Ismail wI[1], Hassali MA[2], Farooqui M[3], Saleem F[4]

[1]Faculty of Health Sciences University Technology MARA, Penang, Malaysia, [2]Universiti Sains Malaysia, Penang, Malaysia, [3]Universiti Teknologi MARA, Kepala Batas, Malaysia, [4]School of pharmaceutical sciences, Universiti Sains Malaysia, Penang, Malaysia

OBJECTIVES: The traditional and complementary medicine (T&CM) is an important component of healthcare system to improve the health and the quality of life of patients. However combination of T&CM in Thalassemia care has not been explored well. The current study aimed to evaluate Thalassemia patient's perceptions towards the combinationof T&CM with conventional therapies. **METHODS:** Qualitative interview were used to explore the phenomena which allows to understand the subjectivity and complexity of human experience. A total of 21 consented patients were recruited from Thalasaemia Society of Kedah State, Malaysia. Patients were from the two major ethnic groups in Malaysia namely Malay and Chinese. All interviews were conducted in Bahasa Malaysia (National Language of Malaysia) and were translated into English for thematic content analysis. **RESULTS:** Patients reported mixed perceptions regarding the combination of T&CM into the conventional treatment. Patients agreed such combination only been undertaken with the consent of their health care providers. However majority of the patients reported that they were never asked by their physicians regarding such combinations. This was given as a reason of not disclosing T&CM use to the doctors by some of the participants.Majority of the patients were in favour of the combination between modern and traditional medicines.Even though such combination could not cure thalassaemia, it was able to reduce the side effects of therapies used in modern therapies. **CONCLUSIONS:** In conclusion, the positive views of the combination of T&CM in conventional care invites doctors and nurses to have an open discussion on T&CM with their patients. This could prevent them with drug-drug interactions and may help them to use proven T&CM with least side effects. At the same time an open discussion between modern and traditional practitioners is warranted to enable combining traditional therapies in Thalassemia care in order to improve the quality of life these patients.

PRM190
INCORPORATING BIOMETRIC DATA FROM WEARABLE ACTIVITY TRACKERS WITH STUDY DATA IN FRANCE AND THE UK

Fink L[1], Chanot G[1], Bernard F[1], Mondry B[2], Normand A[3], Vegreville M[3], Bondarenko K[1]
[1]Kantar Health, Paris, France, [2]Kantar Health, New York, NY, USA, [3]Withings, Issy-les-Moulineaux, France

OBJECTIVES: The objective of this research was to combine passively collected biometric data from connected devices with participant questionnaire data to gain insights into the link between steps and sleep and feelings about overall condition, stress and restfulness. **METHODS:** 84 people in France and the UK participated in this research in February 2016. Each participant was equipped with an activity tracker. Biometric data including the number of steps and sleep time was collected over a 2-week period. In addition, participants completed a questionnaire via smartphone every other day over the same period pertaining to their overall condition, stress levels and restfulness. Each questionnaire was subsequently matched with the corresponding days of biometric data, resulting in a final sample of 393 observations. **RESULTS:** Participants who reported a better overall condition (scores from 1 to 10) took more steps per day (8,342 for scores $\geq$7 (n=245), 6,904 for 6 (n=81) and 5,515 for <6 (n=67) (p<0.001). Those with a score $\geq$6 slept 18 minutes more per night vs. those with a score <6 (p=0.191). Although not statistically significant, the population who was never/sometimes stressed (n=344) took 7,645 steps on average vs. 6,989 for those stressed most/all of the time (n=49) (p=0.329) and slept 20 minutes more per night vs. those who were stressed most/all of the time (p=0.167). While restfulness was not linked to the number of steps taken, the population who considered themselves well rested (n=137) slept 31 minutes more per night vs. those who were somewhat/not at all rested (n=256) (p<0.001). **CONCLUSIONS:** Step and sleep data are correlated with overall condition, stress level and restfulness. Therefore, collecting these types of biometric data in parallel to healthcare research studies adds valuable insight into the QoL of patients and enriches findings compared to traditionally designed studies.

