Results. All 23 HB-HTA units answered the questionnaire. Of these, 65 percent had a technology prioritization process. The technologies assessed included drug therapies (73%), equipment (64%), medical devices (64%), clinical protocols (46%), and emerging technologies (27%). The dimensions of health technology assessment (HTA) evaluated by these organizations were: efficacy (76%); effectiveness (67%); safety (67%); costs (52%); cost effectiveness or cost utility (52%); and budget impact (43%). The hospital departments that required more HTA studies were: cardiology (50%); infectious diseases (45%); hospital management (45%); oncology (40%); surgery (40%); and endocrinology (20%). HTA studies supported: incorporation of new technologies (81%); protocol or guideline development (57%); new indications for already approved technologies (38%); and withdrawal of obsolete technologies (29%). Half of the institutions also conducted educational or training activities. The main difficulties reported were a lack of trained professionals (78%), funding (70%), and material resources (48%).

Conclusions. For low- and middle-income countries, the process of implementing HB-HTA units remains a challenge. Even though human resources and funding are scarce, HB-HTA units continue to develop. Given their importance in the decision-making process, it is imperative that every effort is made to ensure their activities continue.

PP100 Unraveling Hospital-Based Health Technology Assessment In Brazil

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Introduction. In Brazil, hospital-based health technology assessment (HB-HTA) units have been implemented countrywide since early 2000 to improve decision-making processes. Multiple-criteria decision analysis (MCDA) can provide a deeper understanding of a given subject. The present study used MCDA to evaluate capacity building among HB-HTA units in Brazil.

Methods. This study analyzed preliminary data from a survey developed and sent to all HB-HTA units in Brazil in 2018. The survey comprised 116 questions covering a wide range of aspects. Initially, an expert panel was organized, and 46 objective questions (out of 116) were selected by four experts. Next, these experts classified the selected questions by weighting them according to their relative importance. A Likert scale was used to identify the levels of importance, which were converted to weights ranging from zero to one. The experts then defined a final importance score threshold of 60 percent to classify units as fully operational. Grades below this threshold indicated the need for a more detailed evaluation. Of the 80 survey questionnaires, 23 were evaluated by the proposed method.

Results. Importance weights for each classification were defined as follows: personnel (25%); level of expertise (31%); work production (31%); and infrastructure (13%). The mean final importance score for the HB-HTA units was 68 percent. The maximum and minimum scores achieved were 95 percent and 15 percent, respectively. The HB-HTA units had been established for an average of 6 years, and ten of the 23 units were classified as fully operational.

Conclusions. The multicriteria method presented by this study simplified HB-HTA unit evaluation, reducing the subjectivity of results. Final importance scores for each unit's categories indicated which areas need improvement. Results from the study indicated that infrastructure and personnel could be greatly enhanced, even though the production profile was satisfactory.

PP103 A Comparative Study Of Catastrophic Health Expenditure In China

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Introduction. China has made great achievements in health insurance coverage and healthcare financing. Nonetheless, the rate of catastrophic health expenditure (CHE) in China was 13 percent in 2008, which is higher than in some other countries. There are differences among the provinces in China in terms of the lifestyles, customs, prevalent medical conditions, and health consciousness of their populations. This study aimed to compare the proportion of households with CHE and the factors influencing this expenditure between the Zhejiang and Qinghai province in China.

Methods. Data were derived from household surveys conducted in Zhejiang and Qinghai. Sampling was based on a multi-stage, stratified random cluster method. Households with CHE were defined as those with an out-of-pocket payment for health care that was at least 40 percent of the household income. Univariate and multivariate logistic regression analyses were used to identify the factors associated with CHE.

Results. A total of 1,598 households were included: 995 in Zhejiang and 603 in Qinghai. The average rates of CHE in Zhejiang and Qinghai were 10 percent and 31 percent, respectively. The economic status of a household influenced the likelihood of experiencing CHE; households headed by an employed person were less likely to experience CHE. In contrast, households that included outpatients or individuals with chronic diseases had a higher risk of experiencing CHE across the two provinces. Poorer or uninsured households in Zhejiang were more likely to experience CHE, as were households in Qinghai that included outpatients or were headed by a person from a minority nationality.

Conclusions. This study highlighted the importance of promoting economic development, expanding employment, and adjusting policies to better protect individuals with chronic diseases and outpatients from the risk of CHE. The Chinese government should pay more attention to actual conditions in different provinces to ensure that policy decisions incorporate local knowledge.

