improvement	reduces the cost	cures an equal number	increase	1.248	1.277	1.325	1.252
less	improvement	increases the cost	cures more	does not change	1.187	1.153	1.298	1.114
more	improvement	reduces the cost	cures more	does not change	1.181	1.129	1.253	1.162
less	no change	increases the cost	cures more	increase	1.166	1.133	1.348	1.035
more	no change	reduces the cost	cures more	increase	1.161	1.109	1.303	1.083
less	improvement	reduces the cost	cures an equal number	does not change	1.141	1.167	1.087	1.094
less	no change	reduces the cost	cures an equal number	increase	1.120	1.146	1.138	1.015
more	improvement	does not change the cost	cures an equal number	increase	1.011	0.972	1.126	1.119
less	no change	reduces the cost	cures more	does not change	1.054	0.998	1.066	0.925
less	reduction	reduces the cost	cures more	increase	0.977	1.016	1.183	0.858
as much	improvement	increases the cost	cures an equal number	increase	1.018	0.980	0.972	0.985
more	improvement	does not change the cost	cures more	does not change	0.945	0.823	1.054	1.029
less	improvement	reduces the cost	cures fewer	increase	1.027	1.055	0.942	0.812
more	no change	does not change the cost	cures more	increase	0.924	0.803	1.104	0.949
less	improvement	does not change the cost	cures an equal number	does not change	0.904	0.861	0.888	0.961
as much	improvement	increases the cost	cures more	does not change	0.951	0.831	0.900	0.895
less	no change	does not change the cost	cures an equal number	increase	0.884	0.841	0.939	0.881
as much	no change	increases the cost	cures more	increase	0.930	0.811	0.951	0.815



New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value no reminder	Added value one reminder	Added value two reminders	Added value three reminders
as much	improvement	reduces the cost	cures an equal number	does not change	0.905	0.844	0.690	0.875
as much	no change	reduces the cost	cures an equal number	increase	0.884	0.824	0.740	0.795
less	no change	does not change the cost	cures more	does not change	0.817	0.692	0.867	0.791
less	reduction	does not change the cost	cures more	increase	0.741	0.710	0.984	0.724
less	improvement	does not change the cost	cures fewer	increase	0.790	0.749	0.743	0.678
as much	no change	reduces the cost	cures more	does not change	0.818	0.676	0.668	0.705
as much	reduction	reduces the cost	cures more	increase	0.741	0.694	0.785	0.638
as much	improvement	reduces the cost	cures fewer	increase	0.791	0.732	0.545	0.592
more	improvement	increases the cost	cures an equal number	increase	0.540	0.603	0.697	0.620
as much	improvement	does not change the cost	cures an equal number	does not change	0.669	0.539	0.491	0.741
as much	no change	does not change the cost	cures an equal number	increase	0.648	0.519	0.541	0.661
more	improvement	increases the cost	cures more	does not change	0.473	0.454	0.625	0.530
more	no change	increases the cost	cures more	increase	0.453	0.434	0.676	0.450
as much	no change	does not change the cost	cures more	does not change	0.581	0.370	0.469	0.571
as much	reduction	does not change the cost	cures more	increase	0.505	0.388	0.586	0.504
less	improvement	increases the cost	cures an equal number	does not change	0.433	0.492	0.459	0.462
more	improvement	reduces the cost	cures an equal number	does not change	0.427	0.467	0.414	0.510
as much	improvement	does not change the cost	cures fewer	increase	0.555	0.427	0.345	0.458
less	no change	increases the cost	cures an equal number	increase	0.412	0.472	0.510	0.382
more	no change	reduces the cost	cures an equal number	increase	0.407	0.447	0.465	0.430



New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value no reminder	Added value one reminder	Added value two reminders	Added value three reminders
less	no change	increases the cost	cures more	does not change	0.346	0.323	0.438	0.292
less	reduction	increases the cost	cures more	increase	0.269	0.341	0.555	0.225
more	no change	reduces the cost	cures more	does not change	0.340	0.299	0.393	0.340
more	reduction	reduces the cost	cures more	increase	0.264	0.317	0.510	0.273
less	improvement	increases the cost	cures fewer	increase	0.319	0.380	0.314	0.179
more	improvement	reduces the cost	cures fewer	increase	0.313	0.355	0.269	0.227
less	no change	reduces the cost	cures an equal number	does not change	0.300	0.336	0.228	0.272
less	reduction	reduces the cost	cures an equal number	increase	0.223	0.354	0.344	0.205
more	improvement	does not change the cost	cures an equal number	does not change	0.191	0.162	0.215	0.376
more	no change	does not change the cost	cures an equal number	increase	0.170	0.142	0.266	0.297
less	reduction	reduces the cost	cures more	does not change	0.157	0.206	0.272	0.115
as much	improvement	increases the cost	cures an equal number	does not change	0.197	0.170	0.062	0.242
as much	no change	increases the cost	cures an equal number	increase	0.177	0.150	0.112	0.163
less	improvement	reduces the cost	cures fewer	does not change	0.206	0.244	0.032	0.069
more	no change	does not change the cost	cures more	does not change	0.104	-0.007	0.194	0.207
more	reduction	does not change the cost	cures more	increase	0.027	0.011	0.311	0.139
less	no change	reduces the cost	cures fewer	increase	0.186	0.224	0.083	-0.010
more	improvement	does not change the cost	cures fewer	increase	0.077	0.050	0.070	0.093
less	no change	does not change the cost	cures an equal number	does not change	0.063	0.031	0.029	0.139
less	reduction	does not change the cost	cures an equal number	increase	-0.013	0.049	0.145	0.071



New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value no reminder	Added value one reminder	Added value two reminders	Added value three reminders
as much	no change	increases the cost	cures more	does not change	0.110	0.001	0.041	0.073
as much	reduction	increases the cost	cures more	increase	0.034	0.019	0.157	0.005
as much	improvement	increases the cost	cures fewer	increase	0.083	0.058	-0.083	-0.041
as much	no change	reduces the cost	cures an equal number	does not change	0.064	0.014	-0.170	0.053
as much	reduction	reduces the cost	cures an equal number	increase	-0.013	0.032	-0.053	-0.015
less	reduction	does not change the cost	cures more	does not change	-0.080	-0.100	0.073	-0.019
less	improvement	does not change the cost	cures fewer	does not change	-0.030	-0.061	-0.167	-0.065
less	no change	does not change the cost	cures fewer	increase	-0.051	-0.081	-0.117	-0.144
as much	reduction	reduces the cost	cures more	does not change	-0.079	-0.116	-0.125	-0.105
as much	improvement	reduces the cost	cures fewer	does not change	-0.030	-0.078	-0.366	-0.150
as much	no change	reduces the cost	cures fewer	increase	-0.050	-0.098	-0.315	-0.230
more	improvement	increases the cost	cures an equal number	does not change	-0.280	-0.207	-0.213	-0.122
more	no change	increases the cost	cures an equal number	increase	-0.301	-0.228	-0.163	-0.202
as much	no change	does not change the cost	cures an equal number	does not change	-0.172	-0.291	-0.369	-0.081
as much	reduction	does not change the cost	cures an equal number	increase	-0.249	-0.273	-0.252	-0.148
more	no change	increases the cost	cures more	does not change	-0.368	-0.376	-0.235	-0.292
more	reduction	increases the cost	cures more	increase	-0.444	-0.358	-0.118	-0.359
as much	reduction	does not change the cost	cures more	does not change	-0.316	-0.422	-0.324	-0.238
more	improvement	increases the cost	cures fewer	increase	-0.394	-0.319	-0.359	-0.405



New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value no reminder	Added value one reminder	Added value two reminders	Added value three reminders
as much	improvement	does not change the cost	cures fewer	does not change	-0.266	-0.383	-0.565	-0.284
less	no change	increases the cost	cures an equal number	does not change	-0.408	-0.338	-0.400	-0.360
less	reduction	increases the cost	cures an equal number	increase	-0.484	-0.320	-0.284	-0.427
more	no change	reduces the cost	cures an equal number	does not change	-0.414	-0.363	-0.445	-0.312
more	reduction	reduces the cost	cures an equal number	increase	-0.490	-0.345	-0.329	-0.379
as much	no change	does not change the cost	cures fewer	increase	-0.286	-0.404	-0.514	-0.364
less	reduction	increases the cost	cures more	does not change	-0.551	-0.469	-0.355	-0.517
more	reduction	reduces the cost	cures more	does not change	-0.557	-0.493	-0.400	-0.469
less	improvement	increases the cost	cures fewer	does not change	-0.501	-0.430	-0.596	-0.563
more	improvement	reduces the cost	cures fewer	does not change	-0.507	-0.455	-0.641	-0.515
less	reduction	reduces the cost	cures an equal number	does not change	-0.597	-0.456	-0.566	-0.537
less	no change	increases the cost	cures fewer	increase	-0.522	-0.450	-0.545	-0.643
more	no change	reduces the cost	cures fewer	increase	-0.528	-0.475	-0.590	-0.595
more	no change	does not change the cost	cures an equal number	does not change	-0.650	-0.669	-0.644	-0.446
more	reduction	does not change the cost	cures an equal number	increase	-0.727	-0.650	-0.528	-0.513
as much	no change	increases the cost	cures an equal number	does not change	-0.644	-0.661	-0.798	-0.580
as much	reduction	increases the cost	cures an equal number	increase	-0.720	-0.642	-0.681	-0.647
more	reduction	does not change the cost	cures more	does not change	-0.793	-0.799	-0.600	-0.603



New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value no reminder	Added value one reminder	Added value two reminders	Added value three reminders
less	no change	reduces the cost	cures fewer	does not change	-0.635	-0.586	-0.828	-0.753
less	reduction	reduces the cost	cures fewer	increase	-0.711	-0.568	-0.711	-0.820
more	improvement	does not change the cost	cures fewer	does not change	-0.743	-0.761	-0.840	-0.649
less	reduction	does not change the cost	cures an equal number	does not change	-0.834	-0.761	-0.765	-0.671
more	no change	does not change the cost	cures fewer	increase	-0.764	-0.781	-0.789	-0.729
as much	reduction	increases the cost	cures more	does not change	-0.787	-0.791	-0.753	-0.737
as much	improvement	increases the cost	cures fewer	does not change	-0.737	-0.753	-0.993	-0.783
as much	reduction	reduces the cost	cures an equal number	does not change	-0.833	-0.778	-0.964	-0.757
as much	no change	increases the cost	cures fewer	increase	-0.758	-0.773	-0.943	-0.863
less	no change	does not change the cost	cures fewer	does not change	-0.871	-0.891	-1.027	-0.887
less	reduction	does not change the cost	cures fewer	increase	-0.947	-0.873	-0.910	-0.954
as much	no change	reduces the cost	cures fewer	does not change	-0.870	-0.908	-1.225	-0.973
as much	reduction	reduces the cost	cures fewer	increase	-0.947	-0.890	-1.109	-1.040
more	no change	increases the cost	cures an equal number	does not change	-1.121	-1.038	-1.073	-0.945
more	reduction	increases the cost	cures an equal number	increase	-1.198	-1.020	-0.957	-1.012
as much	reduction	does not change the cost	cures an equal number	does not change	-1.069	-1.083	-1.163	-0.891
more	reduction	increases the cost	cures more	does not change	-1.264	-1.168	-1.028	-1.102
more	improvement	increases the cost	cures fewer	does not change	-1.215	-1.130	-1.269	-1.148
less	reduction	increases the cost	cures an equal number	does not change	-1.305	-1.130	-1.194	-1.170



New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value no reminder	Added value one reminder	Added value two reminders	Added value three reminders
more	reduction	reduces the cost	cures an equal number	does not change	-1.311	-1.155	-1.239	-1.122
more	no change	increases the cost	cures fewer	increase	-1.235	-1.150	-1.218	-1.227
as much	no change	does not change the cost	cures fewer	does not change	-1.107	-1.214	-1.424	-1.106
as much	reduction	does not change the cost	cures fewer	increase	-1.183	-1.196	-1.308	-1.174
less	no change	increases the cost	cures fewer	does not change	-1.342	-1.261	-1.455	-1.385
less	reduction	increases the cost	cures fewer	increase	-1.419	-1.242	-1.339	-1.453
more	no change	reduces the cost	cures fewer	does not change	-1.348	-1.285	-1.501	-1.337
more	reduction	reduces the cost	cures fewer	increase	-1.425	-1.267	-1.384	-1.405
more	reduction	does not change the cost	cures an equal number	does not change	-1.547	-1.461	-1.438	-1.256
as much	reduction	increases the cost	cures an equal number	does not change	-1.541	-1.453	-1.591	-1.390
less	reduction	reduces the cost	cures fewer	does not change	-1.532	-1.378	-1.621	-1.563
more	no change	does not change the cost	cures fewer	does not change	-1.584	-1.591	-1.700	-1.471
more	reduction	does not change the cost	cures fewer	increase	-1.661	-1.573	-1.583	-1.538
as much	no change	increases the cost	cures fewer	does not change	-1.578	-1.583	-1.853	-1.605
as much	reduction	increases the cost	cures fewer	increase	-1.655	-1.565	-1.737	-1.672
less	reduction	does not change the cost	cures fewer	does not change	-1.768	-1.684	-1.820	-1.696
as much	reduction	reduces the cost	cures fewer	does not change	-1.767	-1.700	-2.019	-1.782
more	reduction	increases the cost	cures an equal number	does not change	-2.018	-1.830	-1.867	-1.754
more	no change	increases the cost	cures fewer	does not change	-2.056	-1.960	-2.128	-1.970
more	reduction	increases the cost	cures fewer	increase	-2.132	-1.942	-2.012	-2.037

