treated as the “intelligence” of the incorporation process procedures in the pub-
llic health system. Efficacy refers to the benefit effect in experimental conditions; effectiveness mentions the benefit effect operating under the system’s conditions, i.e. the action field, and cost-effectiveness refers to the objective when confronted with the costs involved in bringing the procedure into the system. CONCLUSIONS: The emphasis remains on the HTA area, and the health systems and judicial sentences should lead the policies on public health. The need to study the process of judicialization of health through HTA is evident.

PHIP12 THE IMPACT OF THE ASEAN COMMUNITY AND THAILAND’S MEDICAL HUB ASPIRATION ON THE THAI HEALTH CARE SYSTEM
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CONCLUSIONS: Although most stakeholders see value in personalized medicines, they struggle with practical implementation and need actionable strategies to characterize the value and impact of these technologies. The survey suggests that limited emphasis on infrastructure development and methods, horizon scanning, and investment of reman important key challenges to enabling care and economic efficiencies promised by this evolving treatment paradigm.

PHIP14 MULTI CRITERIA DECISION ANALYSIS METHODS IN HEALTH CARE: CURRENT STATUS, GOOD PRACTICE AND FUTURE RECOMMENDATIONS
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OBJECTIVES: There has been an increase in the number of multi-criteria decision analysis (MCDA) applications in healthcare since 1990s but there is still confusion among potential users regarding their appropriate use and this paper reports on an expert MCDA meeting organised to address these issues. METHODS: An expert meeting was held in 2013 in UK with 21 representatives from a variety of governmental, academic and pharmaceutical institutes, which had the objective to discuss the role, options and limitations of MCDA in health. RESULTS: The key messages and good practice recommendations developed by the participants of the expert meeting are as follows: a) Problem structuring is key: it is recommended that enough time is allocated for this stage and the models should be transparent to the audiences; b) Numerical MCDA modelling is not always necessary: deliberative discourse with the performance matrix as a starting point is sufficient in some situations rather than numerical MCDA models; c) Variety of weighting and scoring techniques: There are a variety of different methods available to estimate the weights and priorities and not all scoring methods and weighting techniques are suitable for every MCDA method, d) Visualisation/transparency is important: For the decision makers to have confidence in the MCDA model, the model outputs need to be adequately visualised and the model needs to be transparent; e) Uncertainty modelling: appropriate care needs to be taken in performing uncertainty analysis CONCLUSIONS: MCDA has already been used and is well suited to support a broad range of health care decision problems but there is a need to develop a framework to select the appropriate MCDA technique for specific health care decisions. Future work is underway to develop the guidelines for choosing the most appropriate MCDA method to be applied for a given health care decision problem.

PHIP14 PERSONALIZED DRUG DEVELOPMENT: STRATEGIC AND OPERATIONAL INSIGHTS FOR BIOPHARMA, PAYERS AND PROVIDERS FROM A LARGE SURVEY OF UNITED STATES AND EU DECISION MAKERS
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OBJECTIVES: As the US health care system drives toward population-level goals for effectiveness, demand for personalized medicine at the patient-level. Personalized medicine is an emerging business model that harnesses genomics and biotechnology aimed at tailoring therapies and interventions to individual patient characteristics. Market stakeholders universally acknowledge the tectonic shift away from the historic blockbuster drug model to a more targeted model. To evaluate current insights and challenges, we surveyed key stakeholders and decisions makers across the health care industry. METHODS: We conducted a survey of 168 biopharma executives, payers, providers, and patients in the US and EU to gain insight into their needs, perceptions, and readiness to shift toward a more robust personalized medicine approach. This original research is aimed to characterize current status of infrastructure, preparedness, adoption and value assessment around personalized medicine development and highlight key chal-

PHIP14 PREDICTING PRICE-TO-CHARGE RATIOS FOR COMMUNITY HOSPITALS IN THE UNITED STATES
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OBJECTIVES: Reliable price data could enable consumers to choose providers that offer better value than others, eventually leading to market-level gains in quality and efficiency. The objective of this study is to predict price-to-charge ratios (PCRs) for community hospital stays on the basis of charge data and information about individual patients, hospitals, and states. METHODS: We used a two-stage iterative estimation in exponential conditional mean models with a log link and gamma-distributed errors. The first stage was used as two-step estimation in which equations are estimated individually and the errors saved. In the next step, each payer equation is estimated a second time with the first-stage errors of the other payer equations as new independent variables. We assessed goodness of fit through model characteristics and by assessing the match of actual and predicted PCRs. RESULTS: Average demographic characteristics were significant predictors of PCRs for Medicare and Private insurance, but not for Medicaid or Self-Fray. Hospital characteristics were related to every PCR category. Critical-access hospitals and teaching hospitals were associated with significantly greater PCRs for Medicare, Medicaid, and Private insurance holders. Greater numbers of Medicare and Medicaid discharges were associated with significantly lower PCRs. Higher PCRs were most often associated with hospital located in states where Medicare eligibility and spending. CONCLUSIONS: Inpatient encounter prices paid by Medicare, Medicaid, and private insurance can be estimated with acceptable accuracy for community hospital stays. Stays funded by other insurance types or by patients were harder to predict and simultaneously have almost no correlation with PCRs.

PHIP14 NUTRITION PHARMACO-ECONOMICS: SPECIFICITIES AND CHALLENGES
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BACKGROUND: Over the last decade, evidence-based assessment of food and nutritional products has substantially accelerated, in a fast-moving market and regulatory environment. Specific evidence synthesis, epidemiological and pharma-ceutical economics tools have been developed and used for HTA and public health decision support. OBJECTIVES: This presentation highlights through case studies the specific needs, tools and challenges arising from health economic evaluations of nutritional products. METHODS: To first set the scene of nutritional product assessment, the regulatory and HTA systems and guidelines in both Europe and the US will be described and potential differences with drugs or devices highlighted. Through a series of illustrative but representative case studies covering both health claims and medical nutrition, the specific data needs and statistical methods to analyse them will be reviewed and discussed. Data and methods gaps will be highlighted and consequences on the market access strategies and tactics will be discussed. RESULTS: Nutritional products would typically target a wider and heterogeneous group of population than common drugs. Furthermore, control of food/compound exposure and effect in observational and clinical studies is more challenging resulting in larger studies and requiring more stringent tracking of compliance. Data analysis then requires refined statistical models such as hierarchical models able to handle population variability. Safety issues are also expected to be minimal to make benefit/risk evaluation acceptable by regulators, so that risk studies and risk management tactics should be designed accordingly. Finally, pricing and reimbursement depend even more on drugs on how the compound is positioned and for which target segment. CONCLUSIONS: The economic tools and regulatory/HTA strategies applied to nutritional products market access need to be tailored to their best to handle the higher population heterogeneity and numerous market access options.

PHIP14 A SYSTEMS THINKING APPROACH FOR THE HEALTH CARE INDUSTRY: AN A34 SURVEY OF BIOPHARMA, PAYERS AND PROVIDER STAKEHOLDERS
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