questionnaire. Whatever the level of pain reduction, the WTP value evaluated was different before and after surgery. The WTP were not correlated to the patients' incomes. CONCLUSIONS: Although short-lived, avoidance of postoperative pain may have considerable value to patients undergoing a heavy surgery. These findings may have important consequences for selection of emerging anaesthetics technologies.

**ASSESSING THE WILLINGNESS-TO-PAY (WTP) FOR INTRADERMAL INFLUENZA VACCINATION IN AUSTRALIA USING DISCRETE CHOICE METHODOLOGY**

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OBJECTIVES: Infection causes significant morbidity and mortality particularly in the elderly where the vast majority of influenza related deaths occur among people aged 65 years of age. Vaccination is the most effective way to prevent influenza and its associated complications. Studies have shown that administering the influenza vaccine via the intradermal (ID) route results in significantly superior immune responses compared with intramuscular (IM) administration. A WTP study using discrete choice conjoint analysis (CA) was designed to determine participant's preference for ID influenza vaccination over the currently available IM injection. METHODS: Australianians individuals aged 65 years and older were presented with a set of 12 pairs of choices describing the two vaccine types; 11 choices to determine WTP for variable levels and one to determine irrational trades. Each pair contained information for IM and ID vaccines regarding efficacy, adverse event profile, administration and cost. Values were randomly allocated based on the ranges for each attribute and each participant received a bespoke set of choices. The questionnaire sought basic demographic information and was completed after a short presentation on influenza. RESULTS: Ninety people aged 65 years were recruited to participate in the study. Participants had an average age of 71.1 years (SD = 6.0) and more than half (n = 50, 56%) stated that they get immunised against influenza annually. Both the adjusted and unadjusted analyses for the CA showed a statistically significant preference for ID injection with participating willing to pay an additional $25.80 for an ID vaccine and $26.80 when adjusted for demographic variables. The efficacy difference ID vs. IM was responsible for driving preference and the ID needle also added to the overall WTP for the vaccine and was also statistically significant. CONCLUSIONS: The participants clearly preferred to be vaccinated against influenza with an ID vaccine over an intramuscular vaccine.

**DISCRETE CHOICE EXPERIMENT TO DETERMINE WILLINGNESS-TO-PAY FOR GASTROESOPHAGEAL REFUX DISEASE (GERD) TREATMENT**

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OBJECTIVES: To assess Canadian patient preferences and estimate willingness to pay for symptoms relief for gastroesophageal reflux disease (GERD) treatment. METHODS: The study was a cross-sectional design, recruiting patients enrolled in a multi-centre clinical trial from 17 Canadian clinical sites. Preferences and willingness to pay were estimated using a discrete choice experiment (DCE) informed by focus groups and clinical literature. The experimental design considered orthogonality, balance and efficiency. The pen-and-paper-administered DCE survey consisted of 14 discrete choice tasks. Patients chose between 3 different GERD treatments described by 6 attributes: GERD medication cost, when medication was taken, diet changes, daytime discomfort due to GERD, sleeping discomfort due to GERD and side effects. Additional data were gathered on health status, health-related quality of life, and sociodemographic characteristics. RESULTS: 361 of 379 subjects completed the DCE. Mean age was 57 years (SD = 16) and 48% were male. 41% paid some portion of prescription drug costs; a majority rated their GERD symptoms as mild to moderate. Avoiding side effects was the most important attribute, followed by sleeping discomfort, daytime discomfort, dietary changes and medication cost. Treatment choice was least affected by when the medications were to be taken. Patients were willing to pay (WTP): $16 for mild rather than moderate side effects and $14 for complete relief of nighttime symptoms rather than 1–3 episodes per month. Patients with less severe GERD symptoms were WTP more to avoid side effects. Older patients were less WTP for better relief of young age patients. Avoiding sleeping discomfort was more important to women. CONCLUSIONS: Patients are WTP more for a GERD medication that avoids side effects, nighttime and daytime discomfort and dietary changes. Differences in preferences were found by gender and age. This information can help to guide physicians and patients in choosing GERD treatments.