PP107 Harpoon™: A Novel Device For Transapical Mitral Valve Repair

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Introduction. Mitral regurgitation (MR) is the most prevalent heart valve condition in Western countries. Open-heart mitral valve reconstruction is the conventional surgical treatment for MR, whereby the valve's cords are replaced with expanded polytetrafluoroethylene cords. Novel devices have introduced minimally invasive alternatives, such as transapical beating-heart valve repair. Among these alternatives, the Harpoon™ Mitral Valve Repair System (Edwards Lifesciences LLC) may have potential advantages (a smaller diameter valve introducer to minimize bleeding and a different anchoring mechanism). This study aimed to assess the efficacy and safety of Harpoon in minimally invasive mitral valve surgery.

Methods. An early assessment of the technology was conducted by reviewing relevant literature from the following databases: PubMed, EMBASE, Web of Science, the Trip Database, the International Clinical Trials Registry Platform, ClinicalTrials.gov, the Cochrane Library, and the Centre for Reviews and Dissemination. Relevant clinical studies published up to 30 January 2018 were included.

Results. Only two publications, by the same research group, were included: an observational study of 11 patients and the prospective, nonrandomized TRACER trial (n = 30). During the procedure, MR was reduced from severe to none in 73 to 86 percent of patients and severe to mild in 14 to 27 percent. At one month, MR was rated as mild or lower in 82 to 89 percent of patients. At six months, MR had worsened to moderate or severe in 16 percent of patients from the TRACER trial. Safety issues within 30 days (18% to 27% of patients) included intraoperative conversion to open surgery, reoperation, pleural effusion, hemopericardium, and atrial fibrillation. There were no intra- or postoperative deaths.

Conclusions. Current evidence on the Harpoon device is scarce. Although published studies showed improvement in MR in most patients, there are still issues regarding safety, lack of long-term results, comparability with other procedures, and costs. While promising, further research is required before recommending routine use of this technology.

PP108 Assessing CHA2DS2-VASc Score For Predicting Ischemic Stroke In The Non-Atrial Fibrillation Population

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Introduction. Cerebrovascular disease is the most common cause of death in China, and the incidence of ischemic stroke (240 per 100,000 people) is higher than that of hemorrhagic stroke (82 per 100,000 people). More than 80 percent of strokes can be prevented by early control of risk factors. Therefore, identifying and managing high-risk groups is a top priority in preventing stroke. The CHA2DS2-VASc score is a key prediction tool for stratifying stroke risk in individuals with atrial fibrillation (AF) as follows: zero score is low risk; one is intermediate risk; and two is high risk. The present study was undertaken to evaluate the accuracy of the CHA2DS2-VASc scoring system for stratifying ischemic stroke risk in the non-AF population.

Methods. We searched PubMed, EMBASE, and the Cochrane Library in June 2018 for relevant diagnostic studies. Study selection, data extraction, and quality assessment (using the QUADAS-2 criteria) were performed independently by two authors. Methodological variation across the selected studies precluded meta-analysis, so the results were synthesized narratively.

Results. Seven prospective studies involving 50,652 patients (6,760 with ischemic stroke) were included. The treatment threshold ranged from two to four across the studies. Three studies reported diagnostic accuracy at a threshold of two, with a sensitivity above 0.8 and a specificity ranging from 0.32 to 0.68. The diagnostic odds ratio was greater than two (seven studies). The two studies using a treatment threshold of four reported a sensitivity of 0.59 to 0.76 and a specificity of 0.43 to 0.69. One study used a threshold of three, with a sensitivity of 0.79 and a specificity of 0.39.

Conclusions. The CHA2DS2-VASc score may be used to predict ischemic stroke in the non-atrial fibrillation population. Treatment thresholds greater than two provide more optimal diagnostic accuracy, although the predictive performance of the CHA2DS2-VASc score may be better in patients with chronic obstructive pulmonary disease but not AF.

PP113 A Framework To Enhance Eurasian Economic Union Cooperation On Health Technology Assessment: Lessons From The European Network for Health Technology Assessment

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Introduction. The Eurasian Economic Union (EAEU), which currently includes Armenia, Belarus, Kazakhstan, Kyrgyzstan, and Russia, was established in 2015. Pursuing economic integration, and modeled in part after the structure of European Union, the EAEU launched a common medicines market in 2017. There have been various developments regarding cooperation in health technology assessment (HTA) across the EAEU countries, exemplified by a conference held in Kazakhstan in 2017. Here we discuss some considerations for developing cooperation in HTA throughout EAEU based on the experiences of implementing the European Network for Health Technology Assessment (EUnetHTA).

Methods. Legal and review documents regarding the implementation of EUnetHTA were obtained from the European Commission website and research databases to inform this narrative review.

Results. Achieving recognition of the role of HTA at an intergovernmental level, akin to the actions of the European Commission prior to establishing EUnetHTA, appears pivotal at the current stage of HTA development among EAEU members.

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