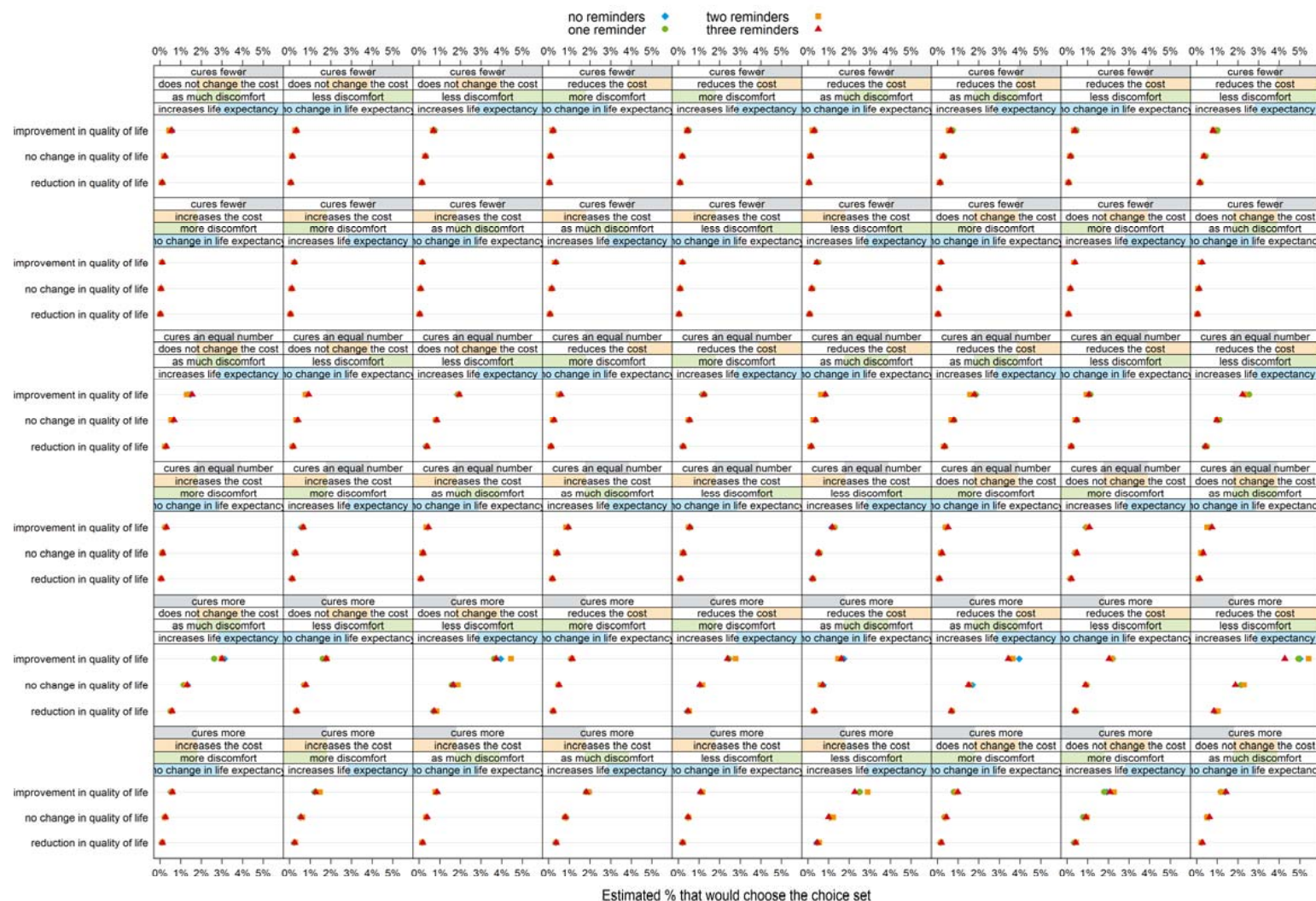


New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value no reminder	Added value one reminder	Added value two reminders	Added value three reminders
as much	reduction	does not change the cost	cures fewer	does not change	-2.004	-2.006	-2.218	-1.916
less	reduction	increases the cost	cures fewer	does not change	-2.239	-2.053	-2.249	-2.195
more	reduction	reduces the cost	cures fewer	does not change	-2.245	-2.077	-2.294	-2.147
more	reduction	does not change the cost	cures fewer	does not change	-2.481	-2.383	-2.493	-2.281
as much	reduction	increases the cost	cures fewer	does not change	-2.475	-2.375	-2.647	-2.415
more	reduction	increases the cost	cures fewer	does not change	-2.953	-2.752	-2.922	-2.780



Appendix 16.1.5. Probabilities of choosing a scenario per number of reminders

Probabilities of choosing a scenario as having a higher added value out of the full set of scenarios per number of reminders





Appendix 16.2. Choice set analysis per age category

Appendix 16.2.1. Model fit per age category

Actual and predicted percentage of choice for each alternative per age category

	N	Alternative 1		Alternative 2	
		Actual	Predicted	Actual	Predicted
20-29	617	59.2%	60.7%	40.8%	39.3%
30-39	678	60.4%	61.3%	39.6%	38.7%
40-49	812	58.9%	60.3%	41.1%	39.7%
50-59	963	58.8%	60.8%	41.2%	39.2%
60-69	765	60.7%	61.1%	39.3%	38.9%
70-79	331	59.9%	59.6%	40.1%	40.4%
80-89	121	56.4%	58.8%	43.6%	41.2%

Goodness of fit statistics

	X ² observed versus predicted	% of responses correctly predicted by model
20-29	2.53 (df=1;p = 0.11)	80.3%
30-39	0.9 (df=1;p = 0.34)	79.8%
40-49	2.66 (df=1;p = 0.1)	79.5%
50-59	6.53 (df=1;p = 0.01)	79.9%
60-69	0.23 (df=1;p = 0.63)	80.4%
70-79	0.03 (df=1;p = 0.85)	80.0%
80-89	1.15 (df=1;p = 0.28)	80.6%



Appendix 16.2.2. Estimated model parameters per age category

Model summary by age category

	Attribute	Level	Estimated coefficient ^a	Standard Error	t-value	Pr(> t)	Significance level
20-29	impact on societal cost	increases the cost	-0.438	0.051			
		does not change the cost	0.081	0.047	1.715	0.086	
		reduces the cost	0.357	0.057	6.312	0.000	***
	change in quality of life	reduction	-0.721	0.059			
		no change	-0.054	0.047	-1.143	0.253	
		improvement	0.774	0.054	14.380	0.000	***
	change in life expectancy	does not change	-0.419	0.035			
		increase	0.419	0.035	12.137	0.000	***
	treatment discomfort	more	-0.425	0.048			
		as much	0.051	0.048	1.063	0.288	
		less	0.373	0.047	8.006	0.000	***
	change in prevalence	cures fewer	-0.798	0.064			
cures an equal number		0.023	0.046	0.497	0.619		
cures more		0.775	0.053	14.686	0.000	***	
30-39	impact on societal cost	increases the cost	-0.347	0.048			
		does not change the cost	0.050	0.045	1.114	0.265	
		reduces the cost	0.298	0.053	5.632	0.000	***
	change in quality of life	reduction	-0.817	0.060			
		no change	0.052	0.044	1.174	0.240	
		improvement	0.765	0.052	14.612	0.000	***
	change in life expectancy	does not change	-0.418	0.032			
		increase	0.418	0.033	12.779	0.000	***
	treatment discomfort	more	-0.235	0.040			
		as much	0.058	0.048	1.225	0.221	
		less	0.177	0.044	4.012	0.000	***
	change in prevalence	cures fewer	-0.900	0.065			
cures an equal number		0.049	0.044	1.102	0.270		
cures more		0.851	0.052	16.288	0.000	***	
40-49	impact on societal cost	increases the cost	-0.344	0.043			



Attribute		Level	Estimated coefficient ^o	Standard Error	t-value	Pr(> t)	Significance level
50-59	change in quality of life	does not change the cost	0.045	0.041	1.089	0.276	
		reduces the cost	0.299	0.049	6.147	0.000	***
		reduction	-0.772	0.051			
	change in life expectancy	no change	-0.038	0.040	-0.941	0.347	
		improvement	0.810	0.047	17.220	0.000	***
		does not change	-0.433	0.030			
	treatment discomfort	increase	0.433	0.030	14.494	0.000	***
		more	-0.315	0.039			
		as much	-0.020	0.042	-0.466	0.641	
	change in prevalence	less	0.335	0.040	8.347	0.000	***
		cures fewer	-0.813	0.056			
		cures an equal number	0.063	0.040	1.589	0.112	
	impact on societal cost	cures more	0.750	0.046	16.227	0.000	***
		increases the cost	-0.366	0.042			
		does not change the cost	0.051	0.038	1.325	0.185	
60-69	change in quality of life	reduces the cost	0.315	0.047	6.778	0.000	***
		reduction	-0.906	0.053			
		no change	-0.008	0.037	-0.227	0.821	
	change in life expectancy	improvement	0.914	0.046	19.683	0.000	***
		does not change	-0.391	0.027			
		increase	0.391	0.028	13.951	0.000	***
	treatment discomfort	more	-0.363	0.037			
		as much	0.042	0.040	1.067	0.286	
		less	0.320	0.038	8.503	0.000	***
	change in prevalence	cures fewer	-0.875	0.055			
		cures an equal number	0.014	0.038	0.381	0.703	
		cures more	0.860	0.045	19.060	0.000	***
	impact on societal cost	increases the cost	-0.384	0.050			
		does not change the cost	0.125	0.044	2.839	0.005	**
		reduces the cost	0.259	0.052	4.965	0.000	***
	change in quality of life	reduction	-0.848	0.058			



Attribute		Level	Estimated coefficient ^o	Standard Error	t-value	Pr(> t)	Significance level
	change in life expectancy	no change	0.008	0.044	0.180	0.857	
		improvement	0.840	0.052	16.018	0.000	***
		does not change	-0.441	0.034			
	treatment discomfort	increase	0.441	0.032	13.827	0.000	***
		more	-0.414	0.045			
		as much	0.072	0.046	1.576	0.115	
	change in prevalence	less	0.342	0.043	7.870	0.000	***
		cures fewer	-1.002	0.065			
		cures an equal number	0.219	0.043	5.088	0.000	***
	70-79 impact on societal cost	cures more	0.783	0.051	15.236	0.000	***
		increases the cost	-0.350	0.076			
		does not change the cost	0.035	0.067	0.519	0.604	
	change in quality of life	reduces the cost	0.315	0.082	3.846	0.000	***
		reduction	-0.867	0.086			
		no change	-0.002	0.065	-0.035	0.972	
	change in life expectancy	improvement	0.869	0.081	10.706	0.000	***
		does not change	-0.363	0.048			
		increase	0.363	0.047	7.732	0.000	***
	treatment discomfort	more	-0.402	0.071			
		as much	-0.068	0.068	-1.004	0.316	
		less	0.471	0.066	7.179	0.000	***
	change in prevalence	cures fewer	-0.986	0.100			
		cures an equal number	0.154	0.065	2.364	0.018	*
		cures more	0.832	0.084	9.872	0.000	***
80-89	impact on societal cost	increases the cost	-0.225	0.123			
		does not change the cost	0.066	0.113	0.584	0.559	
		reduces the cost	0.159	0.142	1.121	0.262	
	change in quality of life	reduction	-0.965	0.143			
		no change	-0.027	0.116	-0.230	0.818	
		improvement	0.991	0.140	7.093	0.000	***
	change in life expectancy	does not change	-0.330	0.074			



Attribute	Level	Estimated coefficient [°]	Standard Error	t-value	Pr(> t)	Significance level
treatment discomfort	increase	0.330	0.080	4.120	0.000	***
	more	-0.478	0.115			
	as much	0.101	0.111	0.911	0.362	
	less	0.377	0.113	3.340	0.001	***
change in prevalence	cures fewer	-0.938	0.157			
	cures an equal number	0.208	0.111	1.872	0.061	.
	cures more	0.730	0.141	5.178	0.000	***

