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children (42%), across all health states. Parents also valued HS significantly higher when they related to children compared to adults, whereas respondents without children did not value the child or adult health states any differently. When valuing child HS, 79% of respondents were making a judgement about what would be best for the child; 36% were thinking about what the child would prefer, and 31% were thinking what they would prefer as a child. *Conclusion:* In this study, some evidence was found that severe HS are valued higher for children than for adults, and also that parents rank child HS higher using the VAS.

#### **PNS244**

# PUBLIC PREFERENCES ON THE DISINVESTMENT OF HEALTHCARE INTERVENTIONS AND SERVICES: AN APPLICATION OF THE PARTICIPATORY VALUE EVALUATION APPROACH IN A HEALTH ECONOMICS CONTEXT



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Objectives: Active disinvestment of healthcare interventions (i.e. stopping reimbursement by means of a policy decision) may be inevitable to curb the growth in healthcare expenditure. This study aims to quantify the criteria the general public takes into account when choosing between candidate healthcare interventions for active disinvestment. Furthermore, the usefulness and feasibility of the participatory value evaluation (PVE) approach, a novel preference elicitation approach, was assessed. Methods: Data were collected in April and May 2020 through a web-based environment, in which the participants (N=1335) were presented with a list of eight unlabeled healthcare interventions, described with attributes and levels. From this list, participants were asked to select healthcare interventions for disinvestment in order to save at least a €100 million. Attributes were: quality of life, life expectancy, availability of alternative treatment, and age. After the PVE task, participants were asked to reflect on their choices and provide feedback on the PVE task. PVE data was analyzed using the portfolio and the MDCEV model. Results: In general, participants understood and enjoyed conducting the PVE task. However, there were some difficulties in including individuals with a low education level. Respondents preferred disinvesting treatments where a (less-effective) alternative was available, that resulted in a smaller gain in life expectancy and quality of life, and which were targeted at older patient groups. Respondents gained the same amount of utility from availability of an alternative treatment as from a gain in life expectancy of 3.6 years. Conclusions: PVE is a novel method within the portfolio of preference elicitation methods, which combines the paradigm of consumer sovereignty with citizen sovereignty to determine the social welfare effect of public policies. This study provides researchers insight in the potential merit of this novel method in healthcare. Furthermore, it provides insight in relevant considerations in the disinvestment

### PNS245

### DO PATIENT PREFERENCES CHANGE IN A PANDEMIC? EXPLORING ITALIAN PATIENT REPORTED EXPERIENCE DATA DURING THE COVID-19 CRISIS



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Objectives: Patient experience is an important metric of hospital performance, both in its own right and due to its association with good processes and a range of positive outcomes. Little is known about the impact of crisis situations on patient experience, such as in the COVID-19 pandemic, where extraordinary measures were necessary to maintain healthcare provision. Methods: We performed multilevel and multivariate regression to evaluate the differences in hospitalisation experience before and during the COVID-19 outbreak in Tuscany and Veneto, regions differently affected by the pandemic. Experience was measured by continuously collected online Patient-Reported Experience Measures (PREMs), with 8,712 questionnaires collected from January-April 2020. Results: Almost all PREM scores increased in the COVID-19 period compared to the two months preceding. Multilevel analysis showed very low, nonsignificant variation in overall satisfaction and Willingness-to-Recommend (WOM) between hospitals in the same region, controlling for health status, sex, age, and first incidence of COVID-19 in the region. Multivariate regression models, including demographic factors only, found increased WOM in the worse affected region. By including relevant PREM items, we found the items most predictive of WOM changed during pandemic situations, with a greater effect and significance for items associated with emotional support and communication (e.g. having fears and anxieties addressed by clinicians [0.25, p=0.07; 0.46 p=0.03]) alongside reduced effect sizes and higher p-values for items most affected by pandemic control processes (e.g. ward silence [0.47, p=0.04; 0.14, p=0.45], communication with relatives [0.3, p=0.02; 0.005, p=0.98). Conclusions: Hospitals in Tuscany and Veneto were able to provide a positive patient experience in the COVID-19 pandemic, despite operating challenges. Patient expectations of their hospitalisation may have changed through awareness of the wider health crisis. The different factors most predictive of WOM during the pandemic may be explained by patient recognition and understanding of the great efforts and professionalism of healthcare professionals.