PRM191
WATCH OUT FOR BERKSON'S BIAS (BB)! SETTING HEALTH-RELATED QUALITY OF LIFE (HRQOL) TREATMENT TARGETS WITH MATCHING-ADJUSTED INDIRECT COMPARISON (MAIC) IN ORDER TO PREDICT MATCHED GENERAL POPULATION CONTROL (MGPC) TARGETS, ASSESS POTENTIAL TO BENEFIT (PTB) AND REVEAL UNMET MEDICAL NEED (UMN)

Soini EJ[1], Heinonen J[2], Miettola E[2], RyynanenRyynänen O[3], Koskela T[4]
[1]ESIOR Oy, Kuopio, Finland, [2]School of Medicine, University of Tampere, Finland, [3]Faculty of Health Sciences, University of Eastern Finland, and Unit of Primary Health Care, Kuopio University Hospital, Kuopio, Finland, [4]Department of General Practice, University of Tampere, and Omapihlaja, Pihlajalinna Terveys Oy, Tampere, Finland

OBJECTIVES: In BB-type selection bias all study groups include patients. BB can result to spurious associations and results in comparative settings. In HRQoL "burden comparisons", MGPC is often based on age and gender alone, if any. Furthermore, commonly available specialist care HRQoL data may generalize poorly to primary health care setting (PHCS) and may not include baseline values for patients entering the system. Thus, real-world evidence (RWE) generation for HRQoL benchmarking is difficult. Our objectives were to develop MAIC, predict MGPC based on the MAIC, estimate PTB and assess UMN; all at individual PHCS level. **METHODS:** A MAIC-based MGPC was developed using representative Finnish general population RWE (N ~5144) to estimate MGPC HRQoL ("reference value") for unselected patients participating in Effective Health Centre Study (N=511, three health centres, Pirkanmaa, Finland). Both studies used EQ-5D-3L with British preferences, and included age, sex, income, education, and comorbidities for the MAIC. PTB was estimated by subtracting the baseline EQ-5D-3L scores from the estimated MGPC scores. UMN (potential residual disutility) was estimated by subtracting the

EQ-5D-3L scores at 3-month follow-up from the estimated MGPC scores. **RESULTS:** Mean baseline EQ-5D-3L scores for PHCS patients and MGPC were 0.74 and 0.81, respectively, demonstrating a significant and clinically important PTB (0.07; 95%CI 0.06-0.09), "medical need". Most patient groups demonstrated significant mean PTB. The mean PTB was highest for ICPC-2 chapter L: Musculoskeletal and lowest for S: Skin. The mean scores at three months for PHCS patients and MGPC were 0.79 and 0.81, respectively, demonstrating an insignificant UMN of 0.02 (95%CI 0.00-0.04). The mean UMN was highest among patients with ICPC-2 chapter N: Neurological or for patients with asthma comorbidity. The developed MAIC-based MGPC outperformed age- and sex-matched MGPC. **CONCLUSIONS:** BB and all time-specific measurements and their development can be taken into account in the MAIC-based MGPC, PTB and UMN HRQoL benchmarking.

PRM192
AN A PRIORI DECISION CRITERIA ELICITATION METHOD FOR TREATMENT DECISION-MAKING IN ELDERLY COLORECTAL CANCER PATIENTS

Keizer J[1], IJzerman MJ[1], van Til JA[1], Wymenga AM[2]
[1]University of Twente, Enschede, The Netherlands, [2]Medical Spectrum Twente Hospital, Enschede, The Netherlands