[°] Results of a multinomial logistic regression model

* significant on the 5% significance level

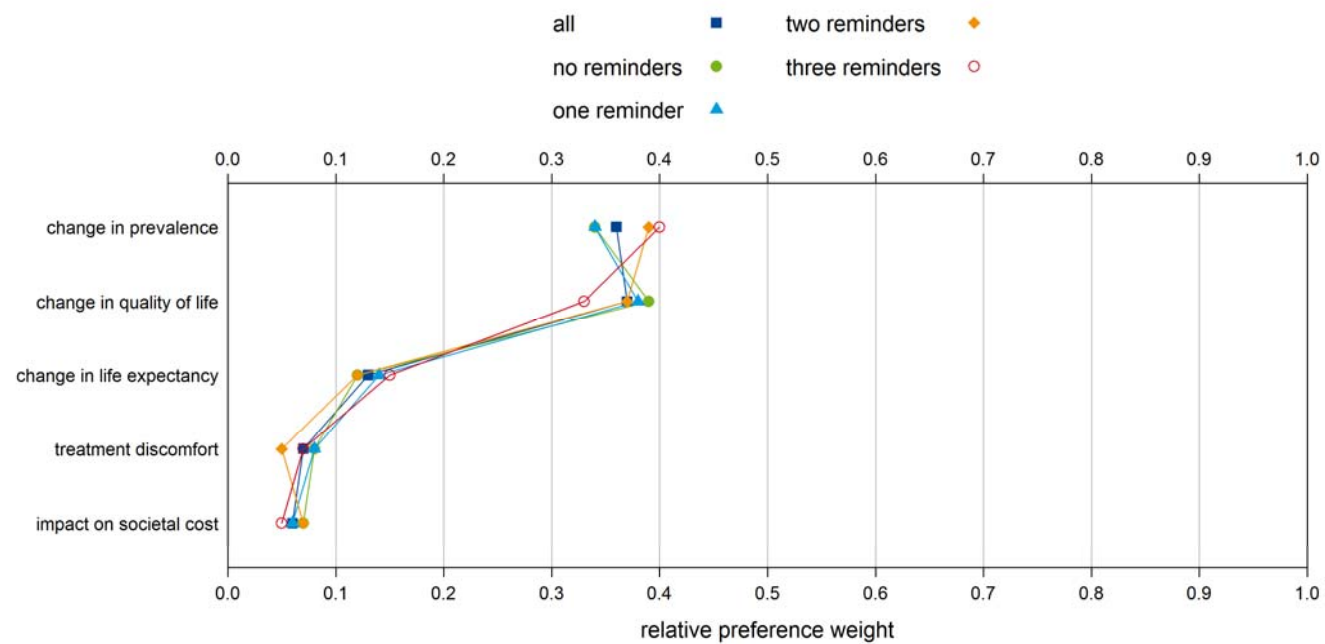
** significant on the 1% significance level

*** significant on the 0.1% significance level



Appendix 16.2.3. Weights per age category

Relative weights in function of age category received





Appendix 16.2.4. Added value per age category

Added value assigned to new treatments, per age category

New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value 20-29	Added value 30-39	Added value 40-49	Added value 50-59	Added value 60-69	Added value 70-79	Added value 80-89
less	improvement	reduces the cost	cures more	increase	2.699	2.509	2.627	2.801	2.666	2.849	2.587
less	improvement	does not change the cost	cures more	increase	2.422	2.261	2.373	2.536	2.531	2.569	2.494
as much	improvement	reduces the cost	cures more	increase	2.377	2.390	2.273	2.523	2.396	2.311	2.311
as much	improvement	does not change the cost	cures more	increase	2.100	2.143	2.018	2.259	2.261	2.030	2.218
less	improvement	increases the cost	cures more	increase	1.903	1.864	1.984	2.119	2.022	2.184	2.203
less	improvement	reduces the cost	cures an equal number	increase	1.947	1.706	1.941	1.955	2.101	2.172	2.066
more	improvement	reduces the cost	cures more	increase	1.901	2.097	1.978	2.118	1.910	1.977	1.732
less	improvement	reduces the cost	cures more	does not change	1.860	1.673	1.761	2.019	1.785	2.124	1.928
less	no change	reduces the cost	cures more	increase	1.871	1.796	1.779	1.878	1.833	1.978	1.569
less	improvement	does not change the cost	cures an equal number	increase	1.671	1.459	1.686	1.690	1.966	1.892	1.972
more	improvement	does not change the cost	cures more	increase	1.624	1.849	1.723	1.854	1.776	1.696	1.638
as much	improvement	increases the cost	cures more	increase	1.581	1.746	1.630	1.842	1.752	1.645	1.927
as much	improvement	reduces the cost	cures an equal number	increase	1.625	1.588	1.586	1.677	1.831	1.633	1.790
less	improvement	does not change the cost	cures more	does not change	1.584	1.425	1.506	1.755	1.650	1.843	1.835
less	no change	does not change the cost	cures more	increase	1.594	1.548	1.525	1.614	1.699	1.698	1.476
as much	improvement	reduces the cost	cures more	does not change	1.539	1.554	1.406	1.742	1.515	1.585	1.652
as much	no change	reduces the cost	cures more	increase	1.549	1.677	1.425	1.600	1.563	1.439	1.293
as much	improvement	does not change cost	cures an equal number	increase	1.349	1.340	1.332	1.413	1.697	1.353	1.696
as much	improvement	does not change cost	cures more	does not change	1.262	1.306	1.152	1.477	1.380	1.305	1.559
less	improvement	increases the cost	cures an equal number	increase	1.151	1.061	1.298	1.273	1.457	1.507	1.681
more	improvement	increases the cost	cures more	increase	1.105	1.452	1.335	1.437	1.267	1.311	1.347
as much	no change	does not change the cost	cures more	increase	1.272	1.430	1.170	1.336	1.429	1.159	1.200



New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value 20-29	Added value 30-39	Added value 40-49	Added value 50-59	Added value 60-69	Added value 70-79	Added value 80-89
more	improvement	reduces the cost	cures an equal number	increase	1.149	1.294	1.291	1.272	1.345	1.299	1.210
less	improvement	increases the cost	cures more	does not change	1.065	1.028	1.118	1.338	1.141	1.458	1.544
less	improvement	reduces the cost	cures an equal number	does not change	1.109	0.870	1.074	1.173	1.220	1.446	1.406
less	no change	increases the cost	cures more	increase	1.075	1.151	1.136	1.197	1.189	1.313	1.185
more	improvement	reduces the cost	cures more	does not change	1.063	1.260	1.111	1.337	1.029	1.251	1.072
less	no change	reduces the cost	cures an equal number	increase	1.119	0.993	1.093	1.032	1.268	1.300	1.048
more	no change	reduces the cost	cures more	increase	1.073	1.384	1.130	1.195	1.078	1.105	0.714
more	improvement	does not change the cost	cures an equal number	increase	0.873	1.046	1.036	1.008	1.211	1.019	1.117
as much	improvement	increases the cost	cures an equal number	increase	0.830	0.943	0.943	0.996	1.187	0.968	1.405
less	no change	reduces the cost	cures more	does not change	1.033	0.959	0.913	1.097	0.952	1.252	0.910
less	reduction	reduces the cost	cures more	increase	1.203	0.927	1.045	0.981	0.977	1.113	0.631
less	improvement	reduces the cost	cures fewer	increase	1.126	0.758	1.064	1.065	0.880	1.032	0.920
less	improvement	does not change the cost	cures an equal number	does not change	0.832	0.622	0.819	0.909	1.085	1.166	1.313
more	improvement	does not change the cost	cures more	does not change	0.786	1.013	0.857	1.072	0.895	0.971	0.979
as much	improvement	increases the cost	cures more	does not change	0.743	0.909	0.763	1.060	0.871	0.920	1.267
less	no change	does not change the cost	cures an equal number	increase	0.843	0.746	0.838	0.768	1.134	1.020	0.954
as much	improvement	reduces the cost	cures an equal number	does not change	0.787	0.751	0.720	0.896	0.950	0.907	1.130
more	no change	does not change the cost	cures more	increase	0.796	1.136	0.875	0.931	0.943	0.825	0.620
as much	no change	increases the cost	cures more	increase	0.753	1.032	0.782	0.919	0.919	0.774	0.909
as much	no change	reduces the cost	cures an equal number	increase	0.797	0.875	0.738	0.754	0.998	0.761	0.771
less	no change	does not change the cost	cures more	does not change	0.756	0.712	0.658	0.832	0.818	0.972	0.817
less	reduction	does not change the cost	cures more	increase	0.927	0.680	0.790	0.716	0.842	0.833	0.538
less	improvement	does not change the cost	cures fewer	increase	0.850	0.510	0.810	0.801	0.746	0.752	0.827
as much	no change	reduces the cost	cures more	does not change	0.711	0.841	0.558	0.819	0.682	0.713	0.634
as much	reduction	reduces the cost	cures more	increase	0.882	0.809	0.690	0.703	0.707	0.575	0.355



New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value 20-29	Added value 30-39	Added value 40-49	Added value 50-59	Added value 60-69	Added value 70-79	Added value 80-89
as much	improvement	reduces the cost	cures fewer	increase	0.805	0.639	0.710	0.788	0.610	0.493	0.644
as much	improvement	does not change the cost	cures an equal number	does not change	0.511	0.503	0.465	0.631	0.815	0.627	1.037
more	improvement	increases the cost	cures an equal number	increase	0.354	0.649	0.648	0.591	0.702	0.634	0.825
as much	no change	does not change the cost	cures an equal number	increase	0.521	0.627	0.484	0.490	0.864	0.481	0.678
less	improvement	increases the cost	cures an equal number	does not change	0.313	0.225	0.431	0.492	0.576	0.781	1.022
more	improvement	increases the cost	cures more	does not change	0.267	0.616	0.468	0.655	0.385	0.586	0.688
as much	no change	does not change the cost	cures more	does not change	0.434	0.593	0.304	0.555	0.548	0.433	0.541
less	no change	increases the cost	cures an equal number	increase	0.324	0.348	0.450	0.351	0.624	0.635	0.663
more	improvement	reduces the cost	cures an equal number	does not change	0.311	0.458	0.424	0.490	0.464	0.573	0.551
more	no change	increases the cost	cures more	increase	0.277	0.739	0.487	0.514	0.434	0.440	0.329
as much	reduction	does not change the cost	cures more	increase	0.605	0.561	0.436	0.439	0.573	0.294	0.262
as much	improvement	does not change the cost	cures fewer	increase	0.528	0.391	0.455	0.523	0.476	0.213	0.550
more	no change	reduces the cost	cures an equal number	increase	0.321	0.581	0.443	0.349	0.513	0.427	0.192
less	no change	increases the cost	cures more	does not change	0.237	0.315	0.270	0.415	0.308	0.587	0.525
less	reduction	increases the cost	cures more	increase	0.408	0.282	0.402	0.299	0.333	0.448	0.247
less	improvement	increases the cost	cures fewer	increase	0.331	0.113	0.421	0.384	0.236	0.367	0.535
less	no change	reduces the cost	cures an equal number	does not change	0.281	0.157	0.226	0.251	0.387	0.574	0.388
more	no change	reduces the cost	cures more	does not change	0.235	0.547	0.263	0.414	0.197	0.379	0.054
less	reduction	reduces the cost	cures an equal number	increase	0.452	0.124	0.358	0.135	0.412	0.436	0.109
more	reduction	reduces the cost	cures more	increase	0.406	0.515	0.395	0.298	0.221	0.241	-0.225
more	improvement	reduces the cost	cures fewer	increase	0.329	0.346	0.415	0.383	0.125	0.159	0.064
more	improvement	does not change the cost	cures an equal number	does not change	0.035	0.210	0.170	0.226	0.330	0.293	0.457
as much	improvement	increases the cost	cures an equal number	does not change	-0.009	0.106	0.077	0.214	0.306	0.242	0.746
less	reduction	reduces the cost	cures more	does not change	0.365	0.091	0.178	0.199	0.096	0.388	-0.028
more	no change	does not change the cost	cures an equal number	increase	0.045	0.333	0.188	0.085	0.378	0.147	0.099
less	improvement	reduces the cost	cures fewer	does not change	0.288	-0.079	0.198	0.284	-0.001	0.306	0.261



New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value 20-29	Added value 30-39	Added value 40-49	Added value 50-59	Added value 60-69	Added value 70-79	Added value 80-89
as much	no change	increases the cost	cures an equal number	increase	0.002	0.230	0.095	0.073	0.355	0.096	0.387
less	no change	reduces the cost	cures fewer	increase	0.299	0.045	0.216	0.143	0.047	0.161	-0.098
less	no change	does not change the cost	cures an equal number	does not change	0.004	-0.091	-0.029	-0.014	0.253	0.294	0.295
more	no change	does not change the cost	cures more	does not change	-0.042	0.300	0.009	0.150	0.062	0.099	-0.039
as much	no change	increases the cost	cures more	does not change	-0.085	0.196	-0.085	0.138	0.038	0.048	0.249
less	reduction	does not change the cost	cures an equal number	increase	0.175	-0.123	0.103	-0.130	0.278	0.155	0.016
more	reduction	does not change the cost	cures more	increase	0.129	0.267	0.141	0.034	0.087	-0.040	-0.318
more	improvement	does not change the cost	cures fewer	increase	0.052	0.098	0.160	0.118	-0.010	-0.121	-0.029
as much	reduction	increases the cost	cures more	increase	0.086	0.164	0.047	0.022	0.063	-0.091	-0.030
as much	improvement	increases the cost	cures fewer	increase	0.009	-0.006	0.067	0.107	-0.034	-0.172	0.259
as much	no change	reduces the cost	cures an equal number	does not change	-0.041	0.038	-0.128	-0.027	0.117	0.036	0.112
as much	reduction	reduces the cost	cures an equal number	increase	0.130	0.006	0.004	-0.143	0.142	-0.103	-0.167
less	reduction	does not change the cost	cures more	does not change	0.089	-0.157	-0.076	-0.065	-0.039	0.107	-0.121
less	improvement	does not change the cost	cures fewer	does not change	0.012	-0.327	-0.057	0.020	-0.135	0.026	0.167
less	no change	does not change the cost	cures fewer	increase	0.022	-0.203	-0.038	-0.121	-0.087	-0.120	-0.191
as much	reduction	reduces the cost	cures more	does not change	0.043	-0.028	-0.176	-0.078	-0.174	-0.151	-0.304
as much	improvement	reduces the cost	cures fewer	does not change	-0.034	-0.198	-0.157	0.006	-0.271	-0.232	-0.016
more	improvement	increases the cost	cures an equal number	does not change	-0.484	-0.187	-0.219	-0.191	-0.179	-0.092	0.166
as much	no change	reduces the cost	cures fewer	increase	-0.023	-0.074	-0.138	-0.135	-0.223	-0.378	-0.374
as much	no change	does not change the cost	cures an equal number	does not change	-0.317	-0.210	-0.383	-0.291	-0.017	-0.245	0.019
more	no change	increases the cost	cures an equal number	increase	-0.474	-0.064	-0.200	-0.332	-0.131	-0.238	-0.193
as much	reduction	does not change the cost	cures an equal number	increase	-0.146	-0.242	-0.251	-0.407	0.008	-0.383	-0.260
less	no change	increases the cost	cures an equal number	does not change	-0.515	-0.488	-0.417	-0.431	-0.257	-0.091	0.004
more	no change	increases the cost	cures more	does not change	-0.561	-0.097	-0.380	-0.267	-0.447	-0.286	-0.330



