brought to you by I CORE

teria decision analysis. CONCLUSIONS: These and other methods may be used by CONITEC's assessment, approaching the issues of efficiency and equity in decision making. Thus, is expected to contribute to the development and application of these decision-support tools and to improve the criteria of Ministry of Health for deciding which technologies to fund.

THE RELEVANCE OF HEALTH TECHNOLOGY ASSESSMENT OF DIAGNOSTIC, PROGNOSTIC AND PREDICTIVE TESTS IN ONCOLOGY: PROSPECTS FOR IMPLEMENTATION IN RUSSIA

Yagudina R, Sorokovikov IV

I.M. Sechenov First Moscow State Medical University, Moscow, Russia

OBJECTIVES: An application of predictive and pharmacogenetic tests in appointment of targeted anti-cancer therapy and predict response to treatment. Considering significant practical necessity of molecular-genetic methods for health care and high cost, it is important to evaluate these technologies in terms of health economics. METHODS: A systematic review of articles has been conducted using databases $PubMed, The\ Cochrane\ Library, and\ published\ reports\ and\ market\ reviews.\ \textbf{RESULTS:}$ In the period from 2007 to 2012 it is estimated the world market in vitro diagnostic (IVD) is increasing due to the development of molecular diagnostic tests and rapid test kits. Experts point out that a key factor in the growth segment of molecular diagnostics in recent years has been precisely the emergence of new oncology tests to prescribe targeted therapy. At the moment, in IVD diagnostics segment in Russia market is forecasted growth rate for 2014 at 10-20%. Price of tests for oncology biomarkers depends on the technology: - for most routine immunological and chemical tests is between 10 and 15 USD; - for molecular genetic tests costs varies from 40 to 4000 USD per procedure. In addition to practiced in Russian Federation KRAS- and EGFR-testing, in this review discussed the practical value of: testing EML4-ALK mutation for crizotinib in non-small lung cancer; BRAF V600E-testing for vemurafenib in melanoma; HER2/neu-testing for trastuzumab in breast cancer. Thus, the Russian segment of the cancer diagnostics market is the fast-growing market. However, the analysis of the literature showed that until that time in the Russian Federation was not conducted clinical and economic evaluation of these $medical\ technologies.\ \textbf{CONCLUSIONS:}\ The\ analysis\ revealed\ that\ evaluation\ of\ diagnostic discontinuous and the property of the control of the property of the control of the property of the prope$ nostic test systems in oncology from the point of view of health economics of the Russian Federation is a topical field for research and requires a rigorous analysis.

QUANTIFYING THE VALUE OF TRANSITIONAL CARE PHARMACY SERVICES

University of Kentucky, Lexington, KY

 $Transitional\ care\ management\ programs\ have\ been\ shown\ to\ improve\ medication$ adherence, elevate patient comprehension of their disease state, increase patient satisfaction, and reduce preventable readmission rates due to certain diagnoses (e.g., congestive heart failure). However, the true value of such programs has recently become more important to key health care decision makers as the United States transitions away from a fee for service model to a value based payment system. The provision of medication therapy management is a vital component of many transitional care management programs, yet the cost effectiveness of pharmacist interventions remains difficult to quantify. The inability to assign a universally accepted economic value to such transitional care programs has hindered the implementation of a sustainable business model for such services; despite the positive impact on patient health outcomes. This paper explores the unique challenges a national post-acute health care network faced while attempting to incorporate cost-effective clinical pharmacy services into its transitional care management programs. First, we discuss the impact of various strategies to stratify patient readmission risk in different settings of care. Second, the challenge to participate in a risk-sharing model in a health system still driven by patient choice is investigated. Finally, we evaluate the published methods used to quantify the economic impact clinical pharmacist interventions. Our assessment of the above topics is applied to three case studies; each located in a distinct region of the United States and with unique approaches to the provision and reimbursement of health care. Our conclusions support the need for additional investment into the value of transitional care pharmacy services throughout the post-acute care continuum.

PHP132

PHARMACEUTICAL PAYMENT REFORM OF TAIWAN, NHI

Shin-IC, Shu-Cheng L

Ministry of Health and Welfare, Taiwan, R.O.C, Taipei City, Taiwan (R.O.C.), Taiwan

The National Health Insurance (NHI) Program in Taiwan is a mandatory government-run social insurance system cover 99% of the population. Since its inception in 1995, NHI has been facing the challenges of rapid increase on health care costs, particularly in 1998; nominal growth rate of NHI costs reached 11.4% per year. So many strategies have been introduced in controlling costs and in improving quality of care, and the Second-Generation NHI was implemented in January 1, 2013. Among them the pharmaceutical benefits and expenditures strategies were the most important reforms. The drug cost of NHI was about 4.4 billion USD in 2012, nearly 25% of total health insurance expenditure, and drug cost per capita was 204 USD. Over 18,000 drugs were listed in the Drug Price List, and average new drugs listed time was 144 days. The average growth rate on drug fees was 4.8% for recent 10 $\,$ years. Many strategies had been introduced to control drug costs, such that: (1) Drug Price List was revised continuously based on setting reference prices for the drugs with same ingredients .The price was adjusted 9 times from 2000 to 2011. (2) "Drug Expenditure Target" policy into practice in January 1, 2013. It control unreasonable drug fees rising, and make drug policy predictable to the pharmaceutical industrial in Taiwan. (3) other reform such as focused on efficient pharmaceutical benefits and payment systems, equity in pharmaceutical transactions, public participation and information transparency. However, these biggest reform are now high hopes

that the launch of the NHI system. To improve the system even further, future challenge will be our motive to reform and also lead us to a new stage in health care.