OBJECTIVES: Evidence-based treatment in older colorectal cancer (CRC) patients is difficult, because of under-representation of older patients in clinical cancer trials. Explicitly considering current physical and cognitive functioning in treatment decision-making and determining trade-offs between aspects of the value framework by the ASCO Value in Cancer Care Task Force (clinical benefit, toxicity, cost) relative to other relevant criteria in elderly patients can assist clinicians in making decisions in this heterogeneous patient group. The aim of this study was to use a rigorous approach to determine the relevant decision criteria in older CRC patients, prior to conducting a stated preference (SP) study. **METHODS:** In a systematic literature review on decision-making criteria for the treatment decision in elderly CRC patients, 201 manuscripts were selected. Results were quantified and used as input for 11 interviews with oncologists, surgeons, radiotherapists, gastroenterologists, a radiologist, a geriatrician and an oncology nurse. The face-to-face interviews contained both structured (importance of literature study results on Likert scales) and semi-structured (missing criteria) questions. The interviews were transcribed, coded, counted and compared with the results of the systematic literature review. **RESULTS:** Most reported criteria both in the literature and interviews were functional status, comorbidities, age, patient preferences and expected treatment toxicity and outcomes. Other criteria were differently reported in the literature and interviews; the costs of treatment were often mentioned in the literature but not important to physicians in their treatment decision. **CONCLUSIONS:** The process of criteria selection in SP studies is often poorly described in the literature, although it is fundamental and critical in designing SP studies. In this study, in-depth and transparent analysis of relevant criteria in the treatment decision for older CRC patients was realized by combining both quantitative and qualitative information. This enables performing SP studies with more reliable and clinical relevant results.

PRM193
THE ECONOMIC IMPACT OF INFLUENZA-LIKE ILLNESS ON FAMILIES LIVING IN THE UK DEMONSTRATED BY THE COLLECTION OF ONLINE DATA

Wade AG, Crawford GM, McLennan K
Patients Direct, Glasgow, UK

OBJECTIVES: To demonstrate that a methodology based on online data collection can be used to measure the economic impact of viral infection and transmission within families. **METHODS:** Between October 2012 and May 2013, a nationwide campaign involving online advertisements, newspaper articles, and literature sent to employers, nurseries, and schools was used to recruit UK households to a study on influenza-like illness (ILI). Each household had at least one employed adult (>18 years old) and at least one child (<18 years old). Definition of ILI incidence was based on the European Centre for Disease Prevention and Control Influenza Case description and transmission of ILI was assessed by study participants, taking into account the timing of ILI occurrences within the family group. **RESULTS:** Data was collected online from 938 households that included 1895 adults and 1695 children. A total of 616 instances of ILI (310 in children; 306 in adults) were recorded. Baseline questionnaires collected data on age, gender, comorbidities and influenza vaccination history. Follow-up questionnaires, issued via SMS/email reminders at two-week intervals, collected additional data from households reporting a recent ILI or influenza vaccination. Additional data recorded included ILI symptoms, absence from work (adults) or education (children), presenteeism parameters, and healthcare resource (HCR) use (GP/hospital visits, prescriptions received, etc.). We recorded the economic impact of each episode of ILI (related/unrelated to a child ILI) on the family (i.e., child absent from school, adult absent from work to care for child or with ILI). Estimates of the burden of ILI on the NHS and its cost in terms of lost productivity were used to make the case for extending influenza vaccination to healthy school-age children in the UK. **CONCLUSIONS:** Data collected online can be used to estimate the economic and HCR costs of viral infection and probable transmission within family groups.

RESEARCH ON METHODS – Statistical Methods

PRM194
COMPARISON OF METHODS FOR INDIRECT TREATMENT COMPARISON COMBINING INDIVIDUAL AND AGGREGATE PATIENT DATA: A SIMULATION

Rasouliyan L
RTI Health Solutions, Barcelona, Spain

OBJECTIVES: The objective of this research is to compare three methods of indirect treatment comparison in the scenario where individual patient data (IPD) is accessible from one trial and aggregate patient data (APD) is accessible from the other trial: covariate centering with multivariable modeling (CCMM), matching-adjusted