Article title: Designing Value-Based Dental Benefit Packages: A Multicriteria Decision Analysis in the Netherlands

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Supplementary file 4. Process Evaluation

The average responses to each question of the process evaluation can be found in Table S6. Further details of the themes from the thematic analysis for each topic are described below.

Table S6: Summary statistics of process evaluation

Topic	Statement	Mean	Standard deviation
Stakeholder involvement	It is clear to me how the stakeholders were selected to participate in the dental insurance design.	3.73	1.10
	All important stakeholders were involved in the dental insurance design.	3.82	0.75
	My involvement in the dental insurance design was valuable.	3.82	0.40
	Involved stakeholders had equal opportunities to contribute during meetings.	4.18	0.60
	Deliberation amongst stakeholders contributed to the development of my own opinions.	3.82	1.08
	Views of involved stakeholders have been adequately taken into account in the dental insurance design.	4.18	0.60
Decision criteria	The criterion of "disease burden" was clear to me.	4.18	0.40
	The criterion of "clinical efficacy" was clear to me.	4.18	0.75
	The criterion of "impact on quality of life" was clear to me.	4.00	0.89
	The criterion of "patient safety" was clear to me.	3.82	0.87
	The criterion of "insurability" was clear to me.	3.64	0.50
	The decision criteria are an adequate reflection of the most important values for the dental insurance design.	4.00	0.77
	The trade-offs between different criteria were clear to me.	3.82	0.98
	Each criterion was adequately taken into account in the dental insurance design.	3.82	0.98
Evidence	The evidence presented on the decision criteria was clear to me.	3.64	0.81
	There was sufficient time to understand the evidence on each intervention.	3.27	0.65
	The evidence presented was relevant to design the dental insurance.	3.91	0.70
	It is clear to me how the evidence was developed.	3.45	0.69
	I am generally satisfied with the methods used for the evidence.	3.64	0.67
	The evidence presented was sufficiently sensitive to the context of the Netherlands.	3.55	0.69
Appraisal	There was sufficient time to deliberate on each intervention.	3.55	1.04
	Each intervention was evaluated according to the same standards.	3.36	0.67

	The process for taking decisions about the inclusion of interventions into the dental insurance packages was clear to me.	3.45	1.04
	I am satisfied with how decisions were taken about the inclusion of interventions in the dental insurance packages.	3.27	0.90
	The interventions under discussion were relevant to the context of the Netherlands.	3.91	0.70
Overall process	The process and methods used improve decision-making compared to previous approaches for dental insurance design.	3.36	1.03
	The final content of the dental insurance packages is acceptable for the context of the Netherlands.	3.45	0.82
	I am satisfied with the outcomes of the dental insurance design process.	3.73	0.90
	The outcomes of the dental insurance design process are relevant to my setting or work area.	3.82	0.60

Note: Questions were adapted from Baltussen et al. (Baltussen R, Jansen M, Akhtar SS, et al. The use of evidence-informed deliberative processes for designing the essential package of health services in Pakistan. Int J Health Policy Manag. 2024;13:8004. doi:10.34172/ijhpm.2023.8004).

Stakeholder involvement

Participants highlighted potential for closer guidance by the moderator during the sessions. The framework implemented in this study departs from established ways of allocating resources. Physical instead of online sessions were suggested. Moreover, participants noted structural changes to the sessions to facilitate more engagement. Some participants could not attend all sessions completely. This challenge of availability could be addressed by inquiring stakeholder views through multiple sessions at each stage of the process with a smaller number of participants. Additionally, participants highlighted differences in views and experiences across individuals within stakeholder groups, and potential weighting of arguments based on expertise.

Decision criteria

Additional considerations of stakeholders in the survey were the feasibility within processes of dental insurance, and future costs and utilization resulting from changes in coverage. Moreover, the participants suggested that the use of these decision criteria could be improved through clear presentation of budget impact, changes from the status quo, and personal contribution to health care costs. Diversity of outcomes and views of patients could be expressed through the development of multiple packages varying in outcomes of decision criteria. Again, existing frameworks and institutions were highlighted, and more explanation of the process could help participants. Assumptions such as linearity in value functions may require further investigation.

Evidence

Participants suggested presenting more details on the breadth and depth of evidence for the criteria. Again, existing frameworks and policy context were considered for the translation of evidence into policy action. Comparison between the status quo and recommended change was mentioned. Assumptions of the value function were also considered for the improvement of evidence, along with potential use of artificial intelligence given recent developments in this field.

Appraisal

Context was referred to several times in the suggestions for the appraisal. Participants highlighted that there is a need for cultural change among stakeholders to inform decision-making by structural evidence synthesis. Participants considered clear goals of the designed packages and focus on local context key elements for appraisal. The recommendations that follow should be translated into concrete policy decision-making. Participants mention that these recommendations could also be improved by the design of multiple packages highlighting diversity in patient needs and outcomes. Moreover, a greater number of experts, arguments weighted by expertise, and more data where needed and available, could be considered for final recommendations.

Overall process

Participants suggested extending the framework to facilitate more time for each stage and giving a more prominent role to the context. Considerations for the process were budget impact of recommendations, cultural change needed among stakeholders, and highlighting the advantages and disadvantages of recommended policies.