follow or they do not have customized service standards. Moreover, basing on the result, medical staffs have no common awareness what standards they must follow for their services, except awareness of treatment and diagnosis; there is insufficient information about service standards. **CONCLUSIONS:** One third of organizations attended in surveys operates their operations without the organization's service standards. Service standards of an organization are developed by Medical directors, Quality department and Professional council. Service standards of organizations are not approved, there is no any control to implement service standards, or the service standards are inappropriate and no unfavorable environment to implement service standards. Even the control on "Common operation standards"'s implementation is good, no unfavorable environment to implement the standard. Moreover registration of mistakes related to "Common operation standards" is insufficient, measures and warnings to improve the low indication of mistakes are not taken well.

PHP101
PRIORITY SETTING OF NEW MEDICAL INTERVENTIONS IN TAIWAN: A MULTICRITERIA DECISION ANALYSIS
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OBJECTIVES: Priority setting in the allocation of new medical interventions is increasingly based on formulated values. Before drafting the new medical service items and fee schedule, the National Health Insurance Act of Taiwan identifies four prioritizing rules -human health, medical ethics, cost-effectiveness, and the finances of the Insurance respectively to compliance with. Our study objectives are to compare the policy makers' actual value preferences with these four official formulated principles and to guide the Ministry of Health and Welfare in Taiwan in the priority setting of new medical interventions. **METHODS:** We used a multicriteria decision analytical framework. In total 65 respondents participated in a discrete choice experiment to weigh their relative importance of six selected policy criteria for priority setting. Regression analysis was used to rank order a set of new recently adopted medical interventions on the basis of these criteria and related to weights. **RESULTS:** Policymakers considered severity of disease, people of middle-age, cost effectiveness as the most important criteria for priority setting of interventions, followed by low budget impact. Signs of coefficients of many beneficiaries and large individual benefits did not have the expected direction. Certain interventions in HIV Ag/Ab test, HLA-B 1502 gene typing, HCV Genotyping Test and orthopedic surgery rank highest. Cochlear implant ranks 12th out of 22 medical interventions. **CONCLUSIONS:** Policy makers' values are partially in agreement with principles formulated in National Health Insurance laws. Multi-criteria decision approaches may provide a tool to guide explicit allocation decisions.

PHP102
FEASIBILITY OF PHARMACOECONOMIC EVALUATIONS OF TRADITIONAL CHINESE MEDICINE FROM THE PERSPECTIVES OF THE HEALTH INSURANCE REVIEW & ASSESSMENT SERVICE IN SOUTH KOREA
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OBJECTIVES: Having maintained close association with China through the ages, a number of traditional Chinese medicine hospitals have prevailed in South Korea despite abundance of western medicines. Given this prevalence of herbal medicinal therapy and the increasing health care expenditure, the purpose of this research is to explore the feasibility of formally establishing guidelines and conducting pharmacoeconomic evaluations for coverage selection of traditional Chinese medicine from the perspective of decision makers in the Republic of Korea. **METHODS:** Research was conducted, using qualitative telephone and email-based interviews with individuals involved in Health Insurance Review & Assessment Service (HIRA) and KOLs in South Korea in order to gain a broad range of perspectives on the topic. The interviewees were asked to share their opinions on the significance and viability of developing formal guidelines and performing economic evaluations for traditional herbal medicines. Moreover, they were asked to identify critical issues around applying established pharmacoeconomic guidelines to traditional medicinal therapy. **RESULTS:** In the primary research, the majority of interviewees agreed on the importance of conducting pharmacoeconomic evaluations for traditional medicine. They recognised that a great amount of herbal medicine is produced and consumed. Patients pay for this medicine as out-of-pocket expense, although the outcomes are not well measured and understood by either the government or the public. Furthermore, they acknowledged that existing pharmacoeconomic guidelines may not always be appropriate for making coverage decisions for these herbal treatments. Finally, they expected that separate guidelines specifically targeted at traditional medicine may develop, but not in a very near future. **CONCLUSIONS:** Given the extensive use of herbal medicine by the public, using pharmacoeconomic evaluation for reimbursement decision may encourage patients and physicians to choose more cost effective treatments and thus prevent the dramatic increase in total health care expenditure without demonstrated improvement in health outcomes.