New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value 20-29	Added value 30-39	Added value 40-49	Added value 50-59	Added value 60-69	Added value 70-79	Added value 80-89
as much	reduction	does not change the cost	cures more	does not change	-0.233	-0.276	-0.431	-0.343	-0.309	-0.432	-0.398
less	reduction	increases the cost	cures an equal number	increase	-0.344	-0.520	-0.285	-0.547	-0.232	-0.230	-0.275
as much	improvement	does not change the cost	cures fewer	does not change	-0.310	-0.445	-0.412	-0.258	-0.405	-0.513	-0.109
more	reduction	increases the cost	cures more	increase	-0.390	-0.130	-0.248	-0.383	-0.422	-0.425	-0.609
more	improvement	increases the cost	cures fewer	increase	-0.467	-0.299	-0.229	-0.299	-0.519	-0.506	-0.320
more	no change	reduces the cost	cures an equal number	does not change	-0.517	-0.255	-0.424	-0.432	-0.368	-0.298	-0.467
as much	no change	does not change the cost	cures fewer	increase	-0.300	-0.322	-0.393	-0.399	-0.357	-0.658	-0.468
more	reduction	reduces the cost	cures an equal number	increase	-0.346	-0.288	-0.292	-0.548	-0.343	-0.437	-0.746
less	reduction	increases the cost	cures more	does not change	-0.430	-0.554	-0.465	-0.482	-0.548	-0.278	-0.413
less	improvement	increases the cost	cures fewer	does not change	-0.507	-0.724	-0.445	-0.397	-0.645	-0.359	-0.124
less	reduction	reduces the cost	cures an equal number	does not change	-0.386	-0.712	-0.508	-0.647	-0.469	-0.290	-0.550
less	no change	increases the cost	cures fewer	increase	-0.497	-0.600	-0.427	-0.538	-0.596	-0.505	-0.483
more	reduction	reduces the cost	cures more	does not change	-0.433	-0.321	-0.471	-0.483	-0.660	-0.485	-0.884
more	improvement	reduces the cost	cures fewer	does not change	-0.510	-0.491	-0.452	-0.399	-0.756	-0.566	-0.595
more	no change	reduces the cost	cures fewer	increase	-0.499	-0.367	-0.433	-0.540	-0.708	-0.712	-0.954
more	no change	does not change the cost	cures an equal number	does not change	-0.793	-0.503	-0.678	-0.696	-0.503	-0.579	-0.561
as much	no change	increases the cost	cures an equal number	does not change	-0.836	-0.607	-0.771	-0.708	-0.527	-0.630	-0.272
more	reduction	does not change the cost	cures an equal number	increase	-0.622	-0.535	-0.546	-0.813	-0.478	-0.717	-0.840
as much	reduction	increases the cost	cures an equal number	increase	-0.666	-0.639	-0.639	-0.824	-0.502	-0.768	-0.551
less	no change	reduces the cost	cures fewer	does not change	-0.540	-0.792	-0.650	-0.639	-0.834	-0.565	-0.757
less	reduction	reduces the cost	cures fewer	increase	-0.369	-0.824	-0.518	-0.755	-0.809	-0.704	-1.036
less	reduction	does not change the cost	cures an equal number	does not change	-0.663	-0.960	-0.763	-0.911	-0.603	-0.570	-0.643
more	reduction	does not change the cost	cures more	does not change	-0.709	-0.569	-0.726	-0.748	-0.794	-0.766	-0.977
more	improvement	does not change the cost	cures fewer	does not change	-0.786	-0.739	-0.707	-0.663	-0.891	-0.847	-0.688
as much	reduction	increases the cost	cures more	does not change	-0.752	-0.673	-0.819	-0.760	-0.818	-0.817	-0.689



New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value 20-29	Added value 30-39	Added value 40-49	Added value 50-59	Added value 60-69	Added value 70-79	Added value 80-89
as much	improvement	increases the cost	cures fewer	does not change	-0.829	-0.842	-0.800	-0.675	-0.915	-0.898	-0.400
as much	reduction	reduces the cost	cures an equal number	does not change	-0.708	-0.831	-0.863	-0.924	-0.739	-0.829	-0.826
more	no change	does not change the cost	cures fewer	increase	-0.776	-0.615	-0.688	-0.804	-0.842	-0.992	-1.047
as much	no change	increases the cost	cures fewer	increase	-0.819	-0.719	-0.781	-0.816	-0.866	-1.043	-0.759
less	no change	does not change the cost	cures fewer	does not change	-0.816	-1.040	-0.905	-0.903	-0.968	-0.845	-0.851
less	reduction	does not change the cost	cures fewer	increase	-0.645	-1.072	-0.773	-1.019	-0.943	-0.984	-1.130
as much	no change	reduces the cost	cures fewer	does not change	-0.861	-0.911	-1.005	-0.916	-1.104	-1.104	-1.034
as much	reduction	reduces the cost	cures fewer	increase	-0.691	-0.943	-0.873	-1.032	-1.079	-1.243	-1.313
more	no change	increases the cost	cures an equal number	does not change	-1.312	-0.900	-1.067	-1.113	-1.012	-0.964	-0.852
as much	reduction	does not change the cost	cures an equal number	does not change	-0.985	-1.079	-1.118	-1.189	-0.873	-1.109	-0.919
more	reduction	increases the cost	cures an equal number	increase	-1.142	-0.933	-0.935	-1.229	-0.987	-1.102	-1.131
less	reduction	increases the cost	cures an equal number	does not change	-1.182	-1.357	-1.152	-1.328	-1.113	-0.955	-0.934
more	reduction	increases the cost	cures more	does not change	-1.228	-0.966	-1.114	-1.165	-1.303	-1.151	-1.268
more	improvement	increases the cost	cures fewer	does not change	-1.305	-1.136	-1.095	-1.080	-1.400	-1.232	-0.980
as much	no change	does not change the cost	cures fewer	does not change	-1.138	-1.158	-1.259	-1.181	-1.238	-1.384	-1.127
more	reduction	reduces the cost	cures an equal number	does not change	-1.184	-1.124	-1.158	-1.330	-1.225	-1.163	-1.406
more	no change	increases the cost	cures fewer	increase	-1.295	-1.012	-1.077	-1.221	-1.352	-1.377	-1.338
as much	reduction	does not change the cost	cures fewer	increase	-0.967	-1.190	-1.127	-1.297	-1.213	-1.523	-1.406
less	no change	increases the cost	cures fewer	does not change	-1.335	-1.437	-1.293	-1.320	-1.477	-1.230	-1.142
less	reduction	increases the cost	cures fewer	increase	-1.164	-1.469	-1.161	-1.436	-1.452	-1.369	-1.421
more	no change	reduces the cost	cures fewer	does not change	-1.337	-1.204	-1.300	-1.321	-1.589	-1.438	-1.613
more	reduction	reduces the cost	cures fewer	increase	-1.167	-1.236	-1.168	-1.437	-1.564	-1.577	-1.892
more	reduction	does not change the cost	cures an equal number	does not change	-1.461	-1.372	-1.413	-1.594	-1.359	-1.443	-1.499
as much	reduction	increases the cost	cures an equal number	does not change	-1.504	-1.476	-1.506	-1.606	-1.383	-1.494	-1.211
less	reduction	reduces the cost	cures fewer	does not change	-1.207	-1.661	-1.385	-1.536	-1.690	-1.430	-1.696

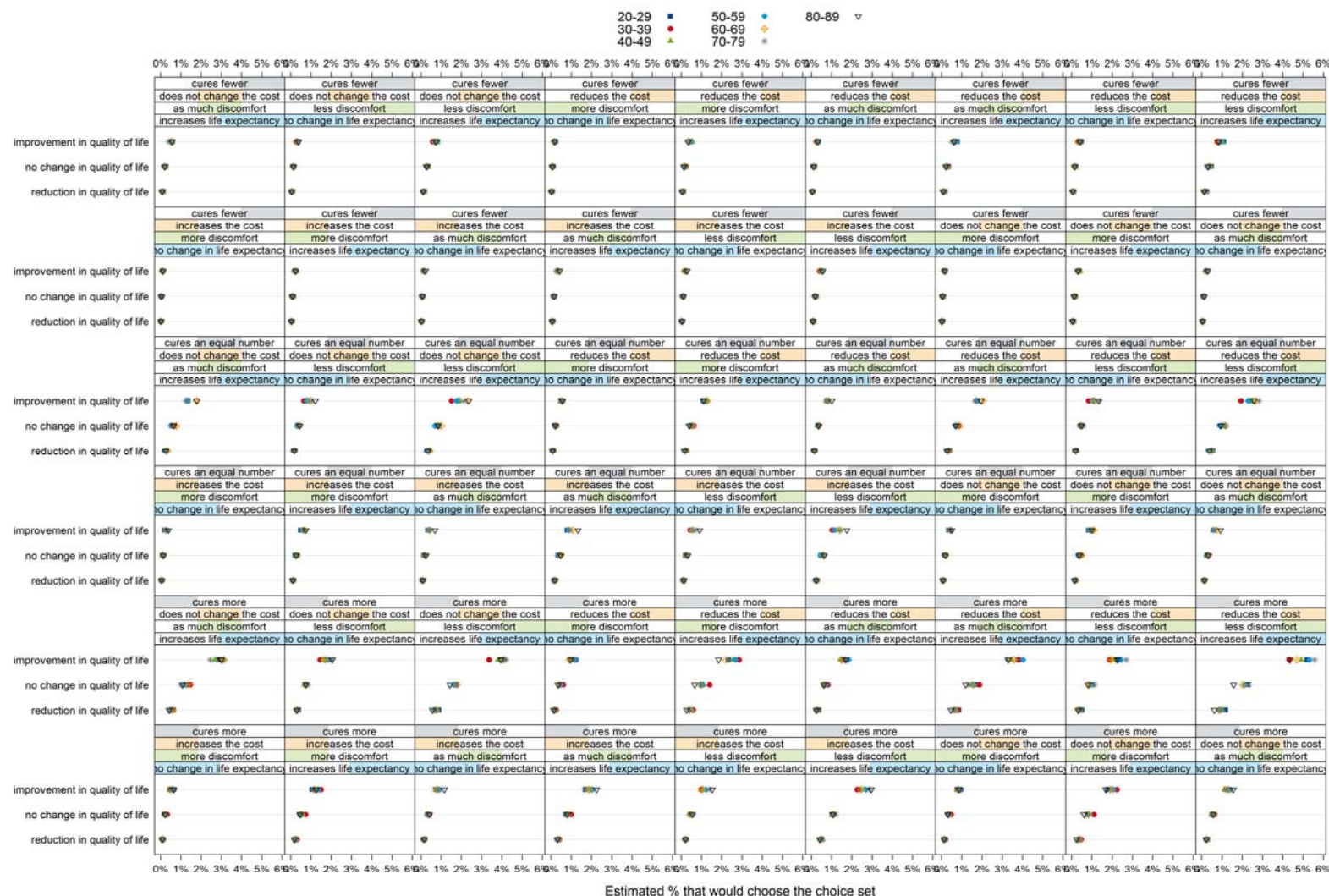


New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value 20-29	Added value 30-39	Added value 40-49	Added value 50-59	Added value 60-69	Added value 70-79	Added value 80-89
more	no change	does not change the cost	cures fewer	does not change	-1.614	-1.452	-1.555	-1.586	-1.723	-1.718	-1.706
as much	no change	increases the cost	cures fewer	does not change	-1.657	-1.555	-1.648	-1.597	-1.747	-1.769	-1.418
more	reduction	does not change the cost	cures fewer	increase	-1.443	-1.484	-1.423	-1.702	-1.699	-1.857	-1.985
as much	reduction	increases the cost	cures fewer	increase	-1.486	-1.588	-1.516	-1.714	-1.722	-1.908	-1.697
less	reduction	does not change the cost	cures fewer	does not change	-1.484	-1.908	-1.640	-1.800	-1.824	-1.710	-1.789
as much	reduction	reduces the cost	cures fewer	does not change	-1.529	-1.779	-1.739	-1.814	-1.960	-1.969	-1.972
more	reduction	increases the cost	cures an equal number	does not change	-1.980	-1.769	-1.801	-2.011	-1.868	-1.828	-1.790
more	no change	increases the cost	cures fewer	does not change	-2.133	-1.849	-1.943	-2.003	-2.233	-2.103	-1.998
as much	reduction	does not change the cost	cures fewer	does not change	-1.805	-2.027	-1.994	-2.078	-2.094	-2.249	-2.065
more	reduction	increases the cost	cures fewer	increase	-1.962	-1.881	-1.811	-2.119	-2.208	-2.242	-2.277
less	reduction	increases the cost	cures fewer	does not change	-2.003	-2.306	-2.028	-2.217	-2.334	-2.095	-2.080
more	reduction	reduces the cost	cures fewer	does not change	-2.005	-2.073	-2.035	-2.219	-2.445	-2.303	-2.551
more	reduction	does not change the cost	cures fewer	does not change	-2.281	-2.320	-2.289	-2.483	-2.580	-2.583	-2.645
as much	reduction	increases the cost	cures fewer	does not change	-2.324	-2.424	-2.382	-2.495	-2.604	-2.634	-2.356
more	reduction	increases the cost	cures fewer	does not change	-2.800	-2.718	-2.678	-2.900	-3.089	-2.968	-2.936



