section, adding questions to the knowledge domain, and lastly putting the attitude questions in a table format which was easier to be understood. The questionnaire was modified accordingly and sent for a second review. The questionnaire was readable by respondents with at least grade 6 education level. The reconciled and modified version was sent to be translated to Malay language, which is the national language of Malaysia. The translation was validated using the standard forward and backward methods.

**OBJECTIVES:** The procedure to tell participants that one of the states was “all-worst” was valued significantly lower than the near all-worst state in one or two of the six dimensions of the SF-6D (e.g. 645555). Four conditions (stroke, lung disease, pain, and mental illness) were used. The relative efficiency (RE) of the scores in discriminating between respondents with and without one of 8 chronic medical conditions was measured using the F-statistic from the analysis of variance test. **RESULTS:** A total of 7529 respondents (50 years of age; 56.8% Chinese; 52.6%; and 0.56, respectively. Reliability analysis of the questionnaire using Cronbach’s alpha showed an internal consistency reliability of 0.9 for the attitude domain. The reliability of four knowledge items was measured by the split-half reliability method and found Spearman-Brown split-Half Coefficients were 0.6, and 0.56, respectively. **CONCLUSIONS:** The questionnaire was valid and reliable to evaluate diabetic knowledge, physician practice, and attitude towards the smoking cessation intervention when applied by their physicians.

**PM35**

**IS THERE A LABELING EFFECT IN THE VALUATION OF THE ALL-WORST HEALTH STATE?**

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**OBJECTIVES:** A protocol for the valuation of SF-6D health states began with telling the participants that the “all-worst” health state (645555) was the worst among all health states to be considered. Respondents might decide if “all-worst” was worse or better than dead. This secondary analysis aimed to evaluate whether this practice would influence the valuation of the “all-worst” state.

**RESULTS:** A total of 5673 participants considered the all-worst health state worse than death. Among them, the all-worst health state was valued significantly lower than the near all-worst health states (30 points; P<0.001), even after adjustment for the difference attributable to the one step difference in the six dimensions. Among the 1753 participants who considered the all-worst state better than death, the valuation result was as expected according to the differences in the six dimensions.

**CONCLUSIONS:** The procedure to tell participants that one of the states was “all-worst” had a labeling effect, but not every respondent was affected.

**PM34**

**THE COPYRIGHT OF TRANSLATIONS OF PRO INSTRUMENTS: THE CASE OF INSTRUMENTS USED IN LUNG DISEASES**

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**OBJECTIVES:** To evaluate how the copyright of Patient-Reported Outcome (PRO) instruments for lung diseases and their translations is handled by the developers of these instruments.

**METHODS:** The following method was used: 1) Search in the PR الشرقية DOG: Hands, Paws, and Tail. 2) Identify PRO instruments developed for lung and respiratory complaints. 3) Search focused on “respiratory tract diseases,” excluding common cold, influenza, tuberculosis, and coronary heart disease. 4) Conditions (stroke, lung disease, pain, and mental illness).

**RESULTS:** A total of 45 instruments were retrieved; nine were expropriated and four were commercial. As for the translations, results show that those translated by the original developer or the original copyright holder or the public domain were available. The relative efficiency (RE) of the scores in discriminating between respondents with and without one of 8 chronic medical conditions was measured using the F-statistic from the analysis of variance test. **RESULTS:** A total of 3529 respondents (50 years of age; 56.8% Chinese; 52.6%; and 0.56, respectively. Reliability analysis of the questionnaire using Cronbach’s alpha showed an internal consistency reliability of 0.9 for the attitude domain. The reliability of four knowledge items was measured by the split-half reliability method and found Spearman-Brown split-Half Coefficients were 0.6, and 0.56, respectively. **CONCLUSIONS:** The questionnaire was valid and reliable to evaluate diabetic knowledge, physician practice, and attitude towards the smoking cessation intervention when applied by their physicians.