PHP103
RISK-SHARING AGREEMENTS IN AUSTRALIA: ATTITUDE TOWARDS RISK-SHARING ARRANGEMENTS WITH THE DEPARTMENT OF HEALTH FOR THE PBS-LISTING OF PHARMACEUTICALS
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OBJECTIVES: Conditional reimbursement approval for pharmaceuticals, for example, risk-sharing arrangement (RSA) involving price-volume agreement or various post-launch monitoring requirements, is becoming a standard practice in Australia, especially for novel treatments with high ICER and/or potentially significant budget impact. Uptake of RSAs are relatively slow in other jurisdictions. Efficient implementation of an RSA requires active involvement from all stakeholders, in particular, drug manufacturers and the decision makers. This study reports the findings from a survey of pricing and reimbursement experts in Australia to gain insight into their attitude/opinions of RSAs from their own personal experience. **METHODS:** Senior-level health economists and consultants were targeted. The survey included questions about responder's demographics, the number and type of RSAs they have personally been involved with, and their experience and opinions about RSAs. A general overview of RSAs is also provided to better contextualise the survey findings. **RESULTS:** Ten experts participated on an anonymous basis. They in total have been involved in 403 submissions, and 56 RSAs of various types. Capped cost agreements were most frequently employed (>70% of all RSAs). 'Hidden price' is also frequently agreed. Respondents generally had positive attitude towards RSA (mean of 3 using a 1-5 scale) mainly because it can potentially benefit timeline and address global pricing issues. Concerns were however raised about the fact that the 'risk' is entirely borne by the industry in many cases and RSA has now become an integral element in the PBAC's decision making process. **CONCLUSIONS:** RSA is generally well perceived among industry experts in Australia, whilst an increasing role of PBAC in defining clauses in the agreement is seen as a hurdle against productive involvement from the industry. The Australian model of RSA may offer a useful template for other jurisdictions.

PHP104
RISK SHARING AGREEMENT CONSIDERATIONS FOR PHARMACEUTICALS IN CHINA MARKET
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OBJECTIVES: This study is designed to review current 'risk-sharing' schemes worldwide and in China, and further examine what kind of situations where 'risk-sharing' schemes should be considered. **METHODS:** A literature review was undertaken to identify existing schemes in developed countries. A review of released policies in China was also conducted to understand China's current rules of practice. Cases studies were established for detailing agreement structure and potential impact on payers and industry. **RESULTS:** Risk-sharing schemes are introduced to the market in the context of fast growing health care cost and uncertain drug values. Nearly almost all of China's scheme practices are financial-based agreements and don't integrate drug's real world performance. Unlike mature market, risk-sharing agreement in China is more often applied to established products rather than newly-entered innovative drugs. A typical successful agreement in China has several must-have factors, including discounted drug price, purchase/free drug package and charity program. When considering a sustainable win-win risk-sharing scheme, a company must be very determined and assess its product carefully to decide whether the disease is in a high priority and there are currently few effective treatments; where policies can be leveraged and opportunities can be created for negotiation; whether strong lobbying message and product value proposition can be developed to meet the interests of the stakeholders; whether proposed scheme (price and additional service) can substantially lower health service cost as well as to enhance reimbursement; whether management team can ensure well-functioning operational capabilities for legal, administrative and delivery support. **CONCLUSIONS:** With more innovative drugs being introduced to China market; 'risk-sharing' schemes will become more popular as national reimbursement drug list cannot immediately cover the increasing cost. Global experience also suggests there is a trend that 'risk-sharing' agreement will be more often considered as a market access strategy for new products in the future.

HEALTH CARE USE & POLICY STUDIES – Conceptual Papers

PHP105
MODEL BASED MEDICINE: A NEXT FRONTIER IN HEALTH CARE
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In the last three decades, evidence-based medicine (EBM) has been the driving force in shaping guidelines and clinical decision making in screening, prevention and treatment of diseases. Evidence review, evidence grading and meta-analysis of trials are standardized and routinely conducted. However, recent technological developments have significant impacts on future directions of EBM. With recent advances in health information technology, electronic medical records (EMRs), proteomics and genomics, clinical evidence has become increasingly abundant and diverse. At the same time, the inputs into medical decision making have also become increasingly complex. Model Based Medicine (MBM) has recently emerged as a framework to address the above challenges. MBM is the use of large-scale integrated physiology and pathology-driven mathematical models to translate and to synthesize existing evidence and medical knowledge into a unified framework, which will then be used to support clinical decision making at individual patient level. MBM not only incorporates all available evidence and most up-to-date understanding of diseases but also account for uncertainties in data and gaps in knowledge. MBM serves as an interface between evidence and physicians, allowing rapid extraction of quantitative, robust and already synthesized information for customized clinical decision making. The decisions can be optimized not only based on the therapeutic efficacy of health interventions, current health status of patients but also patient's health behavior (e. g. past likelihood to comply with treatment recommendations) and preferences. Based on our recent experience at Archimedes, I will present several case studies to illustrate the power of MBM in leveraging data from EHR and other data sources to support decision making at both population and individual level. I will also speak about the scientific and technical challenges faced by MBM and our strategy in addressing these challenges, including developments of standardized and automatic tools for data integration and synthesis, model calibration and validation, uncertainty quantification and optimal design for model-physician interface.