Appendix 16.2.5. Probabilities of choosing a scenario per age category

Probabilities of choosing a scenario as having a higher added value out of the full set of scenarios per age category





Appendix 16.3. Choice set analysis per health status

Appendix 16.3.1. Model fit per health status

Actual and predicted percentage of choice for each alternative per health status

	N	Alternative 1		Alternative 2	
		Actual	Predicted	Actual	Predicted
in good health	3299	59.8%	60.9%	40.2%	39.1%
not in good health	985	58.4%	60.2%	41.6%	39.8%

Goodness of fit statistics

	X ² observed versus predicted	% of responses correctly predicted by model
in good health	5.86 (df=1;p = 0.02)	80.6%
not in good health	5.33 (df=1;p = 0.02)	77.6%



Appendix 16.3.2. Estimated model parameters per health status

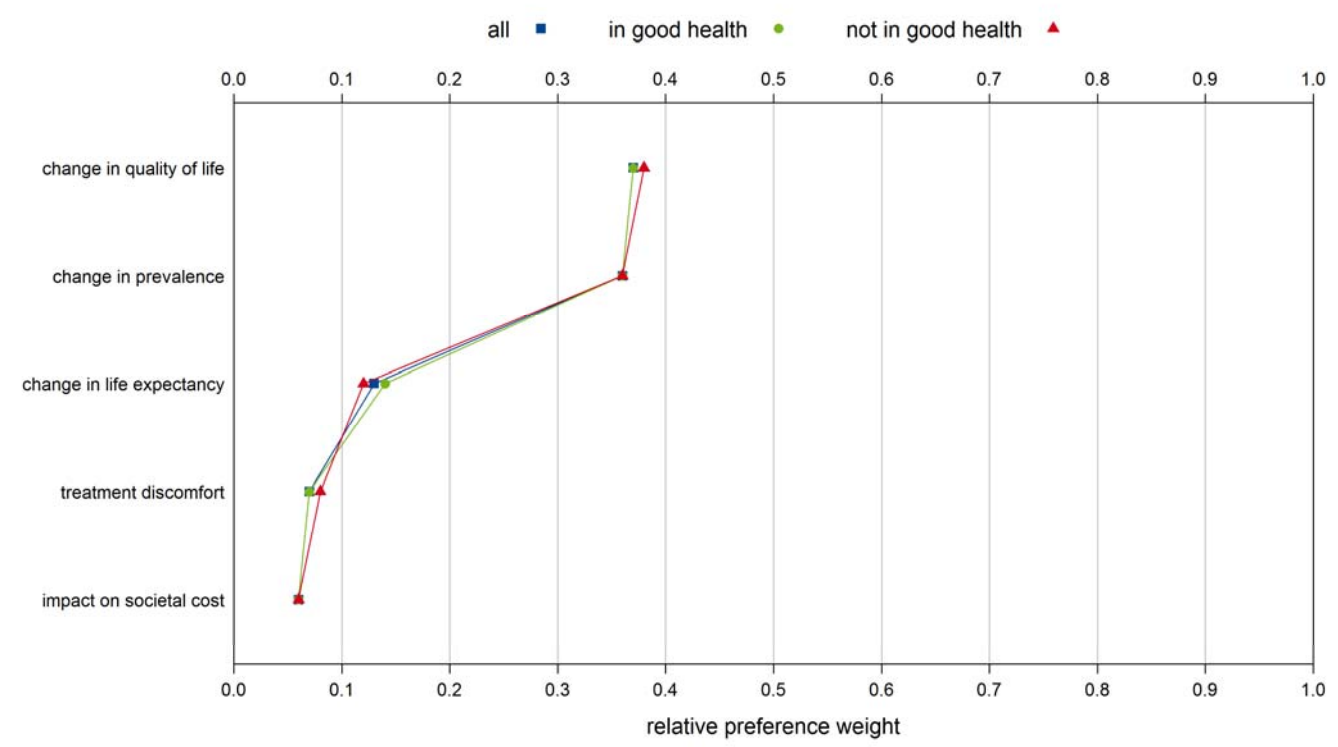
Model summary by health status

	Attribute	Level	Estimated coefficient [°]	Standard Error	t-value	Pr(> t)	Significance level
in good health	impact on societal cost	increases the cost	-0.380	0.023			
		does not change the cost	0.068	0.021	3.258	0.001	**
		reduces the cost	0.312	0.025	12.471	0.000	***
	change in quality of life	reduction	-0.851	0.028			
		no change	-0.017	0.020	-0.854	0.393	
		improvement	0.869	0.025	35.088	0.000	***
	change in life expectancy	does not change	-0.435	0.016			
		increase	0.435	0.015	28.430	0.000	***
	treatment discomfort	more	-0.364	0.020			
		as much	0.038	0.022	1.747	0.081	.
		less	0.326	0.021	15.899	0.000	***
	change in prevalence	cures fewer	-0.912	0.030			
		cures an equal number	0.064	0.020	3.132	0.002	**
		cures more	0.848	0.024	34.803	0.000	***
not in good health	impact on societal cost	increases the cost	-0.321	0.038			
		does not change the cost	0.058	0.036	1.579	0.114	
		reduces the cost	0.264	0.043	6.097	0.000	***
	change in quality of life	reduction	-0.753	0.045			
		no change	0.022	0.036	0.626	0.531	
		improvement	0.731	0.042	17.415	0.000	***
	change in life expectancy	does not change	-0.339	0.024			
		increase	0.339	0.026	13.243	0.000	***
	treatment discomfort	more	-0.314	0.037			
		as much	0.002	0.037	0.043	0.966	
		less	0.313	0.036	8.790	0.000	***
	change in prevalence	cures fewer	-0.804	0.049			
		cures an equal number	0.135	0.036	3.788	0.000	***
		cures more	0.669	0.042	16.064	0.000	***

[°] Results of a multinomial logistic regression model * significant on the 5% significance level ** significant on the 1% significance level *** significant on the 0.1% significance level



Appendix 16.3.3. Weights per health status
Relative weights in function of health status received



*Appendix 16.3.4. Added value per health status***Added value values assigned to new treatments, per health status**

New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value in good health	Added value not in good health
less	improvement	reduces the cost	cures more	increase	2.789	2.314
less	improvement	does not change the cost	cures more	increase	2.546	2.108
as much	improvement	reduces the cost	cures more	increase	2.501	2.003
as much	improvement	does not change the cost	cures more	increase	2.257	1.797
less	improvement	increases the cost	cures more	increase	2.098	1.729
more	improvement	reduces the cost	cures more	increase	2.100	1.688
less	improvement	reduces the cost	cures an equal number	increase	2.005	1.780
less	improvement	reduces the cost	cures more	does not change	1.919	1.637
less	no change	reduces the cost	cures more	increase	1.903	1.606
more	improvement	does not change the cost	cures more	increase	1.856	1.481
less	improvement	does not change the cost	cures an equal number	increase	1.761	1.574
as much	improvement	increases the cost	cures more	increase	1.810	1.418
as much	improvement	reduces the cost	cures an equal number	increase	1.717	1.469
less	improvement	does not change the cost	cures more	does not change	1.675	1.431
less	no change	does not change the cost	cures more	increase	1.660	1.400
as much	improvement	reduces the cost	cures more	does not change	1.631	1.326
as much	no change	reduces the cost	cures more	increase	1.615	1.295
as much	improvement	does not change the cost	cures an equal number	increase	1.473	1.263
more	improvement	increases the cost	cures more	increase	1.408	1.103
less	improvement	increases the cost	cures an equal number	increase	1.314	1.196
as much	improvement	does not change the cost	cures more	does not change	1.387	1.120
more	improvement	reduces the cost	cures an equal number	increase	1.316	1.154
as much	no change	does not change the cost	cures more	increase	1.371	1.089
less	improvement	increases the cost	cures more	does not change	1.228	1.052
more	improvement	reduces the cost	cures more	does not change	1.229	1.010
less	improvement	reduces the cost	cures an equal number	does not change	1.135	1.103



New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value in good health	Added value not in good health
less	no change	increases the cost	cures more	increase	1.212	1.021
more	no change	reduces the cost	cures more	increase	1.214	0.979
less	no change	reduces the cost	cures an equal number	increase	1.119	1.072
more	improvement	does not change the cost	cures an equal number	increase	1.072	0.947
less	no change	reduces the cost	cures more	does not change	1.033	0.929
as much	improvement	increases the cost	cures an equal number	increase	1.026	0.885
less	reduction	reduces the cost	cures more	increase	1.070	0.831
less	improvement	reduces the cost	cures fewer	increase	1.030	0.842
more	improvement	does not change the cost	cures more	does not change	0.986	0.804
less	improvement	does not change the cost	cures an equal number	does not change	0.891	0.897
more	no change	does not change the cost	cures more	increase	0.970	0.773
less	no change	does not change the cost	cures an equal number	increase	0.875	0.866
as much	improvement	increases the cost	cures more	does not change	0.939	0.741
as much	improvement	reduces the cost	cures an equal number	does not change	0.847	0.792
as much	no change	increases the cost	cures more	increase	0.924	0.710
as much	no change	reduces the cost	cures an equal number	increase	0.831	0.761
less	no change	does not change the cost	cures more	does not change	0.789	0.722
less	reduction	does not change the cost	cures more	increase	0.826	0.625
less	improvement	does not change the cost	cures fewer	increase	0.786	0.636
as much	no change	reduces the cost	cures more	does not change	0.745	0.618
as much	reduction	reduces the cost	cures more	increase	0.782	0.520
as much	improvement	reduces the cost	cures fewer	increase	0.741	0.531
more	improvement	increases the cost	cures an equal number	increase	0.624	0.569
as much	improvement	does not change the cost	cures an equal number	does not change	0.603	0.586
as much	no change	does not change the cost	cures an equal number	increase	0.587	0.555
more	improvement	increases the cost	cures more	does not change	0.538	0.425
less	improvement	increases the cost	cures an equal number	does not change	0.443	0.518
more	improvement	reduces the cost	cures an equal number	does not change	0.445	0.476



New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value in good health	Added value not in good health
more	no change	increases the cost	cures more	increase	0.522	0.394
less	no change	increases the cost	cures an equal number	increase	0.428	0.487
as much	no change	does not change the cost	cures more	does not change	0.501	0.411
more	no change	reduces the cost	cures an equal number	increase	0.430	0.445
as much	reduction	does not change the cost	cures more	increase	0.538	0.314
as much	improvement	does not change the cost	cures fewer	increase	0.497	0.325
less	no change	increases the cost	cures more	does not change	0.342	0.344
more	no change	reduces the cost	cures more	does not change	0.343	0.302
less	no change	reduces the cost	cures an equal number	does not change	0.249	0.395
less	reduction	increases the cost	cures more	increase	0.379	0.246
less	improvement	increases the cost	cures fewer	increase	0.338	0.257
more	reduction	reduces the cost	cures more	increase	0.380	0.204
less	reduction	reduces the cost	cures an equal number	increase	0.286	0.297
more	improvement	reduces the cost	cures fewer	increase	0.340	0.215
more	improvement	does not change the cost	cures an equal number	does not change	0.201	0.270
more	no change	does not change the cost	cures an equal number	increase	0.186	0.239
as much	improvement	increases the cost	cures an equal number	does not change	0.155	0.207
less	reduction	reduces the cost	cures more	does not change	0.200	0.153
less	improvement	reduces the cost	cures fewer	does not change	0.159	0.165
as much	no change	increases the cost	cures an equal number	increase	0.140	0.176
less	no change	reduces the cost	cures fewer	increase	0.144	0.134
more	no change	does not change the cost	cures more	does not change	0.100	0.096
less	no change	does not change the cost	cures an equal number	does not change	0.005	0.189
more	reduction	does not change the cost	cures more	increase	0.136	-0.002
less	reduction	does not change the cost	cures an equal number	increase	0.042	0.091
more	improvement	does not change the cost	cures fewer	increase	0.096	0.009
as much	no change	increases the cost	cures more	does not change	0.053	0.033
as much	no change	reduces the cost	cures an equal number	does not change	-0.039	0.084



