applicants clearly defined study designs and data collection methods for outcomes research proposals addressing 16/22 research questions posed in T = 0reports. ZIN provided discussion points and recommendations regarding research proposals for 18/22 research questions. Applicants implemented recommendations fully in 8/22 cases and partially in 12/22. Sufficient data was available at T = 4 to answer 15/22 research questions posed at T = 0. However, discussion points remained regarding implemented outcomes research for all eleven candidates at T = 4. ZIN advised to continue reimbursement for nine candidates and to stop reimbursement for two. For six of the nine candidates, reimbursement was continued on the basis of conditions relating to additional evidence generation beyond T = 4.

# **CONCLUSIONS:**

Theoretically, CF provides a valuable option for enabling quick but conditional access to medicines in the Netherlands. However, procedural, methodological and decision-making considerations related to scheme design and implementation may affect its value in decision-making practice.

OP94 Is The National Institute for Health And Care Excellence In The United Kingdom More Innovation-Friendly Than The German Institute For Quality And Efficiency in Health Care In Germany?

# **AUTHORS:**

Ramon Schaefer, Michael Schlander (m.schlander@dkfz.de)

# **INTRODUCTION:**

Whereas Health Technology Assessments (HTAs) by the National Institute for Health and Care Excellence (NICE) rely heavily on cost utility analysis, HTAs by the German

Institute for Quality and Efficiency in Health Care (IQWiG) and the Federal Joint Committee (GBA) focus on an assessment of comparative effectiveness, rejecting a cost per quality-adjusted life year benchmark. The present study aimed to explore the differential impact of methodological choices by NICE and IQWiG/GBA on HTA outcomes.

# **METHODS:**

We extracted data from all GBA decisions between January 2011 (when early benefit assessments were implemented) and April 2015 (cut-off date for the present study), as well as all single technology appraisals (STAs) by NICE published during the same period. We compared early benefit assessment results by IQWiG/GBA and by NICE overall, and by additional criteria including therapeutic area, clinical and incremental cost effectiveness, and patient-relevant endpoints.

## **RESULTS:**

During the study period, NICE issued guidance for 88 technologies (with 125 subgroups). GBA completed 105 appraisals (with 226 subgroups). We identified thirty-seven matched condition-intervention pairs; of these, twenty-four were evaluated differently by NICE and GBA. NICE recommended twenty-nine of thirty-seven interventions (78 percent), whereas GBA confirmed additional benefit for 21/37 only (57 percent; p< .05, two-tailed chi-square test). By therapeutic area, NICE was more likely to evaluate interventions for metabolic and cardiovascular disorders favorably, whereas IQWiG/GBA appraisals were more favorable for treatments of hematological and oncological diseases. Results including all HTAs were consistent with those for matched pairs.

# **CONCLUSIONS:**

Our results suggest that, overall, NICE tends to evaluate new interventions more favorably than IQWiG/GBA. However, our analysis revealed conspicuous differences by therapeutic area. The results are consistent with the hypothesis that different methodological choices may lead to systematic differences in decision making. It

seems plausible that the observed differences reflect, at least in part, differences in underlying value judgments.

# OP95 An Update On The Economic Value Of A Statistical Life Year In Europe

## **AUTHORS:**

Michael Schlander (m.schlander@dkfz.de), Ramon Schaefer, Oliver Schwarz

# **INTRODUCTION:**

Evaluation of "value for money" is an important component of Health Technology Assessments (HTAs). It is often conceptualized as "cost effectiveness" or cost per (quality-adjusted) life year gained. Whether used in isolation or alongside further drivers of social value (such as priority for younger or more severely impaired patient groups, or for access to effective treatment, even if costly), for example within a multi-criteria decision analysis framework, any reference "value of a statistical life year" (VSLY) should be supported by empirical data capturing the preferences of the population(s) in question. Here we report results based on a systematic review of relevant European economic studies, which were published during the last two decades, that is, from 1995 to 2015.

## **METHODS:**

Our literature search (using the EconBiz and EconLit databases, supplemented by an analysis of relevant reviews) identified fourty-one European studies providing original data, yielding a total of fourty-eight average estimates for the value of a statistical life (VSL, or fatality prevented). We classified studies by methodology, for example, revealed preference (RP) or stated preference (contingent valuation, CV; discrete choice experiment, DCE) approach. We transformed VSL estimates into VSLY expressed in year 2014 Euros, using the life expectancy of the populations studied, a real discount rate of 3 percent, the national Consumer Price Index (CPI) for inflating, and purchasing power parities

for currency conversion. We calculated confidence intervals by means of nonparametric bootstrapping.

## **RESULTS:**

The median VSLY was EUR158,000 (for RP studies, EUR218,000; DCE, EUR188,000; CV,EUR143,000); we did not identify studies using the human capital approach. Our VSLY estimates showed large heterogeneity, both by methodology and regional origin; thus the differences that we observed did not reach statistical significance.

# **CONCLUSIONS:**

Our results suggest that the empirical willingness-to-pay for a statistical life year might be substantially higher than benchmarks currently used by the international HTA community.

# OP97 Program Budgeting Marginal Analysis For The Real World

# **AUTHORS:**

Philippa Anderson (p.anderson@swansea.ac.uk)

# **INTRODUCTION:**

Program budgeting marginal analysis (PBMA) accommodates economic analysis, multi-stakeholder inputs, values, needs and perspectives within one framework in order to determine optimal use of available resources to deliver the highest 'health value'. Two pilot PBMA projects in two different services were conceived and completed in a Welsh Health Board (HB) as 'proof of concept' methodology for robust prioritization decisons and for improving quality of patient care, outcomes and experience. The pilots were essential to enable development of a 'bespoke' PBMA process for the HB to implement.

# **METHODS:**

The PBMA methods were based on methods and criteria for successful PBMAs reported in the literature. Project