RESULTS:

Ninety-six appraisals have been conducted by pCODR, reflecting an average of 16 per year (10 in 2012, 18 in 2013, 9 in 2014, 24 in 2015, 19 in 2016, and 20 in 2017). The rate of appraisals was similar pre-CADTH transfer (14.2 per year [32 from January 2012 to March 2014]) versus post-CADTH transfer (13.7 per year [56 from April 2014 to November 2017]). Seventy-eight percent of pCODR outcomes were positive recommendations (defined as full recommendations [10 percent] or restricted/conditional recommendations [68 percent]) with 22 percent not recommended. Annually, positive recommendation rates were 70 percent in 2012, 89 percent in 2013, 78 percent in 2014, 79 percent in 2015, 74 percent in 2016, and 75 percent in 2017. There were no significant differences in recommendation rates since pCODR was transferred to CADTH irrespective if the phase one or phase two cut-off dates were used (p = 0.434 and 0.307, respectively).

CONCLUSIONS:

The number of appraisals and likelihood of a positive recommendation for oncology drugs has not been affected by the pCODR transfer to CADTH.

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PP135 Cost-Effectiveness Of Cryoballoon Ablation In China: Real-World Results

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INTRODUCTION:

Paroxysmal atrial fibrillation (PAF) represents a significant economic burden to the healthcare system. Catheter ablation is a commonly adopted treatments for PAF, and cryoballoon ablation (CBA) has been recently proven to be as effective as radiofrequency ablation (RFA). This study aims to evaluate the cost-effectiveness of CBA versus RFA in patients with drug-refractory PAF in China.

METHODS:

A Markov model was developed to study the effects and the costs of CBA versus RFA. Cost and probability inputs data were obtained mainly from a real-world study of 85 CBA and 284 RFA patients treated in a tertiary hospital between July 2014 and July 2016. Propensity score matching was used to overcome retrospective bias, resulting in including 75 patients in each group. Input data gaps were closed with literature review and advisory board. A simulation was carried out for 14 cycles/years, and a discount rate of 3 percent was used. Then, a probabilistic sensitivity analysis was carried out with Monte Carlo approach.

RESULTS:

In the base case scenario, the cumulative costs incurred by the CBA and RFA groups were CNY 132,222 (USD 20,767) and CNY 147,304 (USD 23,136), respectively. Over the 14-year period, the quality-adjusted life years (QALYs) gained by the CBA group was 7.85 versus 7.71 in the RFA group. The incremental cost-effectiveness ratio for CBA versus RFA was thus CNY 107,729 (USD 16,920)/QALY. Model results were most sensitive to the cost incurred during the first hospitalization, recurrence rate, and relative utility weights. The probability of CBA being cost-effective for willingness to pay thresholds of per capita GDP in China was estimated to be 99 percent.

CONCLUSIONS:

Compared with RFA, CBA is a cost-saving treatment providing increased QALYs. It represents good value for money for patients with drug-refractory PAF in China. However, further evidence needs to be generated from larger-scale studies in China.

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PP136 Smartphone Intervention To Promote Healthy Lifestyles Among Teenagers

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INTRODUCTION:

We aimed to pilot the evaluation of the PEGASO system, a smartphone-based intervention (apps/wearables/game) to improve lifestyles and increase awareness.

METHODS:

We conducted a before-after quasi-experimental pilot controlled study. Teenagers aged 13–16 in a 2:1 (intervention: comparative group [IG:CG]) basis from

Spain, Italy and the United Kingdom were recruited. The IG had access to the apps and game for six months, and to smart sensors for the last two months. Schools were recruited by convenience sampling. Participants in both groups undertook (i) anthropometric measurements, (ii) diet (KIDMED), physical activity (PAQ-A) and sleep (HELENA study) validated questionnaires, and (iii) ad-hoc lifestyles knowledge questionnaire. PEGASO, if used, continuously recorded diet and physical activity. User experience was assessed through focus groups.

RESULTS:

Five hundred and fifty-eight participants were included (IG:365 / CG:193). The mean (standard deviation; SD) age was 14.8 (0.8), and 52.3 percent were girls. At baseline, mean scores (SD) of KIDMED, PAQ-A and weekday and weekend sleep hours were 5.60 (2.41), 2.48 (0.66), 8.34 (1.07) and 9.99 (1.66), respectively. The percentage of correct answers of lifestyle's knowledge was 65.2 percent (range 13–100 percent). The IG and CG did not show differences for main outcome variables. At six months, a higher percentage of participants in the IG reported an increase of at least one point in the adherence to Mediterranean Diet (43.8 percent vs. 35.4). No differences were observed for other lifestyles. Focus group results showed a predisposition of adolescents to use mHealth for health promotion; the platform was considered to be useful and complete and personalized suggestions were positively valued. Participants reported few limited interest ion the game and several technical issues.

CONCLUSIONS:

Although participants were motivated and excited about their involvement in the study, and that PEGASO was something desirable for them, the system only showed some impact in specific areas – namely, diet – and could improve some its technological features. Several challenges and opportunities are associated with the implementation of mHealth.

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PP137 Colorectal Cancer Screening In The Philippines: Cost-Utility Analysis

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INTRODUCTION:

Colorectal cancer (CRC) is the fourth leading cause of cancer deaths in the Philippines. In 2014, the Philippine Health Insurance Corporation (PhilHealth) created a CRC treatment package. The study aimed to determine the cost-utility and budget impact of CRC screening strategies.

METHODS:

A discrete-event microsimulation model was used to simulate four screening modalities: (i) guaiac-fecal occult blood test (gFOBT) followed by colonoscopy every 10 years; (ii) fecal immunochemical test (FIT) followed by colonoscopy every 10 years; (iii) FIT followed by flexible sigmoidoscopy; and (iv) colonoscopy screening every 10 years. These interventions were all compared to no screening. Parameter values were taken from a rapid review of the medical literature and primary data collection from a nationally representative sample of tertiary hospitals.

RESULTS:

All screening modalities were very cost effective considering that the incremental cost-effective ratios (ICERs) were lower than the gross domestic product per capita threshold suggested by the World Health Organization. Sensitivity analysis showed that the ICERs of all screening modalities evaluated remained below this threshold. The strategy of using FIT followed by colonoscopy every 10 years had an ICER of USD 6,025, with an annual budget impact of USD 6.5 million, assuming low compliance. With moderate compliance this could increase to USD 18.7 million annually.

CONCLUSIONS:

PhilHealth may introduce a benefit package for outpatient screening of colorectal cancer using the screening modality of annual FIT followed by colonoscopy every 10 years.

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PP138 Cost-Effectiveness Analysis Of Influenza A (H1N1) Chemoprophylaxis

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