New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value in good health	Added value not in good health
as much	reduction	increases the cost	cures more	increase	0.090	-0.065
as much	improvement	increases the cost	cures fewer	increase	0.050	-0.054
as much	reduction	reduces the cost	cures an equal number	increase	-0.003	-0.014
less	reduction	does not change the cost	cures more	does not change	-0.044	-0.053
less	improvement	does not change the cost	cures fewer	does not change	-0.085	-0.042
less	no change	does not change the cost	cures fewer	increase	-0.100	-0.072
as much	reduction	reduces the cost	cures more	does not change	-0.089	-0.158
as much	improvement	reduces the cost	cures fewer	does not change	-0.129	-0.146
as much	no change	reduces the cost	cures fewer	increase	-0.145	-0.177
more	improvement	increases the cost	cures an equal number	does not change	-0.246	-0.109
more	no change	increases the cost	cures an equal number	increase	-0.262	-0.139
as much	no change	does not change the cost	cures an equal number	does not change	-0.283	-0.122
as much	reduction	does not change the cost	cures an equal number	increase	-0.246	-0.220
more	no change	increases the cost	cures more	does not change	-0.348	-0.283
less	no change	increases the cost	cures an equal number	does not change	-0.443	-0.190
more	no change	reduces the cost	cures an equal number	does not change	-0.441	-0.232
more	reduction	increases the cost	cures more	increase	-0.311	-0.381
less	reduction	increases the cost	cures an equal number	increase	-0.406	-0.288
as much	reduction	does not change the cost	cures more	does not change	-0.333	-0.364
more	improvement	increases the cost	cures fewer	increase	-0.351	-0.370
as much	improvement	does not change the cost	cures fewer	does not change	-0.373	-0.353
more	reduction	reduces the cost	cures an equal number	increase	-0.404	-0.330
as much	no change	does not change the cost	cures fewer	increase	-0.389	-0.383
less	reduction	increases the cost	cures more	does not change	-0.492	-0.432
less	improvement	increases the cost	cures fewer	does not change	-0.532	-0.420
more	reduction	reduces the cost	cures more	does not change	-0.490	-0.473
less	reduction	reduces the cost	cures an equal number	does not change	-0.585	-0.381
more	improvement	reduces the cost	cures fewer	does not change	-0.530	-0.462



New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value in good health	Added value not in good health
less	no change	increases the cost	cures fewer	increase	-0.548	-0.451
more	no change	reduces the cost	cures fewer	increase	-0.546	-0.493
more	no change	does not change the cost	cures an equal number	does not change	-0.685	-0.438
more	reduction	does not change the cost	cures an equal number	increase	-0.648	-0.536
as much	no change	increases the cost	cures an equal number	does not change	-0.731	-0.501
less	no change	reduces the cost	cures fewer	does not change	-0.727	-0.544
as much	reduction	increases the cost	cures an equal number	increase	-0.694	-0.599
less	reduction	reduces the cost	cures fewer	increase	-0.690	-0.642
more	reduction	does not change the cost	cures more	does not change	-0.734	-0.680
less	reduction	does not change the cost	cures an equal number	does not change	-0.829	-0.587
more	improvement	does not change the cost	cures fewer	does not change	-0.774	-0.668
more	no change	does not change the cost	cures fewer	increase	-0.790	-0.699
as much	reduction	increases the cost	cures more	does not change	-0.780	-0.743
as much	improvement	increases the cost	cures fewer	does not change	-0.820	-0.731
as much	reduction	reduces the cost	cures an equal number	does not change	-0.873	-0.692
as much	no change	increases the cost	cures fewer	increase	-0.836	-0.762
less	no change	does not change the cost	cures fewer	does not change	-0.971	-0.750
less	reduction	does not change the cost	cures fewer	increase	-0.934	-0.848
as much	no change	reduces the cost	cures fewer	does not change	-1.015	-0.855
as much	reduction	reduces the cost	cures fewer	increase	-0.978	-0.953
more	no change	increases the cost	cures an equal number	does not change	-1.132	-0.817
more	reduction	increases the cost	cures an equal number	increase	-1.095	-0.915
as much	reduction	does not change the cost	cures an equal number	does not change	-1.117	-0.898
more	reduction	increases the cost	cures more	does not change	-1.182	-1.058
less	reduction	increases the cost	cures an equal number	does not change	-1.276	-0.965
more	improvement	increases the cost	cures fewer	does not change	-1.222	-1.047
more	reduction	reduces the cost	cures an equal number	does not change	-1.274	-1.007
more	no change	increases the cost	cures fewer	increase	-1.237	-1.078



New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value in good health	Added value not in good health
as much	no change	does not change the cost	cures fewer	does not change	-1.259	-1.061
as much	reduction	does not change the cost	cures fewer	increase	-1.222	-1.159
less	no change	increases the cost	cures fewer	does not change	-1.418	-1.129
more	no change	reduces the cost	cures fewer	does not change	-1.416	-1.170
less	reduction	increases the cost	cures fewer	increase	-1.381	-1.226
more	reduction	reduces the cost	cures fewer	increase	-1.380	-1.268
more	reduction	does not change the cost	cures an equal number	does not change	-1.518	-1.214
as much	reduction	increases the cost	cures an equal number	does not change	-1.564	-1.276
less	reduction	reduces the cost	cures fewer	does not change	-1.560	-1.319
more	no change	does not change the cost	cures fewer	does not change	-1.660	-1.377
more	reduction	does not change the cost	cures fewer	increase	-1.623	-1.475
as much	no change	increases the cost	cures fewer	does not change	-1.706	-1.440
as much	reduction	increases the cost	cures fewer	increase	-1.670	-1.537
less	reduction	does not change the cost	cures fewer	does not change	-1.804	-1.525
as much	reduction	reduces the cost	cures fewer	does not change	-1.849	-1.630
more	reduction	increases the cost	cures an equal number	does not change	-1.966	-1.592
more	no change	increases the cost	cures fewer	does not change	-2.108	-1.755
more	reduction	increases the cost	cures fewer	increase	-2.071	-1.853
as much	reduction	does not change the cost	cures fewer	does not change	-2.092	-1.836
less	reduction	increases the cost	cures fewer	does not change	-2.252	-1.904
more	reduction	reduces the cost	cures fewer	does not change	-2.250	-1.946
more	reduction	does not change the cost	cures fewer	does not change	-2.494	-2.152
as much	reduction	increases the cost	cures fewer	does not change	-2.540	-2.215
more	reduction	increases the cost	cures fewer	does not change	-2.941	-2.531

[illegible]



Appendix 16.4. Choice set analysis per certainty of the choices

Appendix 16.4.1. Model fit per certainty of the choices

Actual and predicted percentage of choice for each alternative per certainty of the choices

	N	Alternative 1		Alternative 2	
		Actual	Predicted	Actual	Predicted
uncertain	882	57.9%	59.7%	42.1%	40.3%
certain	3399	59.9%	60.9%	40.1%	39.1%

Goodness of fit statistics

	X ² observed versus predicted	% of responses correctly predicted by model
uncertain	4.75 (df=1;p = 0.03)	75.9%
certain	5.95 (df=1;p = 0.01)	81.0%



Appendix 16.4.2. Estimated model parameters per certainty of the choices

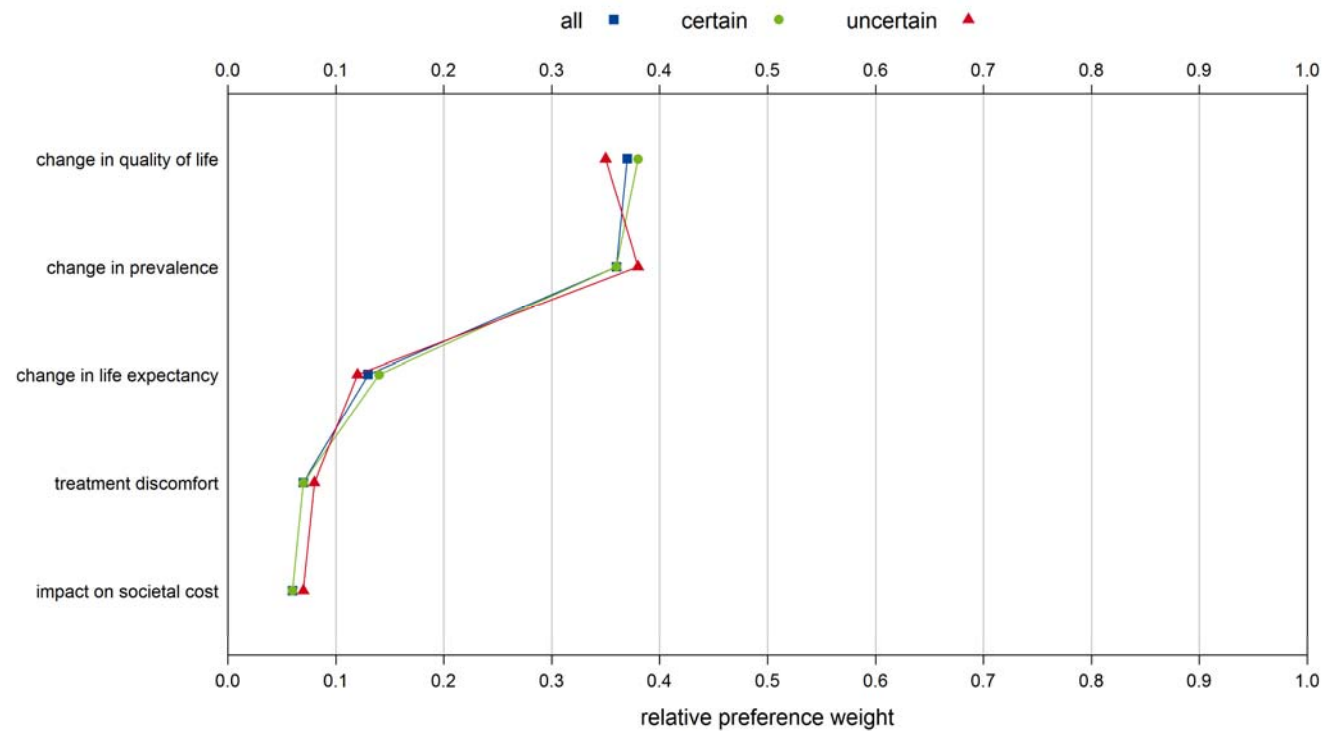
Model summary by certainty of the choices

	Attribute	Level	Estimated coefficient ^o	Standard Error	t-value	Pr(> t)	Significance level
uncertain	impact on societal cost	increases the cost	-0.312	0.037			
		does not change the cost	-0.002	0.038	-0.063	0.950	
		reduces the cost	0.315	0.045	7.032	0.000	***
	change in quality of life	reduction	-0.658	0.045			
		no change	-0.053	0.037	-1.427	0.154	
		improvement	0.711	0.044	16.333	0.000	***
	change in life expectancy	does not change	-0.328	0.026			
		increase	0.328	0.027	12.147	0.000	***
	treatment discomfort	more	-0.320	0.036			
		as much	0.032	0.039	0.836	0.403	
		less	0.287	0.037	7.836	0.000	***
	change in prevalence	cures fewer	-0.743	0.050			
		cures an equal number	0.009	0.037	0.243	0.808	
		cures more	0.734	0.044	16.537	0.000	***
certain	impact on societal cost	increases the cost	-0.383	0.023			
		does not change the cost	0.086	0.021	4.182	0.000	***
		reduces the cost	0.296	0.025	11.970	0.000	***
	change in quality of life	reduction	-0.876	0.028			
		no change	0.005	0.020	0.260	0.795	
		improvement	0.871	0.025	35.528	0.000	***
	change in life expectancy	does not change	-0.431	0.015			
		increase	0.431	0.015	28.648	0.000	***
	treatment discomfort	more	-0.364	0.020			
		as much	0.031	0.021	1.451	0.147	
		less	0.333	0.020	16.324	0.000	***
	change in prevalence	cures fewer	-0.929	0.030			
		cures an equal number	0.103	0.020	5.067	0.000	***
		cures more	0.827	0.024	34.521	0.000	***

^o Results of a multinomial logistic regression model *** significant on the 0.1% significance level



Appendix 16.4.3. Weights per certainty of the choices
Relative weights in function of certainty of the choices received





