MICE (MODULE FOR STANDARDISED INDIRECT COST ESTIMATION) INCREASES THE TRANSFERABILITY OF STUDY RESULTS
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OBJECTIVE: To offer scientists and policy makers a tool for standardized indirect/productivity cost estimations that (a) can be adapted to different contexts and (b) allow for the comparison and transfer of study results within and between countries.

METHODS: MICE consists of an Excel spreadsheet, a handbook, and documentation specifying the data sources. It computes the age- and sex-specific unit costs per day or year of lost work in the paid and unpaid work sector, for the general or the employed population. Due to its flexibility it can be adapted to national guidelines for economic evaluation as well as to different perspectives (e.g. societal or employer). The human capital approach or the friction cost method can be chosen. For the valuation of lost productivity, different approaches can be selected, e.g., labor costs for the paid work sector or substitution costs for the unpaid work sector. The reference year is 1999 and can be simply updated. MICE is available and has been successfully applied to the Netherlands and Germany with other countries to follow.

RESULTS: For a Dutch/German inhabitant aged 33, the unit costs for the loss of one actual working day of paid work are €83 / €104 for females and €179 / €180 for males (basis: labor costs, elasticity of annual labor time versus labor productivity = 1). The respective unit costs for a Dutch/German employee are €126 / €149 for females and €193 / €202 for males.

CONCLUSIONS: MICE enables a standardized and precise estimation of indirect costs in different countries. Its feasibility, transparency, and flexibility have been shown in several studies. MICE provides a useful tool for multinational studies. It not only improves the comparability of national and international study results, but also increases their transferability.

QUALITY OF LIFE: FUNCTIONING OR NEED FULFILMENT?
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OBJECTIVES: Health services are increasingly concerned with chronic, disabling conditions associated with an aging population. Furthermore, patients’ perceptions of the impact of treatment are gaining greater consideration. Where interventions are designed to make life more comfortable rather than to cure, interest focuses increasingly on quality of life (QoL) outcomes. While there is no generally accepted definition of QoL, several approaches to its assessment can be identified. This paper presents the most commonly applied approaches to QoL measurement and makes recommendations for defining the construct.

METHODS: Literature review.

RESULTS: Three main approaches to QoL assessment were identified: functional; needs based; phenomenological/hermeneutic. The latter two place particular emphasis on the patient’s perspective. As the phenomenological/hermeneutic approach is rarely applied, it is not considered here. The functional approach focuses on symptoms...
and disability, issues often already assessed in trials and which may not be of direct concern to the respondent. Such assessments fail to account for interactions between health status and other influences on QoL, such as economic, social and environmental factors. The needs-based model argues that QoL is the extent to which individuals are able to meet their needs. Specific diseases influence different needs and interventions are effective where they allow more needs to be met. Relevant needs are identified from qualitative interviews with patients. The approach has been applied in the development of QoL instruments specific to depression, adult growth hormone deficiency, genital herpes, migraine, incontinence, urogenital atrophy, male erectile difficulties, rheumatoid arthritis, care givers of Alzheimer patients, ankylosing spondylitis, atopic dermatitis, psoriasis, lupus and psoriatic arthritis. All language versions of these instruments have excellent psychometric properties, are sensitive to clinical improvements and several are now the QoL instruments of choice for clinical trials.

CONCLUSIONS: The needs-based model provides a true “QoL” measurement that complements clinical assessments of health status.

THE RELATION OF DISTRIBUTION- AND ANCHOR-BASED APPROACHES ON INTERPRETATION OF CHANGES IN HEALTH-RELATED QUALITY OF LIFE

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BACKGROUND: Approaches to interpretation of quality of life changes in clinical trials have fallen into two camps: those that rely on the distribution of changes and the Effect Size (ES), and those that use some external anchor, such as patient judgements of change, which is then used to compute a Minimally Important Difference (MID), the proportion benefiting from treatment, p(B), and the number needed to treat (NNT).

OBJECTIVE: To examine the relationship between the ES and p(B), and the impact of the MID on this relationship.

METHODS: We used a simulation based on a normal distribution to compute the proportion of patients benefiting in both parallel group and crossover designs, for various values of the ES and the MID. We assessed the agreement of the simulation with empirical data from four studies of asthma and respiratory disease. We also examined the effect of skewness in the distribution of change scores on the relationship between ES and p(B).

RESULTS: The simulation showed a near-linear relationship between ES and p(B), which was nearly independent of the value of the MID. Agreement of the simulation with the empirical data was excellent. While the curves differed for crossover and parallel group designs, the general form was similar. Introducing moderate skew into the distributions had minimal impact on the relationship.

CONCLUSIONS: The proportion of patients who will benefit from treatment can be directly estimated from the effect size, and is nearly independent of the choice of MID. Effect size and anchor-based approaches provide equivalent information in this situation.

ASSESSMENT OF RESPONDENT ACCEPTABILITY OF UTILITY MEASURES: DISCRIMINATORY POWER OF GRAPHIC POSITIONING SCALE VERSUS TRADITIONAL SCALING MEASURES

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OBJECTIVE: To compare the discriminatory power of two different measures—graphic positioning scale (GPS) and traditional scale (TS)—in assessing respondent acceptability of three utility measures: standard gamble (SG), visual analogue scale (VAS) and willingness to pay (WTP).

METHODS: Two face-to-face interviews were conducted at least one week apart in a convenience sample of women aged 22 to 50 years with no history of breast cancer or cancer requiring chemotherapy. Study participation required completion of two surveys: one evaluating utility for an acute condition (post chemotherapy nausea and vomiting: PCNV), and the other, for a chronic condition (breast cancer). Data were collected between March 2000 and June 2000 at a University in the Midwest US. Respondents were randomized to either GPS or TA. A four-way, mixed-design analysis of variance (ANOVA)—2x(2x3x4)—was conducted, i.e., assessment (GPS/TS), condition (acute and chronic), utility (VAS, SG, WTP) and acceptability (difficulty, clarity, reasonableness and comfort). Each of the four levels of acceptability was measured on a nine-point Likert scale.

RESULTS: Analysis of 119 useable respondent surveys showed that condition, utility, and acceptability were significant main effects. Furthermore, ANOVA results suggested three significant interactions: condition and assessment, condition and acceptability, utility and acceptability.

CONCLUSION: Results of this study support Narayana’s (1977) findings in the marketing literature and indicate that GPS has higher discriminatory power than TS in assessing respondent acceptability of utility measures. These results can be explained by direct versus indirect comparisons made with GPS and TS methods respectively.

FACTORS INFLUENCING COMPLETION OF THE EUROQOL EQ-5D GENERIC QOL QUESTIONNAIRE

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