#### **PNS246**

### CHRONIC DISEASE AND HEALTH-RELATED QUALITY OF LIFE AS MEASURED ON THE EQ-5D-5L: A NEW ZEALAND POPULATION STUDY



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Objectives: Chronic health conditions are associated with high rates of morbidity and mortality, productivity losses and ever-increasing health care costs. Using the NZ EQ-5D-5L value set created in 2018, the aim of this study was to explore the healthrelated quality of life (HRQoL) of people with chronic conditions. *Methods:* Using individual data (n=2468) from the NZ EQ-5D-5L valuation study, participants were categorised by chronic disease status, number of chronic conditions and chronic disease group. Using each participant's self-reported EQ-5D-5L health status and individual preference weights, utility scores were calculated. A multivariable Tobit regression model was used to explore the association between utility and chronic disease, and the mean preference weights for the EQ-5D dimensions were compared across groups. Results: Fifty five percent of the sample (n=1349) had at least one chronic condition; 55% had two or more. The most common conditions were depression (15.4%), followed by anxiety (14.0%) and arthritis (13.9%). When grouped by condition, musculoskeletal conditions (41%) were the most common, followed by mental illness/distress (37%). People with at least one chronic condition were less likely to report 'no problems' on Mobility, Self-care, Usual activity and Pain/ discomfort. Mean EQ-VAS and utility scores were lower for people with a chronic condition and decreased as the number of chronic conditions increased. People with mental illness/distress, bowel/digestive illness or musculoskeletal conditions had the lowest mean utility scores. The highest ranked dimension for the majority of groups was Anxiety/depression with Usual activities being the lowest ranked dimension for all groups except for the cancer group. Conclusions: Exploring the HRQoL preferences of individuals using their personal ED-5D value sets has not been done before. Given the growing prevalence of chronic health conditions worldwide, and the impact these conditions have on HRQoL, the results of this study are likely to be of widespread interest.

#### **PNS248**

## A HIERARCHICAL BAYES APPROACH IN EXPLORING INDIVIDUAL HETEROGENEITY: AN APPLICATION ON HEALTH STATE VALUATION USING A DISCRETE CHOICE EXPERIMENT



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Objectives: Hierarchical Bayes (HB) is widely used in market research to estimate choice models and generate respondents' utilities. HB is known for the advantage of including individual heterogeneity when evaluating preferences. Herein we demonstrate the usability, advantage and performance of HB in estimating health preference utilities for the Short Form 6 Dimension version 2 (SF-6Dv2) from an online Discrete Choice Experiments (DCE). Methods: An online panel of general population in China participated in a web survey. Each participant was randomized to complete 8 DCE tasks, in which a pairwise choice was firstly made between two health states based on SF-6Dv2, followed by a comparison between the worse of them and death. This second task further allows the direct anchoring of the latent utilities onto the 0-1 death-full health scale. Socio-demographic characteristics and self-assessed health, quality of life were also collected. Both conditional logit model (CL, which assumes a homogeneous preference) and an HB model that allows for preference heterogeneity were used. Monotonicity, the number of significant levels and other model fit statistics were employed for the comparison. Results: A total of 447 participants (41.6% < 40 years old, 51.5% female, 69% healthy) who passed the quality threshold were utilized in the analysis. The CL model weighted by trading life had the best fit with 3 inconsistencies, 6 insignificances, and a Root Likelihood (RLH) statistics of 0.57. The HB model also had 3 inconsistencies, one insignificant level, and an RLH of 0.73. The 'Pits' state utility was estimated to be 0.44, 0.24 and 0.06 for respondents preferring painful life over peaceful death, neutrals and first group opponents, respectively, based on the HB model. **Conclusions:** The HB demonstrated a better fit and a more realistic model for estimating utilities than CL. It had the power to elicit the differences preferences between subgroups based on different choice behaviours.

### **PNS249**

### SOCIETAL VIEWS ON THE ACTIVE DISINVESTMENT OF PUBLICLY REIMBURSED HEALTHCARE INTERVENTIONS AND SERVICES



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**Objectives:** To obtain insight in the considerations that citizens find relevant with regard to decisions on the disinvestment of healthcare interventions and services, this study aimed to discern the societal views on the active disinvestment of