Appendix 16.4.4. Added value per certainty of the choices

Added value assigned to new treatments, per certainty of the choices

New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value uncertain	Added value certain
less	improvement	reduces the cost	cures more	increase	2.375	2.758
less	improvement	does not change the cost	cures more	increase	2.058	2.548
as much	improvement	reduces the cost	cures more	increase	2.120	2.457
as much	improvement	does not change the cost	cures more	increase	1.803	2.247
more	improvement	reduces the cost	cures more	increase	1.768	2.062
less	improvement	increases the cost	cures more	increase	1.748	2.079
less	improvement	reduces the cost	cures an equal number	increase	1.649	2.034
less	improvement	reduces the cost	cures more	does not change	1.719	1.895
less	no change	reduces the cost	cures more	increase	1.611	1.893
more	improvement	does not change the cost	cures more	increase	1.451	1.852
as much	improvement	increases the cost	cures more	increase	1.493	1.777
less	improvement	does not change the cost	cures an equal number	increase	1.332	1.824
as much	improvement	reduces the cost	cures an equal number	increase	1.394	1.732
less	improvement	does not change the cost	cures more	does not change	1.402	1.685
as much	improvement	reduces the cost	cures more	does not change	1.464	1.594
less	no change	does not change the cost	cures more	increase	1.294	1.683
as much	no change	reduces the cost	cures more	increase	1.356	1.591
as much	improvement	does not change the cost	cures an equal number	increase	1.077	1.522
as much	improvement	does not change the cost	cures more	does not change	1.147	1.384
more	improvement	increases the cost	cures more	increase	1.141	1.382
as much	no change	does not change the cost	cures more	increase	1.039	1.381
more	improvement	reduces the cost	cures an equal number	increase	1.042	1.338
less	improvement	increases the cost	cures an equal number	increase	1.022	1.355
more	improvement	reduces the cost	cures more	does not change	1.112	1.199
less	improvement	increases the cost	cures more	does not change	1.093	1.216
more	no change	reduces the cost	cures more	increase	1.004	1.196



New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value uncertain	Added value certain
less	no change	increases the cost	cures more	increase	0.985	1.213
less	improvement	reduces the cost	cures an equal number	does not change	0.994	1.171
less	no change	reduces the cost	cures an equal number	increase	0.886	1.169
less	reduction	reduces the cost	cures more	increase	1.006	1.011
less	no change	reduces the cost	cures more	does not change	0.956	1.030
less	improvement	reduces the cost	cures fewer	increase	0.897	1.002
more	improvement	does not change the cost	cures an equal number	increase	0.725	1.128
as much	improvement	increases the cost	cures an equal number	increase	0.767	1.053
more	improvement	does not change the cost	cures more	does not change	0.795	0.989
as much	improvement	increases the cost	cures more	does not change	0.837	0.914
more	no change	does not change the cost	cures more	increase	0.687	0.986
as much	no change	increases the cost	cures more	increase	0.730	0.911
less	improvement	does not change the cost	cures an equal number	does not change	0.677	0.961
as much	improvement	reduces the cost	cures an equal number	does not change	0.739	0.870
less	no change	does not change the cost	cures an equal number	increase	0.569	0.958
as much	no change	reduces the cost	cures an equal number	increase	0.631	0.867
less	reduction	does not change the cost	cures more	increase	0.690	0.801
as much	reduction	reduces the cost	cures more	increase	0.751	0.709
less	no change	does not change the cost	cures more	does not change	0.639	0.820
as much	no change	reduces the cost	cures more	does not change	0.701	0.728
less	improvement	does not change the cost	cures fewer	increase	0.580	0.792
as much	improvement	reduces the cost	cures fewer	increase	0.642	0.701
as much	improvement	does not change the cost	cures an equal number	does not change	0.422	0.660
more	improvement	increases the cost	cures an equal number	increase	0.415	0.658
more	improvement	increases the cost	cures more	does not change	0.485	0.519
as much	no change	does not change the cost	cures an equal number	increase	0.314	0.657
as much	reduction	does not change the cost	cures more	increase	0.434	0.499
as much	no change	does not change the cost	cures more	does not change	0.384	0.518



New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value uncertain	Added value certain
more	no change	increases the cost	cures more	increase	0.377	0.517
more	improvement	reduces the cost	cures an equal number	does not change	0.387	0.475
less	improvement	increases the cost	cures an equal number	does not change	0.367	0.492
as much	improvement	does not change the cost	cures fewer	increase	0.325	0.491
more	no change	reduces the cost	cures an equal number	increase	0.279	0.472
less	no change	increases the cost	cures an equal number	increase	0.259	0.489
more	reduction	reduces the cost	cures more	increase	0.399	0.315
less	reduction	increases the cost	cures more	increase	0.380	0.332
more	no change	reduces the cost	cures more	does not change	0.349	0.333
less	no change	increases the cost	cures more	does not change	0.329	0.350
more	improvement	reduces the cost	cures fewer	increase	0.290	0.306
less	improvement	increases the cost	cures fewer	increase	0.270	0.323
less	reduction	reduces the cost	cures an equal number	increase	0.281	0.287
less	no change	reduces the cost	cures an equal number	does not change	0.230	0.306
less	reduction	reduces the cost	cures more	does not change	0.351	0.148
less	improvement	reduces the cost	cures fewer	does not change	0.241	0.139
more	improvement	does not change the cost	cures an equal number	does not change	0.070	0.265
as much	improvement	increases the cost	cures an equal number	does not change	0.112	0.190
less	no change	reduces the cost	cures fewer	increase	0.133	0.137
more	no change	does not change the cost	cures an equal number	increase	-0.038	0.262
as much	no change	increases the cost	cures an equal number	increase	0.004	0.187
more	reduction	does not change the cost	cures more	increase	0.082	0.105
more	no change	does not change the cost	cures more	does not change	0.032	0.123
as much	reduction	increases the cost	cures more	increase	0.125	0.030
as much	no change	increases the cost	cures more	does not change	0.074	0.049
more	improvement	does not change the cost	cures fewer	increase	-0.027	0.096
less	reduction	does not change the cost	cures an equal number	increase	-0.036	0.077
as much	improvement	increases the cost	cures fewer	increase	0.015	0.021



New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value uncertain	Added value certain
as much	reduction	reduces the cost	cures an equal number	increase	0.026	-0.015
less	no change	does not change the cost	cures an equal number	does not change	-0.086	0.096
as much	no change	reduces the cost	cures an equal number	does not change	-0.025	0.004
less	reduction	does not change the cost	cures more	does not change	0.034	-0.062
as much	reduction	reduces the cost	cures more	does not change	0.096	-0.154
less	improvement	does not change the cost	cures fewer	does not change	-0.076	-0.071
as much	improvement	reduces the cost	cures fewer	does not change	-0.014	-0.162
less	no change	does not change the cost	cures fewer	increase	-0.183	-0.073
as much	no change	reduces the cost	cures fewer	increase	-0.122	-0.165
more	improvement	increases the cost	cures an equal number	does not change	-0.240	-0.205
as much	reduction	does not change the cost	cures an equal number	increase	-0.291	-0.225
as much	no change	does not change the cost	cures an equal number	does not change	-0.342	-0.206
more	no change	increases the cost	cures an equal number	increase	-0.348	-0.207
as much	reduction	does not change the cost	cures more	does not change	-0.221	-0.364
more	reduction	increases the cost	cures more	increase	-0.227	-0.365
more	no change	increases the cost	cures more	does not change	-0.278	-0.346
as much	improvement	does not change the cost	cures fewer	does not change	-0.331	-0.372
more	improvement	increases the cost	cures fewer	increase	-0.337	-0.374
more	reduction	reduces the cost	cures an equal number	increase	-0.326	-0.409
less	reduction	increases the cost	cures an equal number	increase	-0.346	-0.392
more	no change	reduces the cost	cures an equal number	does not change	-0.377	-0.391
less	no change	increases the cost	cures an equal number	does not change	-0.396	-0.374
more	reduction	reduces the cost	cures more	does not change	-0.256	-0.548
less	reduction	increases the cost	cures more	does not change	-0.276	-0.531
as much	no change	does not change the cost	cures fewer	increase	-0.439	-0.375
more	improvement	reduces the cost	cures fewer	does not change	-0.366	-0.557
less	improvement	increases the cost	cures fewer	does not change	-0.385	-0.540
less	reduction	reduces the cost	cures an equal number	does not change	-0.375	-0.576



New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value uncertain	Added value certain
more	no change	reduces the cost	cures fewer	increase	-0.474	-0.560
less	no change	increases the cost	cures fewer	increase	-0.493	-0.543
less	reduction	reduces the cost	cures fewer	increase	-0.471	-0.745
less	no change	reduces the cost	cures fewer	does not change	-0.522	-0.726
more	reduction	does not change the cost	cures an equal number	increase	-0.643	-0.619
more	no change	does not change the cost	cures an equal number	does not change	-0.694	-0.601
as much	reduction	increases the cost	cures an equal number	increase	-0.601	-0.694
as much	no change	increases the cost	cures an equal number	does not change	-0.651	-0.676
more	reduction	does not change the cost	cures more	does not change	-0.573	-0.758
as much	reduction	increases the cost	cures more	does not change	-0.531	-0.833
more	improvement	does not change the cost	cures fewer	does not change	-0.683	-0.767
less	reduction	does not change the cost	cures an equal number	does not change	-0.691	-0.786
as much	improvement	increases the cost	cures fewer	does not change	-0.640	-0.842
as much	reduction	reduces the cost	cures an equal number	does not change	-0.630	-0.878
more	no change	does not change the cost	cures fewer	increase	-0.791	-0.770
as much	no change	increases the cost	cures fewer	increase	-0.748	-0.844
less	reduction	does not change the cost	cures fewer	increase	-0.788	-0.955
as much	reduction	reduces the cost	cures fewer	increase	-0.727	-1.047
less	no change	does not change the cost	cures fewer	does not change	-0.839	-0.936
as much	no change	reduces the cost	cures fewer	does not change	-0.777	-1.028
as much	reduction	does not change the cost	cures an equal number	does not change	-0.947	-1.088
more	reduction	increases the cost	cures an equal number	increase	-0.953	-1.089
more	no change	increases the cost	cures an equal number	does not change	-1.003	-1.070
more	reduction	increases the cost	cures more	does not change	-0.883	-1.228
more	improvement	increases the cost	cures fewer	does not change	-0.993	-1.236
more	reduction	reduces the cost	cures an equal number	does not change	-0.982	-1.272
less	reduction	increases the cost	cures an equal number	does not change	-1.001	-1.255
as much	reduction	does not change the cost	cures fewer	increase	-1.044	-1.257