CONCEPTUAL FRAMEWORK CHARACTERIZING NEUROCOGNITIVE BURDEN ASSOCIATED WITH PRIMARY GLIOBLASTOMA PROGRESSION

Bartley K, Theodore-Oklota C, Campbell A

Genentech, South San Francisco, CA, USA

Glioblastoma (GBM) is an aggressive, high-grade glioma characterized by rapid growth and microvascular proliferation. Tumors are typically localized to the cerebrum and rarely distantly metastasize. Worsening of neurocognitive symptoms is observed with GBM progression, and can significantly impact patient function and quality of life. Current treatments are non-curative and have not demonstrated an increase in overall survival. Progression-free survival (PFS) is a common primary endpoint in clinical trials of GBM therapies; however, it is important in this patient population to quantify how time without disease progression benefits patients. Recent decisions by health authorities and payers suggest an increasing trend towards the need for evidence of patient-centered endpoints, particularly for reimbursement decision-making. Assessment of neurocognitive deterioration due to GBM progression during the clinical trial period is challenging given the need to sensitively assess a range of symptoms that may manifest due to lesions in different regions of the brain. A disease model, or conceptual framework, is needed to ground decision-making around choice of instruments, endpoints, and schedules of symptom assessments, thus ensuring measurement of the most patient and biologically relevant symptoms. The framework presented here outlines the biological processes that contribute to non-focal symptoms of GBM, such as headache, as well as focal symptoms, such as visual disturbances, changes in memory, or loss of verbal expression. Considerations and challenges in assessing neurocognitive symptoms in GBM patients utilizing existing tools and methodologies are reviewed and identified.

PHP134

EVIDENCE BASED APPROACH TO EVALUATE AND IMPROVE ACCESS TO MEDICINES IN EMERGING MARKETS

Shankar R¹, Hickson S¹, Sabat A²

¹IMS Consulting Group, Cambridge, UK, ²IMS Consulting Group, Mumbai, India

Developed countries have largely achieved universal health care coverage, while many developing countries are implementing steps to increase health care coverage. While the objective is the same, the health care systems and policies across countries differ across countries leading to different levels of access to medicines. To understand which systems and policies can lead to better access, we need a measure to evaluate how well countries do in terms of providing access to medicine for their populations. In this paper, we develop a Country Access to Medicines Index that compares and ranks countries on access to medicine outcomes. This index is based on five pillars – ease of accessibility to health care workers and facilities, awareness of disease diagnosis and treatment, availability of medicines, affordability of medicines and adherence to right treatment. We identify key variables in each of these pillars and compare and rank 30 countries with more than 60% of the world's population on each of these variables, at an aggregate level on each pillar, and overall. We draw upon IMS data as well as international and country level sources to obtain the data needed for the measures. We then look at the health systems and policies in these countries to identify features that lead to better performance on the index. We find that five broad factors can help explain access to medicines performance. First is the level of financing of health care, especially reimbursement coverage. Second is a structured and transparent pricing and patient access system that prioritises resource allocation to high need diseases and patients and sets economically justifiable prices. Third is the level of development of health care infrastructure. Fourth, is the provider and pharmacy incentives that promote appropriate use of medicine. And finally, a system that ensures the proper implementation of health policy initiatives.

THE INFLUENTIAL PATIENT: ROLE OF PATIENT OPINION LEADERS ON PHARMACEUTICAL RESEARCH AND DEVELOPMENT, HEALTH POLICY, AND COMMERCIALIZATION

 $\underline{\text{Ko }}J^1$, Godley PJ^2

¹Scott & White Health Plan/Univ of Texas at Austin/Novartis Pharmaceuticals Corp., Temple, TX, USA, ²Scott & White Health Plan, Temple, TX, USA

The increasing adoption of Internet and social media have facilitated the emergence of patient opinion leaders (POLs). These influential individuals are living with a chronic disease and are writing about their experiences on Internet blogs and social media websites. Popular and highly-trusted patients are labeled as POLs because their work influences the decision-making of other patients. Top POLs have tens of thousands of followers who subscribe to their websites, blogs, and online social media accounts. POLs usually focus on one therapeutic area and provide diseaserelated information, treatment options, and emotional support to other patients. Additionally, some POLs are health activists who help shape health policy and provide input into clinical trial design including endpoint development. As health care increases its focus to center around the individual patient, pharmaceutical companies and government agencies will seek out POLs for their personal perspectives. A formal methodology to measure the influence and reach of POLs has yet to be established. Their influence on the Internet can be determined by the size of their audience (e.g., Twitter followers), relevancy of posted content to the disease state of interest, frequency of posted content, and perceived trustworthiness based on various scales (e.g., Google's PageRank algorithm). By characterizing and indexing POLs, interested stakeholders can easily engage with them to incorporate the patient's voice into clinical trials, market research, health policy, and marketing. As an example, researchers can capture and leverage the large audience of an influential POL to recruit patients for a clinical trial or to garner feedback on the endpoints of a clinical trial from the patients' perspectives. This paper's objective is to evaluate