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Preference-based quality of life increment in children with bilateral cochlear implantation. A general population survey.

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Introduction

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- Bilateral cochlear implantation (BCI):
 - > No study has been able to prove beyond all doubt that it is cost-effective
 - \succ Not universally covered even in developed countries.
 - \succ The parameter that most affects the cost-effectiveness is the **increment in quality of life (QoL)** with respect to unilateral implantation (UCI).

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2 Methods

- Online self-administered survey
- Respondents: students of our university (UNED)
- Two vignettes describing children with BCI vs. UCI
- Four elicitation methods
 - Visual analog scale (VAS)
 - Time trade-off giving up time (TTOt)
- Objective: to measure the QoL increment of pediatric BCI, in order to use this result in cost-effectiveness analyses.

Responses obtained for each elicitation technique



- Time trade-off giving up QoL (TTOq)
- Time trade-off via equivalence (TTOe)
- Feedback: VAS \leftrightarrow TTO(e)
 - > and warnings for absurd responses.

4 Results

Ir	icentive	Students invited	Respon- dents	Response rate	% over total responses	
No ir	No incentive		126	14,55%	21,61%	
€100) (raffle)	867	149	17,19%	25,56%	
€300) (raffle)	1732	308	17,78%	52,83%	
Total		3465	583	16,83%	100,00%	
Question	Process	Agreed	Absurd	% absurd	∆QoL	

Elicitation technique	Question proposed	Process completed	Agreed with result	Absurd answers	% absurd answers	∆QoL (initial)	∆QoL (confirmed)
VAS	144	138	77	23	16,67%	0.28	0.25
TTOt	121	105	90	65	61,90%	0.15	0.10
TTOe	112	105	87	33	31,43%	0.13	0.15
TTOq	115	107	98	55	51,40%	0.26	0.23
Total	492	455	352	176	38,68%		

5 Results



Conclusion

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- Different techniques return different estimates for the QoL increment
 - > The result of VAS is within the limits of previous studies
 - TTOe seems to the most neutral method
 - > TTOt seems to be biased towards low QoL estimates.
 - > TTOq seems to bebiased in the opposite direction.
- In general the results we have obtained are higher than in previous TTO studies
 - \succ due to exclusion of non-traders and the feedback process.



Acknowledgments

• Grant PI13/02446, Health Institute Carlos III, cofinanced by the European Regional Development Fund (ERDF).

• Research grant from MED-EL, GmbH.



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