**THE COMMERCIALIZATION OF HEALTH CARE ALLOCATION: CONSUMERS’ TOTAL AND DISTRIBUTIONAL HEALTH OUTCOME PERCEPTIONS AND ATTITUDE TOWARDS FLEXIBLE CARE ACCESS PRICING STRATEGIES BY HOSPITALS**

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OBJECTIVES: Increased competition in the health sector has led hospitals and other organizations to explore new allocation mechanisms that move away from the traditional expert based care allocation to more commercially based allocation mechanisms. Little is known however about consumer perceptions and evaluations of new commercial (price based) allocation mechanisms and how these perceptions and evaluations may differ between individuals and treatment groups. This paper investigates how consumers evaluate (new) hospital care allocation mechanisms. METHODS: We used data of 577 respondents from an American consumer panel. To test the framework confirmatory factor analysis was done and random parameter regression models were estimated. RESULTS: We found that offering individuals the opportunity to pay more for a higher chance of treatment (flexible pricing) affects their perceptions of both the total (p<0.005) and distributional health outcomes (p<0.001) of a hospital’s care, which in turn affect consumer attitude towards the allocation mechanism (p<0.001 and p<0.001). Furthermore, we found that the effects of these two key collective outcome perceptions on consumer attitude are moderated by the type of medical condition (life saving vs. life improving) (p<0.001 and p<0.003), by age (p<0.002 and p<0.001), and to a lesser extent by gender (p<0.1 and n.s.). CONCLUSIONS: Knowing how consumers evaluate allocation mechanisms is important for hospitals because less acceptable allocation mechanisms may scare away patients and decrease community support towards the hospital. Therefore our findings can be relevant and helpful for hospitals that consider implementing new allocation policies.

**PREDICTING PERSISTENT FREQUENT USE OF THE PRIMARY HEALTH CARE SERVICES IN A FINNISH SETTING: A BAYESIAN APPROACH**

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OBJECTIVES: Frequent attenders (FAs) generate a large proportion of clinical workload, referrals and prescriptions in the primary care (PC). The aim of this study was to examine factors, which predict frequent attendance of the PC services in a long-term follow-up. Factors explaining the long-term frequent use of PC services have not been previously explored. METHODS: A prospective cohort study without intervention was carried out in the primary health care centre in Tampere, Finland. From a random sample of 200 PC FAs, 83 patients participated in the study. All participants were PC FAs in the first study year. After four years follow-up the patients were classified as persistent or temporary FAs. A patient was considered as a persistent FA, if he visited the health centre at least 8 times a year for at least 3 out of 4 follow up years. In addition to clinical assessment, also the patient reported outcome assessment was comprehensive including e.g. 15D, BDI, SOC-13, TAS-20, SCL (somatisation part), WHOQoL, Index, patient satisfaction with care, fear of death, and alcohol consumption. 59 different variables were examined as potential predictors using P-course, a web-based Bayesian prediction tool. The models were assessed with accuracy, and predictions with posterior odds and credibility intervals. RESULTS: According to the predictions, the most influential predictive factors related to persistent FAs were female gender, body mass index above 30, former frequent attendance, fear of death, alcohol abstinence, low patient satisfaction and irritable bowel syndrome. New observations related to FAs were high body mass index, alcohol abstinence, fear of death and irritable bowel syndrome. CONCLUSIONS: Our Bayesian model can be used for predictive modelling of persistent FAs in uncertain situations. However, before its use in practice, the external validity of the model will need to be defined, because we only used partitioning in the accuracy assessments and not independent data.

**EFFECTS OF THE IMPLEMENTATION OF AN ANNUAL CO-PAYMENT LIMIT FOR PRESCRIPTION DRUGS IN AUSTRIA**

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OBJECTIVES: The social security system in Austria constitutes insured people to pay a fixed co-payment of €4.80 per prescribed drug unit. Under certain conditions insured are exempted (e.g., very poor people). In 2008 the Austrian government implemented a co-payment limit for prescription drugs, called REGO. If the insured have paid 2% of their annual net income for co-payment rates, they are exempted from these co-payments. The objective of this study was to evaluate the effects of REGO on the prescription volume and therewith demand on the total expenditures for prescription drugs. METHODS: We estimated hypothetical expenditures and prescriptions for 2008 under the assumption that REGO had not been implemented, using the historical data of 2006, 2007 and 2008 on different autoregressive process models. RESULTS: Our analysis showed that the demand increases when prescription drugs become free, and