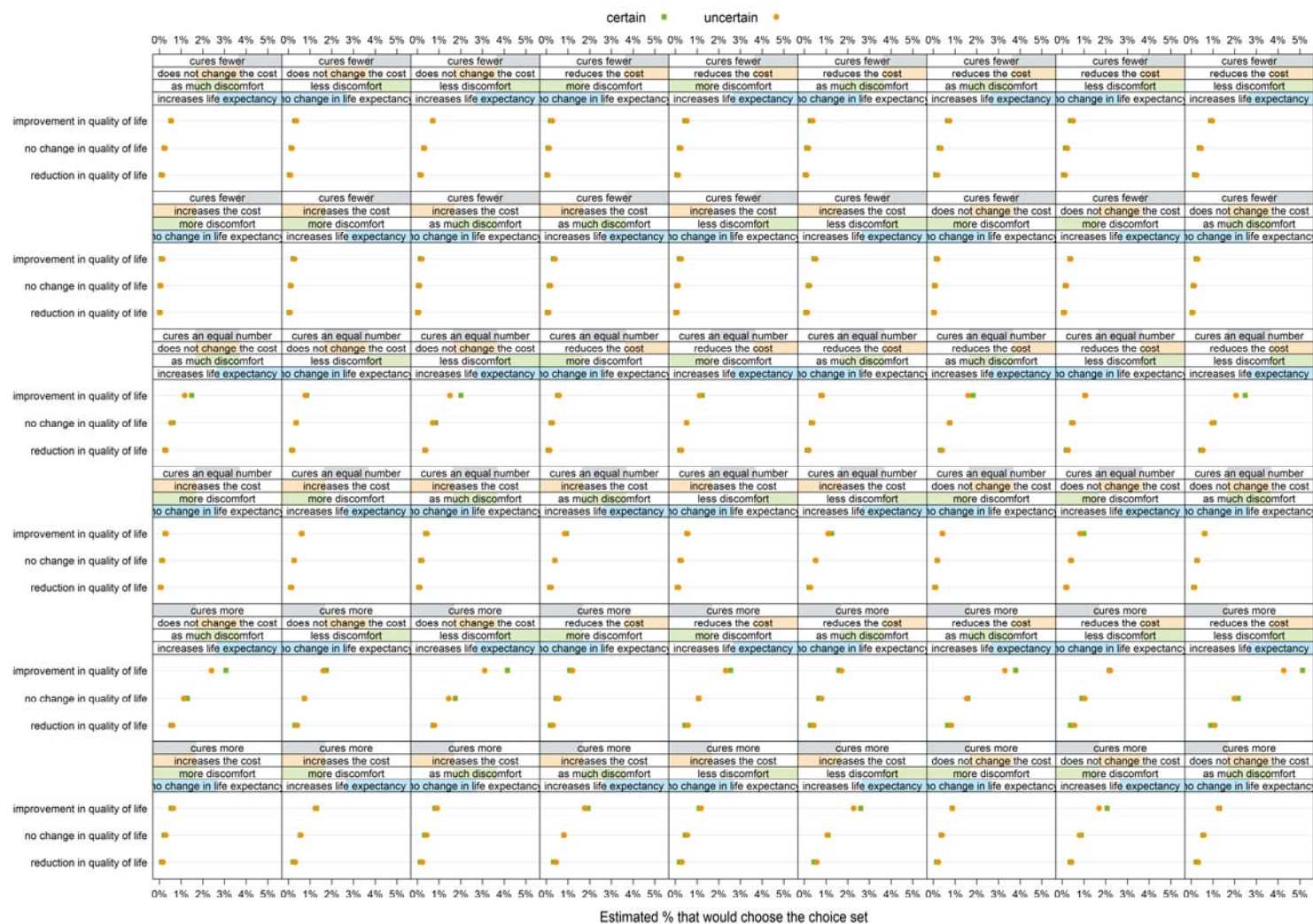


New treatment's discomfort compared to current treatment	Change in quality of life	Impact on societal cost	Change in prevalence	Change in life expectancy	Added value uncertain	Added value certain
as much	no change	does not change the cost	cures fewer	does not change	-1.094	-1.238
more	no change	increases the cost	cures fewer	increase	-1.100	-1.239
more	reduction	reduces the cost	cures fewer	increase	-1.079	-1.441
less	reduction	increases the cost	cures fewer	increase	-1.098	-1.424
more	no change	reduces the cost	cures fewer	does not change	-1.129	-1.423
less	no change	increases the cost	cures fewer	does not change	-1.149	-1.406
less	reduction	reduces the cost	cures fewer	does not change	-1.127	-1.608
more	reduction	does not change the cost	cures an equal number	does not change	-1.299	-1.482
as much	reduction	increases the cost	cures an equal number	does not change	-1.256	-1.557
more	reduction	does not change the cost	cures fewer	increase	-1.396	-1.651
more	no change	does not change the cost	cures fewer	does not change	-1.446	-1.633
as much	reduction	increases the cost	cures fewer	increase	-1.353	-1.726
as much	no change	increases the cost	cures fewer	does not change	-1.404	-1.707
less	reduction	does not change the cost	cures fewer	does not change	-1.444	-1.818
as much	reduction	reduces the cost	cures fewer	does not change	-1.382	-1.909
more	reduction	increases the cost	cures an equal number	does not change	-1.608	-1.952
as much	reduction	does not change the cost	cures fewer	does not change	-1.699	-2.119
more	reduction	increases the cost	cures fewer	increase	-1.705	-2.121
more	no change	increases the cost	cures fewer	does not change	-1.756	-2.102
more	reduction	reduces the cost	cures fewer	does not change	-1.734	-2.304
less	reduction	increases the cost	cures fewer	does not change	-1.754	-2.287
more	reduction	does not change the cost	cures fewer	does not change	-2.051	-2.514
as much	reduction	increases the cost	cures fewer	does not change	-2.009	-2.589
more	reduction	increases the cost	cures fewer	does not change	-2.361	-2.984



Appendix 16.4.5. Probabilities of choosing a scenario per certainty of the choices

Probabilities of choosing a scenario as having a higher added value out of the full set of scenarios per certainty of the choices





APPENDIX 17. RESULTS WEIGHTED MODELS

Appendix 17.1. Therapeutic need domain

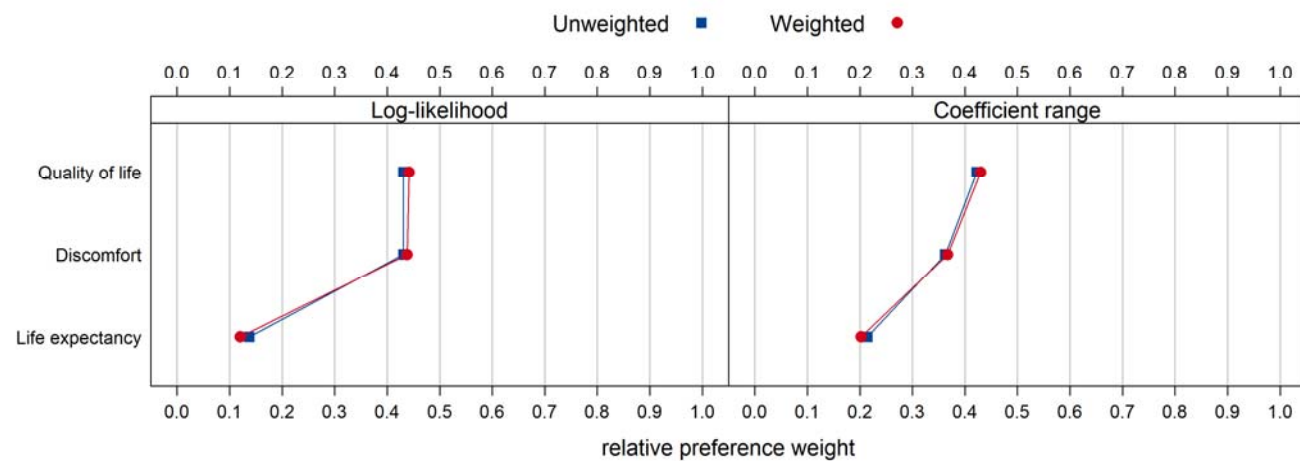
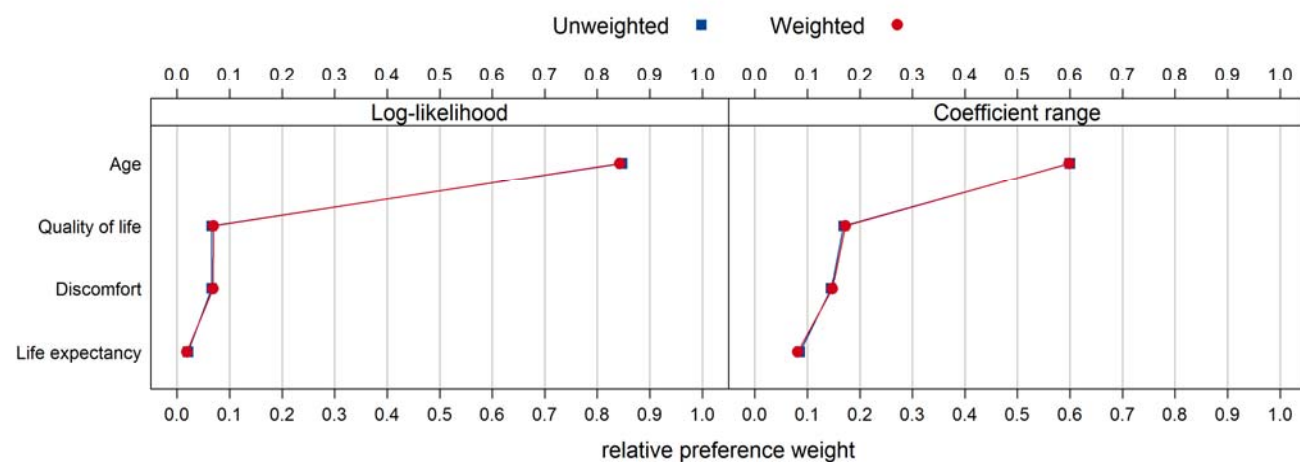
Table 13 – Therapeutic need: model summary for the general population sample

Attribute	Level	Estimated coefficient [°]	Standard Error	t-value	p-value	Significance level
Age	>80y	-1.253	0.028			
	65y - 80y	0.009	0.023	0.390	0.696	
	18y - 64y	0.569	0.029	19.691	0.000	***
	<18y	0.676	0.029	23.459	0.000	***
Quality of life given current treatment	8 out of 10	-0.307	0.025			
	5 out of 10	0.057	0.020	2.895	0.004	**
	2 out of 10	0.250	0.018	13.620	0.000	***
Life expectancy given current treatment	Disease has no impact on life expectancy	-0.173	0.020			
	Patients die 5 years earlier than people without the disease	0.090	0.022	4.033	0.000	***
	Patients die almost immediately	0.083	0.020	4.145	0.000	***
Discomfort of current treatment	little	-0.238	0.019			
	much	0.238	0.014	17.373	0.000	***

[°] Results of a multinomial logistic regression model

** significant on the 1% significance level

*** significant on the 0.1% significance level





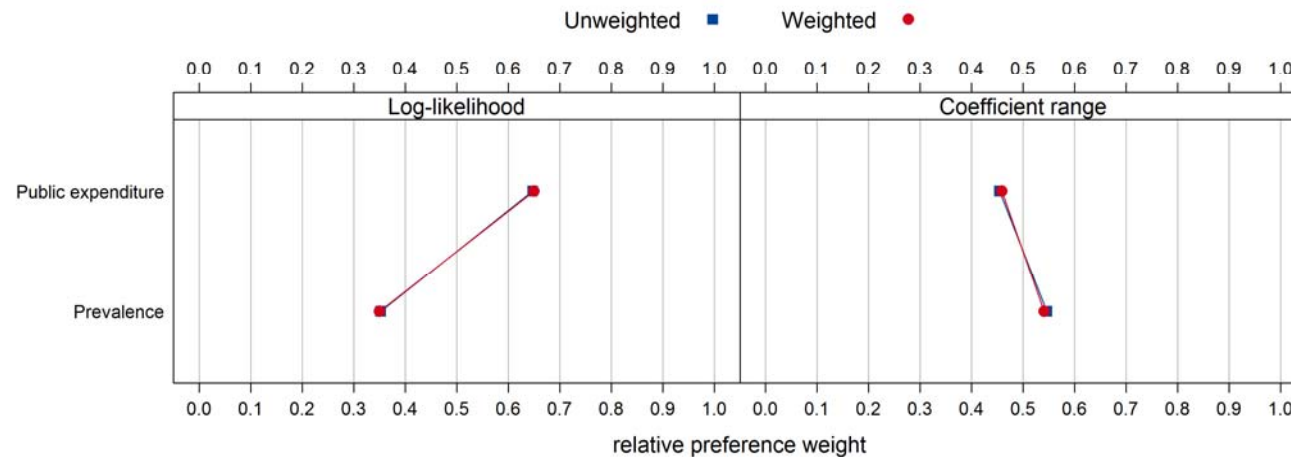
Appendix 17.2. Societal need domain

Table 14 – Societal need: model summary for the general population sample

Attribute	Level	Estimated coefficient ^o	Standard Error	t-value	P-value	Significance level
Prevalence	rare	-0.682	0.043			
	not so frequent	-0.209	0.038	-5.488	0.000	***
	rather frequent	0.350	0.037	9.340	0.000	***
	very frequent	0.542	0.039	13.888	0.000	***
Public expenditure	little public expenditures per patient	-0.519	0.024			
	much public expenditures per patient	0.519	0.019	27.428	0.000	***

^o Results of a multinomial logistic regression model

*** significant on the 0.1% significance level



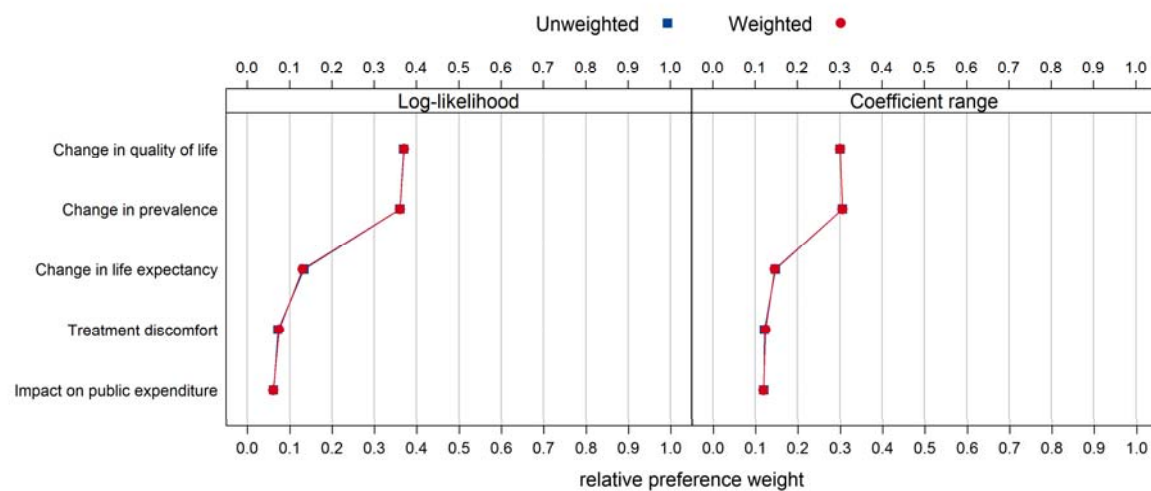


Appendix 17.3. Added value domain

Table 15 – Added value: model summary for the general population sample

Attribute	Level	Estimated coefficient [°]	Standard Error	t-value	P-value	Significance level
Impact on public expenditure	increases public expenditure	-0.367	0.020			
	does not change public expenditure	0.069	0.018	3.825	0.000	***
	reduces public expenditure	0.298	0.022	13.761	0.000	***
Change in quality of life	reduction	-0.827	0.024			
	no change	-0.012	0.018	-0.698	0.485	
	improvement	0.839	0.021	39.375	0.000	***
Change in life expectancy	does not change	-0.405	0.013			
	increase	0.405	0.013	30.957	0.000	***
Treatment discomfort	more	-0.359	0.018			
	as much	0.026	0.019	1.397	0.162	
	less	0.332	0.018	18.726	0.000	***
Change in prevalence	cures fewer	-0.890	0.026			
	cures an equal number	0.087	0.018	4.907	0.000	***
	cures more	0.803	0.021	38.331	0.000	***

[°] Results of a multinomial logistic regression model ** significant on the 1% significance level *** significant on the 0.1% significance level





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