**PM33**

**RELATIVE EFFICIENCY OF THE SF-8, SF-12, AND SF-36 IN THE GENERAL POPULATION**

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**OBJECTIVES:** To assess the relative efficiency of the SF-8, SF-12, and SF-36 in capturing health-related quality of life deficits associated with chronic medical conditions in the population health survey. **METHODS:** Data collected in a cross-sectional population health survey in Singapore was used. The SF-8, SF-12 and SF-36 physical component and mental component summary (PCS and MCS) scores were calculated based on US weights because the local weights are currently not available. The relative efficiency (RE) of the scores in discriminating between respondents with and without one of 8 chronic medical conditions was measured using the F-statistic from the analysis of variance test. **RESULTS:** A total of 3529 respondents (50 years of age; 56.8% Chinese; 52.6%; and 0.56, respectively. Reliability analysis of the questionnaire using Cronbach’s alpha showed an internal consistency reliability of 0.9 for the attitude domain. The reliability of four knowledge items was measured by the split-half reliability method and found Spearman-Brown split-Half Coefficients were 0.6, and 0.56, respectively. **CONCLUSIONS:** The questionnaire was valid and reliable to evaluate diabetic knowledge, physician practice, and attitude towards the smoking cessation intervention when applied by their physicians.

**PM32**

**A CHINESE POPULATION-BASED STUDY ON PREFERENCES FOR HEALTH STATES: HOW INDIVIDUAL CHARACTERISTICS MATTER?**

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**OBJECTIVES:** Previous studies provided inconsistent findings on the impact of individual characteristics on preferences for health states. This paper is the first attempt to use the Chinese population data to understand how individual characteristics influence preferences for EQ-5D health states.

**METHODS:** The preferences are elicited from a sample of 1222 respondents from five cities in China including Beijing, Shenyang, Chengdu and Nanjing. Through the TTO method, each respondent values 13 hypothetical EQ-5D health states. The individual characteristics are also recorded, including age, gender, race, health conditions, and lifestyle habits etc. Linear regression models are used to estimate the effect of individual characteristics on valuations, with a focus to discriminate between the effects across health state severities (mild, moderate, severe). EQ-5D value sets are generated based on the subgroups and the general population respectively to gain insights on the systematic differences between predictions.

**RESULTS:** This paper shows that two major factors, age and exercise habit of respondents are most important in influencing valuations for all health states. The valuations increase by 0.02 for every decade increase in age; the respondents who make exercise a habit assign 0.06 higher valuations than their counterparts without exercise habit.

**CONCLUSIONS:** Higher valuations are also given by respondents who are married and living together, without smoking habit, with high self-rated health conditions, and particularly by those with drinking habit. In terms of valuations for different health state severities, the explanatory power of the effects decreases with the increase of severities.

**PM31**

**DEVELOPMENT AND USE OF A HEALTH-RELATED QUALITY OF LIFE TOOL TO HELP VETERINARIANS AND PET OWNERS ASSESS AGING CHANGES IN PET DOGS**

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**OBJECTIVES:** Many measures have been developed to assess the health-related quality of life (hrQoL) in humans but few have been developed for animals. Our goal was to develop a QoL instrument, completed by pet owners, that was able to reliably detect changes in QoL in healthy dogs as they age. **METHODS:** An hrQoL tool was built with input from pet owners and veterinarians. The prototype QoL tool was tested with 167 pet owners of healthy dogs. A second survey was completed approximately two weeks later. Each pet owner was allowed to self-select their dog for inclusion, based on their personal assessment of the pet’s health.

**RESULTS:** When dogs were blocked by age, the year increase in age was associated with a decrease in the score provided by the pet owner was high and essentially unchanged for the first 9 years. The pet owner QoL assessment dropped dramatically for dogs >10 years of age, mirroring the realization that the dog was “slowing down.” A calculated hrQoL score, derived from the component analysis, demonstrated a statistically significant (P<0.0001) and near-linear decline across age blocks as the dogs aged. A component analysis of many domains was also able to demonstrate a similar uniform age-related decline.

**CONCLUSIONS:** Quality of life scoring can be used to help guide health care decisions for dogs as they age. Compared to the pet owner-derived score, using an hrQoL score derived from component analysis seems to be more reflective of the gradual age-related changes in a healthy dog.