results. A clustered multivariate regression analysis explored theoretical validity of results. RESULTS: On average, responders are willing to pay €12,920 (VAS scores) and €24,549 for a QALY (EuroQol tariffs). Subgroup analysis showed greater variation in WTP/QALY between income groups—from €3,000 in the lowest to €87,000 for a QALY in the highest group. Respondents that indicated a high level of certainty exhibited marginally higher WTP. Regression analyses showed a consistent relation- ship between income, other demographics and WTP/QALY. CONCLUSIONS: Indi- vidual WTP/QALY should be seen as a step to a sound empirical value of the social country’s care. This study was conducted in the Netherlands. Estimates elicited in this study are similar to those found in other empirical studies and are systematically lower than often cited thresholds, largely unsupported by empirical evidence (i.e. €50,000). However, there is a wide gap between the social and private value of a QALY. Future research should move towards estimating the social value of the cost-effectiveness threshold and align with the perspective of decision-makers thus creating a truly valu- able decision-making tool.

EARLY ASSESSMENT OF HIGHLY INNOVATIVE MEDICAL TECHNOLOGY: CLINICAL AND ECONOMICAL GAINS OF POINT-OF-CARE APPLICATIONS FOR MEASURING POTASSIUM CONCENTRATIONS

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OBJECTIVES: Innovative point-of-care diagnostics are likely to be having a strong impact on health care. The aim of this study is to conduct an early assessment of point-of-care checks. These checks can detect many particles and, consequently, many point-of-care-markets. Innovations can be developed. This study investigates the impact of the potential point-of-care applications in health care and to quantify the impact in terms of their likely cost-effectiveness.

METHODS: The Analytic Hierarchy Process (AHP); a technique for multi-criteria analysis, and Markov modeling were applied in this early assessment. The AHP was used to prioritize six potentially attractive product-market combinations (PCM’s). For estimating the future cost-effectiveness of the most attrac- tive PCM’s, Markov health state transition models were developed. Two Markov models were constructed; models for a potassium chip for both stage 5 CKD patients as well as heart failure (HF) patients which suffer from edemas. RESULTS: AHP identified clinical gain as being the most important criterion to assess the attractiveness of a PCM, followed by market potential, attitude of professionals, R&D barriers and implementation barriers. Regarding these criteria, a potassium-chip for Chronic Kidney Disease (CKD) patients was calculated to be the most attractive alternative. Markov model cohort simulation yielded incremental cost-effectiv- e ness ratios (ICERs). The point-of-care chip appeared not to be cost-effective for preventing hyperkalemia in stage 5 CKD patients. For HF patients suffering from edemas the chip was estimated to be cost-effective and could provide a valuable asset to current treatment. CONCLUSIONS: The AHP is valuable in supporting the iden- tification of potentially attractive product-market combinations. For the best combina- tions, Markov modeling can subsequently provide a more in-depth analysis of the future cost-effectiveness.

A NEW TEST OF THE CARERQOL INSTRUMENT: MEASURING ‘CARE-GIVING’ ASSESSMENT

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OBJECTIVES: At present the costs and effects of providing informal care are often ignored in economic evaluations. This is problematic since considering informal care a ‘zero cost’ substitute for formal care may result in non-optimal decisions from a societal perspective, at the burden of carers. This study further investigates the validity of the CarerQol instrument, which values the full impact of informal care on caregivers. The CarerQol consists of seven burden dimensions (CarerQol-TD) and a visual analogue scale measuring happiness (CarerQol-VAS). METHODS: A questionnaire was distributed by mail among a sample of caregivers (N = 1100) via regional support centres for informal caregivers throughout the Netherlands. Construct validity (n = 249) was tested with Spearman’s correlation coefficients of the CarerQol-VAS and the CarerQol-TD and two measures of subjective burden and the utility of care giving. Clinical validity was evaluated by the multivariate corre- lation between the CarerQol-VAS and characteristics of the caregiver, care recipient and care situation. Differences in CarerQol-VAS scores among caregivers are explained with subgroup multiple linear regression analyses and principal component analyses.

RESULTS: CarerQol-VAS scores were negatively associated with burden and posi- tively with utility of caring. The seven dimensions of the CarerQol-TD were also associated with burden and utility of caring in the expected direction, for six dimen- sions the associations were statistically significantly. Significant associations with CarerQol-VAS scores were found for a range of characteristics, including duration and intensity of care, relationship between carer and patient, carer education level and patient age. CONCLUSIONS: Our results further support the construct and clinical validity of the CarerQol and thus underline the relevance of this instrument for including informal care effects in economic evaluations. The next, necessary step in the development of the CarerQol concerns the establishment of tariffs for the caring situations defined by the seven dimensions. This is the topic of coming research.